DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Parts 411, 412, 413, and 489

[CMS–1533–FC]

RIN 0938–AO70

Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2008 Rates

AGENCY: Centers for Medicare and Medicaid Services (CMS), HHS.

ACTION: Final rule with comment period.

SUMMARY: We are revising the Medicare hospital inpatient prospective payment systems (IPPS) for operating and capital-related costs to implement changes arising from our continuing experience with these systems, and to implement certain provisions made by the Deficit Reduction Act of 2005 (Pub. L. 109–171), the Medicare Improvements and Extension Act under Division B, Title I of the Tax Relief and Health Care Act of 2006 (Pub. L. 109–432), and the Pandemic and All Hazards Preparedness Act (Pub. L. 109–417). In addition, in the Addendum to this final rule with comment period, we describe the changes to the amounts and factors used to determine the rates for Medicare hospital inpatient services for operating costs and capital-related costs. We also are setting forth the rate of increase limits for certain hospitals and hospital units excluded from the IPPS that are paid on a reasonable cost basis subject to these limits, or that have a portion of a prospective payment system payment based on reasonable cost principles. These changes are applicable to discharges occurring on or after October 1, 2007.

In this final rule with comment period, as part of our efforts to further refine the diagnosis related group (DRG) system under the IPPS to better recognize severity of illness among patients, for FY 2008, we are adopting a Medicare Severity DRG (MS DRG) classification system for the IPPS. We are also adopting the structure of the MS–DRG system for the LTCH prospective payment system (referred to as MS–LTC–DRGs) for FY 2008.

Among the other policy decisions and changes that we are making, we are making changes related to: limited revisions of the reclassification of cases to MS–DRGs, the relative weights for the MS–LTC–DRGs; applications for new technologies and medical services add-on payments; the wage data, including the occupational mix data, used to compute the FY 2008 wage indices; payments to hospitals for the indirect costs of graduate medical education; submission of hospital quality data; provisions governing the application of sanctions relating to the Emergency Medical Treatment and Labor Act of 1986 (EMTALA); provisions governing the disclosure of physician ownership in hospitals and patient safety measures; and provisions relating to services furnished to beneficiaries in custody of penal authorities.

DATES: *Effective Date:* This final rule with comment period is effective October 1, 2007 and applies to discharges occurring on or after that date.

Comment Date: We will consider public comments only on the provisions of section V., Changes to the IPPS for Capital Related Costs, of the preamble of this final rule with comment period, if we receive them at one of the addresses provided below, no later than 5 p.m. on November 20, 2007.

ADDRESSES: In commenting on the provisions of section V. of the preamble of this final rule with comment period, please refer to file code CMS–1533–FC.

Because of staff and resource limitations, we cannot accept comments by facsimile (FAX) transmission.

You may submit comments in one of three ways (no duplicates, please):

1. *Electronically.* You may submit electronic comments on specific issues in this regulation to *http://www.cms.hhs.gov/eRulemaking.* Click on the link ''Submit electronic comments on CMS regulations with an open comment period''. (Attachments should be in Microsoft Word, WordPerfect, or Excel; however, we prefer Microsoft Word.)

2. *By regular mail.* You may mail written comments (one original and two copies) to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1533–FC, P.O. Box 8011, Baltimore, MD 21244–1850.

Please allow sufficient time for mailed comments to be received before the close of the comment period.

3. *By express or overnight mail.* You may send written comments (one original and two copies) to the following address ONLY: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1533–FC, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

4. *By hand or courier.* If you prefer, you may deliver (by hand or courier) your written comments (one original and two copies) before the close of the comment period to one of the following addresses. If you intend to deliver your comments to the Baltimore address, please call telephone number (410) 786–7195 in advance to schedule your arrival with one of our staff members. Room 445–G, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201, or 7500 Security Boulevard, Baltimore, MD 21244–1850.

(Because access to the interior of the Hubert H. Humphrey Building is not readily available to persons without Federal Government identification, commenters are encouraged to leave their comments in the CMS drop slots located in the main lobby of the building. A stamp-in clock is available for persons wishing to retain proof of filing by stamping in and retaining an extra copy of the comments being filed.)

Comments mailed to the addresses indicated as appropriately for hand or courier delivery may be delayed and received after the comment period.

Submitting Comments: You can assist us by referencing the file code CMS–1533–FC and the specific ''issue identifier'' that precedes section V., Changes to the IPPS for Capital Related Costs.

Inspection of Public Comments: All comments received before the close of the comment period are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received before the close of the comment period on the following Web site as soon as possible after they have been received: *http://www.cms.hhs.gov/eRulemaking.* Click on the link ''Electronic Comments on CMS Regulations'' on that Web site to view public comments.

Comments received timely will also be available for public inspection, generally beginning approximately 3 weeks after publication of a document, at the headquarters of the Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland 21244, Monday through Friday of each week from 8:30 a.m. to 4:00 p.m. To schedule an appointment to view public comments, phone 1–800–743–3951.

FOR FURTHER INFORMATION CONTACT: Marc Hartstein, (410) 786–4548, Operating Prospective Payment, Diagnosis Related Groups (DRGs), Wage Index, New Medical Services and Technology Add-On Payments, and Hospital Geographic Reclassifications Issues.

Tzvi Hefter, (410) 786–4487, Capital Prospective Payment, Excluded Hospitals, Graduate Medical Education, Critical Access Hospitals, and Long-Term Care (LTC)-DRG Issues.

Siddhartha Mazumdar, (410) 786–6673, Rural Community Hospital Demonstration Issues.

Sheila Blackstock, (410) 786–3502, Quality Data for Annual Payment Update Issues.

Thomas Valuck, (410) 786–7479, Hospital Value-Based Purchasing Issues.

Jacqueline Proctor, (410) 786–8852, Disclosure of Physician Ownership in Hospitals.

Marilyn Dahl, (410) 786–8665, Patient Safety Measures Issues.

Fred Grabau, (410) 786–0206, Services to Beneficiaries in Custody of Penal Authorities Issues.

SUPPLEMENTARY INFORMATION:

Electronic Access

This **Federal Register** document is also available from the **Federal Register** online database through GPO Access, a service of the U.S. Government Printing Office. Free public access is available on a Wide Area Information Server (WAIS) through the Internet and via asynchronous dial-in. Internet users can access the database by using the World Wide Web; the Superintendent of Documents' home page address is *http://www.gpoaccess.gov/*, by using local WAIS client software, or by telnet to swais.access.gpo.gov, then login as guest (no password required). Dial-in users should use communications software and modem to call (202) 512–1661; type swais, then login as guest (no password required).

Acronyms

ACGME—Accreditation Council for Graduate Medical Education
AMGA—American Medical Group Association
AHA—American Hospital Association
AHIMA—American Health Information Management Association
AHRQ—Agency for Health Care Research and Quality
AMI—Acute myocardial infarction
AOA—American Osteopathic Association
APR DRG—All Patient Refined Diagnosis Related Group System
ASC—Ambulatory surgical center
ASP—Average sales price
AWP—Average wholesale price
BBA—Balanced Budget Act of 1997, Pub. L. 105–33
BBRA—Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Balanced Budget Refinement Act of 1999, Pub. L. 106–113
BIPA—Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Benefits Improvement and Protection Act of 2000, Pub. L. 106–554
BLS—Bureau of Labor Statistics
CAH—Critical access hospital
CART—CMS Abstraction & Reporting Tool
CBSAs—Core-based statistical areas
CC—Complication or comorbidity
CCR—Cost-to-charge ratio
CDAC—Clinical Data Abstraction Center
CIPI—Capital input price index
CPI—Consumer price index
CMI—Case-mix index
CMS—Centers for Medicare & Medicaid Services
CMSA—Consolidated Metropolitan Statistical Area
COBRA—Consolidated Omnibus Reconciliation Act of 1985, Pub. L. 99–272
CoP—[Hospital] Condition of participation
CPI—Consumer price index
CY—Calendar year
DRA—Deficit Reduction Act of 2005, Pub. L. 109–171
DRG—Diagnosis-related group
DSH—Disproportionate share hospital
ECI—Employment cost index
EMR—Electronic medical record
EMTALA—Emergency Medical Treatment and Labor Act of 1986, Pub. L. 99–272
FDA—Food and Drug Administration
FIPS—Federal information processing standards
FQHC—Federally qualified health center
FTE—Full-time equivalent
FY—Fiscal year
GAAP—Generally Accepted Accounting Principles
GAF—Geographic Adjustment Factor
GME—Graduate medical education
GMEC—Graduate Medical Education Committee
HCAHPS—Hospital Consumer Assessment of Healthcare Providers and Systems
HCFA—Health Care Financing Administration
HCRIS—Hospital Cost Report Information System
HHA—Home health agency
HHS—Department of Health and Human Services
HIC—Health insurance card
HIPAA—Health Insurance Portability and Accountability Act of 1996, Pub. L. 104–191
HIPC—Health Information Policy Council
HIS—Health information system
HIT—Health information technology
HMO—Health maintenance organization
HSA—Health savings account
HSCRC—Maryland Health Services Cost Review Commission
HSRV—Hospital-specific relative value
HSRVcc—Hospital-specific relative value cost center
HQA—Hospital Quality Alliance
HQI—Hospital Quality Initiative
ICD–9–CM—International Classification of Diseases, Ninth Revision, Clinical Modification
ICD–10–PCS—International Classification of Diseases, Tenth Edition, Procedure Coding System
IHS—Indian Health Service
IME—Indirect medical education
IOM—Institute of Medicine
IPF—Inpatient psychiatric facility
IPPS—Acute care hospital inpatient prospective payment system
IRF—Inpatient rehabilitation facility
JCAHO—Joint Commission on Accreditation of Healthcare Organizations
LAMCs—Large area metropolitan counties
LTC–DRG—Long-term care diagnosis-related group
LTCH—Long-term care hospital
MAC—Medicare Administrative Contractor
MCC—Major complication or comorbidity
MCE—Medicare Code Editor
MCO—Managed care organization
MCV—Major cardiovascular condition
MDC—Major diagnostic category
MDH—Medicare-dependent, small rural hospital
MedPAC—Medicare Payment Advisory Commission
MedPAR—Medicare Provider Analysis and Review File
MEI—Medicare Economic Index
MGCRB—Medicare Geographic Classification Review Board
MIEA-TRHCA—Medicare Improvements and Extension Act, Division B of the Tax Relief and Health Care Act of 2006, Pub. L. 109–432
MMA—Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. 108–173
MPN—Medicare provider number
MRHFP—Medicare Rural Hospital Flexibility Program
MSA—Metropolitan Statistical Area
NAICS—North American Industrial Classification System
NCD—National coverage determination
NCHS—National Center for Health Statistics
NCQA—National Committee for Quality Assurance
NCVHS—National Committee on Vital and Health Statistics
NECMA—New England County Metropolitan Areas
NQF—National Quality Forum
NTIS—National Technical Information Service
NVHRI—National Voluntary Hospital Reporting Initiative
OES—Occupational employment statistics
OIG—Office of the Inspector General
OMB—Executive Office of Management and Budget
O.R.—Operating room
OSCAR—Online Survey Certification and Reporting (System)
PMSAs—Primary metropolitan statistical areas
PPI—Producer price index
PPS—Prospective payment system
PRA—Per resident amount
PRM—Provider Reimbursement Manual
ProPAC—Prospective Payment Assessment Commission
PRRB—Provider Reimbursement Review Board
PSF—Provider Specific File
PS&R—Provider Statistical and Reimbursement (System)
QIG—Quality Improvement Group, CMS
QIO—Quality Improvement Organization
RCE—Reasonable compensation equivalent
RHC—Rural health clinic
RHQDAPU—Reporting hospital quality data for annual payment update
RNHCI—Religious nonmedical health care institution

RRC—Rural referral center
RUCAs—Rural-urban commuting area codes
RY—Rate year
SAF—Standard Analytic File
SCH—Sole community hospital
SFY—State fiscal year
SIC—Standard Industrial Classification
SNF—Skilled nursing facility
SOCs—Standard occupational classifications
SOM—State Operations Manual
SSA—Social Security Administration
SSI—Supplemental Security Income
TEFRA—Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. 97–248
UHDDS—Uniform hospital discharge data set
VBP—Value-based purchasing

Table of Contents

I. Background
A. Summary
1. Acute Care Hospital Inpatient Prospective Payment System (IPPS)
2. Hospitals and Hospital Units Excluded from the IPPS a. Inpatient Rehabilitation Facilities (IRFs) b. Long-Term Care Hospitals (LTCHs) c. Inpatient Psychiatric Facilities (IPFs)
3. Critical Access Hospitals (CAHs)
4. Payments for Graduate Medical Education (GME)
B. Provisions of the Deficit Reduction Act of 2005 (DRA)
C. Provisions of the Medicare Improvements and Extension Act under Division B, Title I of the Tax Relief and Health Care Act of 2006
D. Provisions of the Pandemic and All-Hazards Preparedness Act
E. Issuance of a Notice of Proposed Rulemaking
1. DRG Reclassifications and Recalibrations of Relative Weights
2. Proposed Changes to the Hospital Wage Index
3. Other Decisions and Proposed Changes to the IPPS for Operating Costs and GME Costs
4. Proposed Changes to the IPPS for Capital-Related Costs
5. Proposed Changes to the Payment Rates for Excluded Hospitals and Hospital Units: Rate-of-Increase Percentages
6. Services Furnished to Beneficiaries in Custody of Penal Authorities
7. Determining Proposed Prospective Payment Operating and Capital Rates and Rate of Increase Limits
8. Impact Analysis
9. Recommendation of Update Factors for Operating Cost Rates of Payment for Inpatient Hospital Services
10. Discussion of Medicare Payment Advisory Commission Recommendations
F. Public Comments Received on the Proposed Rule
II. Changes to DRG Classifications and Relative Weights
A. Background
B. DRG Reclassifications
1. General
2. Yearly Review for Making DRG Changes
C. MedPAC Recommendations for Revisions to the IPPS DRG System
D. Refinement of DRGs Based on Severity of Illness
1. Evaluation of Alternative Severity-Adjusted DRG Systems
a. Overview of Alternative DRG Classification Systems
b. Comparative Performance in Explaining Variation in Resource Use
c. Payment Accuracy and Case-Mix Impact
d. Other Issues for Consideration
2. Development of the Medicare Severity DRGs (MS DRGs)
a. Comprehensive Review of the CC List
b. Chronic Diagnosis Codes
c. Acute Diagnosis Codes
d. Prior Research on Subdivisions of CCs into Multiple Categories
e. Medicare Severity DRGs (MS-DRGs)
3. Dividing MS DRGs on the Basis of the CCs and MCCs
4. Conclusion
5. Impact of the MS-DRGs
6. Changes to Case-Mix Index (CMI) from the MS–DRGs
7. Effect of the MS-DRGs on the Outlier Threshold
8. Effect of the MS-DRGs on the Postacute Care Transfer Policy
E. Refinement of the Relative Weight Calculation
1. Summary of RTI's Report on Charge Compression
2. RTI Recommendations
a. Short-Term Recommendations
b. Medium-Term Recommendations
c. Long-Term Recommendations
F. Hospital-Acquired Conditions, Including Infections
1. General
2. Legislative Requirement
3. Public Input
4. Collaborative Effort
5. Criteria for Selection of the Hospital-Acquired Conditions
6. Selection of Hospital-Acquired Conditions
7. Other Issues
G. Changes to Specific DRG Classifications
1. Pre-MDCs: Intestinal Transplantation
2. MDC 1 (Diseases and Disorders of the Nervous System)
a. Implantable Neurostimulators
b. Intracranial Stents
3. MDC 3 (Diseases and Disorders of the Ear, Nose, Mouth, and Throat)—Cochlear Implants
4. MDC 8 (Diseases and Disorders of the Musculoskeletal System and Connective Tissue)
a. Hip and Knee Replacements
b. Spinal Fusions
c. Spinal Disc Devices
d. Other Spinal DRGs
5. MDC 17 (Myeloproliferative Diseases and Disorders, Poorly Differentiated Neoplasm): Endoscopic Procedures
6. Medicare Code Editor (MCE) Changes
a. Non-Covered Procedure Edit: Code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s))
b. Non-Specific Principal Diagnosis Edit 7 and Non-Specific O.R. Procedures Edit 10
c. Limited Coverage Edit 17
d. Revision to Part 1, Pancreas Transplant Edit A
7. Surgical Hierarchies
8. CC Exclusions List
a. Background
b. CC Exclusions List for FY 2008
9. Review of Procedure Codes in CMS DRGs 468, 476, and 477
a. Moving Procedure Codes from CMS DRG 468 (MS-DRGs 981 through 983) or CMS DRG 477 (MS-DRGs 987 through 989) to MDCs
b. Reassignment of Procedures Among CMS DRGs 468, 476, and 477 (MS-DRGs 981 through 983, 984 through 986, and 987 through 989)
c. Adding Diagnosis or Procedure Codes to MDCs
10. Changes to the ICD–9–CM Coding System
11. Other DRG Issues Addressed in the FY 2008 IPPS Proposed Rule
a. Seizures and Headaches
b. Devices That are Replaced Without Cost or Where Credit for a Replaced Device is Furnished to the Hospital
12. Other MS-DRG Issues Raised in the Public Comments on the Proposed Rule
a. Heart Transplants or Implants of Heart Assist System and Liver Transplants (Pre-MDC)
b. Gliadel® Wafer (MDC 1)
c. Myasthenia Gravis and Acute and Chronic Inflammatory Demyelinating Neuropathies (AIDP-CIDP) (MDC 1)
d. Peripheral and Spinal Neurostimulators (MDC 1 and MDC 8)
e. Stroke and Administration of Tissue Plasminogen Activator (tPA) (MDC 1)
f. Gliasite® Radiation Therapy System (RTS) (MDC 1)
g. Noninvasive Ventilation (MDC 4)
h. Heart Assist Devices (MDC 5)
i. Automatic Implantable Cardioverter-Defibrillators (ACID) Lead and Generator Procedures (MDC 5)
j. Artificial Heart (MDC 5)
k. Vascular Procedures (MDC 5)
l. Coronary Artery Stents (MDC 5)
m. Endovascular Repair of Aortic and Thoracic Aneurysms (MDC 5)
n. O.R. Procedures for Obesity (MDC 10)
o. Penile Restorative Procedures (MDC 12)
p. Female Reproductive System Reconstruction Procedures (MDC 13)
q. Urological and Gynecological Disorders with Grafts or Prosthesis (MDCs 13 and 14)
r. High Dose Interleukin-2 (HD-IL–2) (MDC 17)
s. Computer Assisted Surgery
13. Changes to MS-DRG Logic As a Result of Public Comments
H. Recalibration of DRG Weights
I. MS-LTC-DRG Reclassifications and Relative Weights for LTCHs for FY 2008
1. Background
2. Changes in the LTC-DRG Classifications
a. Background
b. Patient Classifications into DRGs
3. Development of the FY 2008 MS-LTC-DRG Relative Weights
a. General Overview of Development of the MS-LTC-DRG Relative Weights
b. Data
c. Hospital-Specific Relative Value Methodology
d. Treatment of Severity Levels in Developing Relative Weights
e. Low-Volume MS-LTC-DRGs
4. Steps for Determining the FY 2008 MS-LTC-DRG Relative Weights

J. Add-On Payments for New Services and Technologies
1. Background
2. Public Input Before Publication of a Notice of Proposed Rulemaking on Add-On Payments
3. FY 2008 Status of Technologies Approved for FY 2007 Add-On Payments
a. Endovascular Graft Repair of the Thoracic Aorta
b. Restore® Rechargeable Implantable Neurostimulators
c. X STOP Interspinous Process Decompression System
4. FY 2008 Application for New Technology Add-On Payments
5. Technical Correction
III. Changes to the Hospital Wage Index
A. Background
B. Core-Based Statistical Areas for the Hospital Wage Index
C. Occupational Mix Adjustment to the FY 2008 Wage Index
1. Development of Data for the FY 2008 Occupational Mix Adjustment
2. Timeline for the Collection, Review, and Correction of the Occupational Mix Data
3. Calculation of the Occupational Mix Adjustment for FY 2008
4. 2007–2008 Occupational Mix Survey for the FY 2010 Wage Index
D. Worksheet S–3 Wage Data for the FY 2008 Wage Index
1. Included Categories of Costs
2. Contract Labor for Indirect Patient Care Services
3. Excluded Categories of Costs
4. Use of Wage Index Data by Providers Other Than Acute Care Hospitals under the IPPS
E. Verification of Worksheet S–3 Wage Data
F. Wage Index for Multicampus Hospitals
G. Computation of the FY 2008 Unadjusted Wage Index
1. Method for Computing the FY 2008 Unadjusted Wage Index
2. Expiration of the Imputed Floor
3. CAHs Reverting Back to IPPS Hospitals and Raising the Rural Floor
4. Application of Rural Floor Budget Neutrality
H. Analysis and Implementation of the Occupational Mix Adjustment and the FY 2008 Occupational Mix Adjusted Wage Index
I. Revisions to the Wage Index Based on Hospital Redesignations
1. General
2. Effects of Reclassification/Redesignation
3. FY 2008 MGCRB Reclassifications
4. Hospitals That Applied for Reclassification Effective in FY 2008 and Reinstating Reclassifications in FY 2008
5. Clarification of Policy on Reinstating Reclassifications
6. ''Fallback'' Reclassifications
7. Geographic Reclassification Issues for Multicampus Hospitals
8. Redesignations of Hospitals under Section 1886(d)(8)(B) of the Act
9. Reclassifications under Section 1886(d)(8)(B) of the Act
10. New England Deemed Counties
11. Reclassifications under Section 508 of Pub. L. 108–173
12. Other Issues
J. FY 2008 Wage Index Adjustment Based on Commuting Patterns of Hospital Employees
K. Process for Requests for Wage Index Data Corrections
L. Labor-Related Share for the Wage Index for FY 2008
M. Wage Index Study Required under Pub. L. 109–432
N. Proxy for the Hospital Market Basket
IV. Other Decisions and Changes to the IPPS for Operating Costs and GME Costs
A. Reporting of Hospital Quality Data for Annual Hospital Payment Update
1. Background
2. FY 2008 Quality Measures
3. New Quality Measures and Program Requirements for FY 2009 and Subsequent Years
a. New Quality Measures for FY 2009 and Subsequent Years
b. Data Submission
4. Retiring or Replacing RHQDAPU Program Quality Measures
5. Procedures for the RHQDAPU Program for FY 2008 and FY 2009
a. Procedures for Participating in the RHQDAPU Program
b. Procedures for Participating in the RHQDAPU Program for FY 2009
c. Chart Validation Requirements
d. Data Validation and Attestation
e. Public Display
f. Reconsideration and Appeal Procedures
g. RHQDAPU Program Withdrawal Requirements
6. Electronic Medical Records
7. New Hospitals
B. Development of the Medicare Hospital Value-Based Purchasing Plan
C. Rural Referral Centers (RRCs)
1. Annual Update of RRC Status Criteria
a. Case-Mix Index
b. Discharges
2. Acquired Rural Status of RRCs
D. Indirect Medical Education (IME) Adjustment
1. Background
2. IME Adjustment Factor for FY 2008
3. Time Spent by Residents on Vacation or Sick Leave and in Orientation
a. Background
b. Vacation and Sick Leave Time
c. Orientation Activities
d. Regulation Changes
E. Payments to Disproportionate Share Hospitals (DSHs): Technical Correction
1. Background
2. Technical Correction: Inclusion of Medicare Advantage Days in the Medicare Fraction of the Medicare DSH Calculation
F. Hospital Emergency Services under EMTALA
1. Background
2. Recent Legislation Affecting EMTALA Implementation
a. Secretary's Authority to Waive Requirements During National Emergencies
b. Provisions of the Pandemic and All-Hazards Preparedness Act
c. Revisions to the EMTALA Regulations
G. Disclosure of Physician Ownership in Hospitals and Patient Safety Measures
1. Disclosure of Physician Ownership in Hospitals
2. Patient Safety Measures
H. Rural Community Hospital Demonstration Program
V. Changes to the IPPS for Capital-Related Costs
A. Background
B. Policy Change
VI. Changes for Hospitals and Hospital Units Excluded from the IPPS
A. Payments to Existing and New Excluded Hospitals and Hospital Units
B. Separate PPS for IRFs
C. Separate PPS for LTCHs
D. Separate PPS for IPFs
E. Determining LTCH Cost-to-Charge Ratios (CCRs) under the LTCH PPS
F. Report of Adjustment (Exceptions) Payments
VII. Services Furnished to Beneficiaries in Custody of Penal Authorities
VIII. MedPAC Recommendations
IX. Other Required Information
A. Requests for Data from the Public
B. Collection of Information Requirements
C. Waiver of Notice of Proposed Rulemaking

Regulation Text

Addendum—Schedule of Standardized Amounts, Update Factors, and Rate-of-Increase Percentages Effective With Cost Reporting Periods Beginning On or After October 1, 2007

I. Summary and Background
II. Changes to the Prospective Payment Rates for Hospital Inpatient Operating Costs for FY 2008
A. Calculation of the Adjusted Standardized Amount
1. Standardization of Base-Year Costs or Target Amounts
2. Computing the Average Standardized Amount
3. Updating the Average Standardized Amount
4. Other Adjustments to the Average Standardized Amount
a. Recalibration of DRG Weights and Updated Wage Index Budget Neutrality Adjustment
b. Reclassified Hospitals—Budget Neutrality Adjustment
c. Imputed Rural Floor—Budget Neutrality Adjustment
d. Case-Mix Budget Neutrality Adjustment
e. Outliers
f. Rural Community Hospital Demonstration Program Adjustment (Section 410A of Pub. L. 108–173)
5. FY 2008 Standardized Amount
B. Adjustments for Area Wage Levels and Cost-of-Living
1. Adjustment for Area Wage Levels
2. Adjustment for Cost-of-Living in Alaska and Hawaii
C. DRG Relative Weights
D. Calculation of the Prospective Payment Rates
1. Federal Rate
2. Hospital Specific Rate (Applicable Only to SCHs and MDHs)
a. Calculation of Hospital Specific Rate

b. Updating the FY 1982, FY 1987, FY 1996, and FY 2002 Hospital Specific Rates for FY 2008
3. General Formula for Calculation of Prospective Payment Rates for Hospitals Located in Puerto Rico Beginning On or After October 1, 2007 and Before October 1, 200
a. Puerto Rico Rate
b. National Rate
III. Changes to Payment Rates for Acute Care Hospital Inpatient Capital-Related Costs for FY 2008
A. Determination of Federal Hospital Inpatient Capital Related Prospective Payment Rate Update
1. Projected Capital Standard Federal Rate Update
a. Description of the Update Framework
b. MedPAC Update Recommendation
2. Outlier Payment Adjustment Factor
3. Budget Neutrality Adjustment Factor for Changes in DRG Classifications and Weights and the GAF
4. Exceptions Payment Adjustment Factor
5. Capital Standard Federal Rate for FY 2008
6. Special Capital Rate for Puerto Rico Hospitals
B. Calculation of the Inpatient Capital-Related Prospective Payments for FY 2008
C. Capital Input Price Index
1. Background
2. Forecast of the CIPI for FY 2008
IV. Changes to Payment Rates for Excluded Hospitals and Hospital Units: Rate-of-Increase Percentages
V. Tables

Table 1A—National Adjusted Operating Standardized Amounts, Labor/Nonlabor (69.7 Percent Labor Share/30.3 Percent Nonlabor Share If Wage Index Is Greater Than 1)

Table 1B—National Adjusted Operating Standardized Amounts, Labor/Nonlabor (62 Percent Labor Share/38 Percent Nonlabor Share If Wage Index Is Less Than or Equal to 1)

Table 1C—Adjusted Operating Standardized Amounts for Puerto Rico, Labor/Nonlabor

Table 1D—Capital Standard Federal Payment Rate

Table 2—Hospital Case-Mix Indexes for Discharges Occurring in Federal Fiscal Year 2006; Hospital Wage Indexes for Federal Fiscal Year 2008; Hospital Average Hourly Wages for Federal Fiscal Years 2006 (2002 Wage Data), 2007 (2003 Wage Data), and 2008 (2004 Wage Data); and 3-Year Average of Hospital Average Hourly Wages
Table 3A—FY 2008 and 3-Year Average Hourly Wage for Urban Areas by CBSA
Table 3B—FY 2008 and 3-Year Average Hourly Wage for Rural Areas by CBSA
Table 4A—Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas by CBSA—FY 2008
Table 4B—Wage Index and Capital Geographic Adjustment Factor (GAF) for Rural Areas by CBSA—FY 2008
Table 4C—Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That Are Reclassified by CBSA—FY 2008
Table 4F—Puerto Rico Wage Index and Capital Geographic Adjustment Factor (GAF) by CBSA—FY 2008
Table 4J—Out-Migration Wage Adjustment—FY 2008
Table 5—List of Medicare Severity Diagnosis-Related Groups (MS-DRGs), Relative Weighting Factors, and Geometric and Arithmetic Mean Length of Stay
Table 6A—New Diagnosis Codes
Table 6B—New Procedure Codes
Table 6C—Invalid Diagnosis Codes
Table 6D—Invalid Procedure Codes
Table 6E—Revised Diagnosis Code Titles
Table 6F—Revised Procedure Code Titles
Table 6G—Additions to the CC Exclusions List
Table 6H—Deletions from the CC Exclusions List
Table 6I—Complete List of Complication and Comorbidity (CC) Exclusions
(Available only through the Internet on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/*)
Table 7A—Medicare Prospective Payment System Selected Percentile Lengths of Stay: FY 2006 MedPAR Update—March 2007 GROUPER V24.0 CMS DRGs
Table 7B—Medicare Prospective Payment System Selected Percentile Lengths of Stay: FY 2006 MedPAR Update—March 2007 GROUPER V25.0 CMS DRGs
Table 8A—Statewide Average Operating Cost-to-Charge Ratios—July 2007
Table 8B—Statewide Average Capital Cost-to-Charge Ratios—July 2007
Table 8C—Statewide Average Total Cost-to-Charge Ratios for LTCHs—July 2007
Table 9A—Hospital Reclassifications and Redesignations—FY 2008
Table 9C—Hospitals Redesignated as Rural under Section 1886(d)(8)(E) of the Act—FY 2008
Table 10—Geometric Mean Plus the Lesser of .75 of the National Adjusted Operating Standardized Payment Amount (Increased to Reflect the Difference Between Costs and Charges) or .75 of One Standard Deviation of Mean Charges by Medicare Severity Diagnosis-Related Groups (MS-DRGs)—July 2007
Table 11—FY 2008 MS–LTC–DRGs, Relative Weights, Geometric Average Length of Stay, Short-Stay Outlier Threshold, and IPPS Comparable Threshold

Appendix A—Regulatory Impact Analysis

I. Overall Impact
II. Objectives
III. Limitations on Our Analysis
IV. Hospitals Included In and Excluded From the IPPS
V. Effects on Excluded Hospitals and Hospital Units
VI. Quantitative Effects of the Policy Changes Under the IPPS for Operating Costs
A. Basis and Methodology of Estimates
B. Analysis of Table I
C. Effects of the Changes to the DRG Reclassifications and Relative Cost-Based Weights (Column 2)
D. Effects of Wage Index Changes (Column 3)
E. Combined Effects of DRG and Wage Index Changes (Column 4)
F. Effects of the Expiration of the 3-Year Provision Allowing Urban Hospitals That Were Converted to Rural as a Result of the FY 2005 Labor Market Area Changes to Maintain the Wage Index of the Urban Labor Market Area in Which They Were Formerly Located (Column 5)
G. Effects of MGCRB Reclassifications (Column 6)
H. Effects of the Adjustment to the Application of the Rural Floor (Column 7)
I. Effects of Application of the Imputed Floor (Column 8)
J. Effects of the Expiration of Section 508 of Pub. L. 108–173 (Column 9)
K. Effects of the Wage Index Adjustment for Out-Migration (Column 10)
L. Effects of All Changes with CMI Adjustment Prior to Estimated Growth (Column 11)
M. Effects of All Changes with CMI Adjustment and Assumed Estimated (Column 12)
N. Effects of Policy on Payment Adjustments for Low-Volume Hospitals
O. Impact Analysis of Table II
VII. Effects of Other Policy Changes
A. Effects of Policy on Hospital-Acquired Conditions, Including Infections
B. Effects of MS–LTC–DRG Reclassifications and Relative Weights for LTCHs
C. Effects of New Technology Add-On Payments
D. Effects of Requirements for Hospital Reporting of Quality Data for Annual Hospital Payment Update
E. Effects of Policy on Cancellation of Classification of Acquired Rural Status and Rural Referral Centers
F. Effects of Policy Change on Payment for IME and Direct GME
G. Effects of Policy Changes Relating to Emergency Services under EMTALA During an Emergency Period
H. Effects of Policy on Disclosure of Physician Ownership in Hospitals and Patient Safety Measures
I. Effects of Implementation of the Rural Community Hospital Demonstration Program
J. Effects of Policy Changes on Services Furnished to Beneficiaries in Custody of Penal Authorities
VIII. Impact of Changes in the Capital IPPS
A. General Considerations
B. Results
IX. Alternatives Considered
X. Overall Conclusion
XI. Accounting Statement
XII. Executive Order 12866

Appendix B—Recommendation of Update Factors for Operating Cost Rates of Payment for Inpatient Hospital Services

I. Background
II. Inpatient Hospital Update for FY 2008
III. Secretary's Final Recommendation
IV. MedPAC Recommendation for Assessing Payment Adequacy and Updating Payments in Traditional Medicare

I. Background

A. Summary

1. Acute Care Hospital Inpatient Prospective Payment System (IPPS)

Section 1886(d) of the Social Security Act (the Act) sets forth a system of payment for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively set rates. Section 1886(g) of the Act requires the Secretary to pay for the capital-related costs of hospital inpatient stays under a prospective payment system (PPS). Under these PPSs, Medicare payment for hospital inpatient operating and capital-related costs is made at predetermined, specific rates for each hospital discharge. Discharges are classified according to a list of diagnosis-related groups (DRGs).

The base payment rate is comprised of a standardized amount that is divided into a labor-related share and a nonlabor-related share. The labor-related share is adjusted by the wage index applicable to the area where the hospital is located; and if the hospital is located in Alaska or Hawaii, the nonlabor-related share is adjusted by a cost-of-living adjustment factor. This base payment rate is multiplied by the DRG relative weight.

If the hospital treats a high percentage of low-income patients, it receives a percentage add-on payment applied to the DRG-adjusted base payment rate. This add-on payment, known as the disproportionate share hospital (DSH) adjustment, provides for a percentage increase in Medicare payments to hospitals that qualify under either of two statutory formulas designed to identify hospitals that serve a disproportionate share of low-income patients. For qualifying hospitals, the amount of this adjustment may vary based on the outcome of the statutory calculations.

If the hospital is an approved teaching hospital, it receives a percentage add-on payment for each case paid under the IPPS, known as the indirect medical education (IME) adjustment. This percentage varies, depending on the ratio of residents to beds.

Additional payments may be made for cases that involve new technologies or medical services that have been approved for special add-on payments. To qualify, a new technology or medical service must demonstrate that it is a substantial clinical improvement over technologies or services otherwise available, and that, absent an add-on payment, it would be inadequately paid under the regular DRG payment.

The costs incurred by the hospital for a case are evaluated to determine whether the hospital is eligible for an additional payment as an outlier case. This additional payment is designed to protect the hospital from large financial losses due to unusually expensive cases. Any outlier payment due is added to the DRG-adjusted base payment rate, plus any DSH, IME, and new technology or medical service add-on adjustments.

Although payments to most hospitals under the IPPS are made on the basis of the standardized amounts, some categories of hospitals are paid the higher of a hospital-specific rate based on their costs in a base year (the higher of FY 1982, FY 1987, FY 1996, or FY 2002) or the IPPS rate based on the standardized amount. For example, sole community hospitals (SCHs) are the sole source of care in their areas, and Medicare-dependent, small rural hospitals (MDHs) are a major source of care for Medicare beneficiaries in their areas. Both of these categories of hospitals are afforded this special payment protection in order to maintain access to services for beneficiaries. (Until FY 2007, an MDH has received the IPPS rate plus 50 percent of the difference between the IPPS rate and its hospital-specific rate if the hospital-specific rate is higher than the IPPS rate. In addition, an MDH does not have the option of using FY 1996 as the base year for its hospital-specific rate. As discussed below, for discharges occurring on or after October 1, 2007, but before October 1, 2011, an MDH will receive the IPPS rate plus 75 percent of the difference between the IPPS rate and its hospital-specific rate, if the hospital-specific rate is higher than the IPPS rate.)

Section 1886(g) of the Act requires the Secretary to pay for the capital-related costs of inpatient hospital services ''in accordance with a prospective payment system established by the Secretary.'' The basic methodology for determining capital prospective payments is set forth in our regulations at 42 CFR 412.308 and 412.312. Under the capital IPPS, payments are adjusted by the same DRG for the case as they are under the operating IPPS. Capital IPPS payments are also adjusted for IME and DSH, similar to the adjustments made under the operating IPPS. In addition, hospitals may receive outlier payments for those cases that have unusually high costs.

The existing regulations governing payments to hospitals under the IPPS are located in 42 CFR Part 412, Subparts A through M.

2. Hospitals and Hospital Units Excluded from the IPPS

Under section 1886(d)(1)(B) of the Act, as amended, certain specialty hospitals and hospital units are excluded from the IPPS. These hospitals and units are: rehabilitation hospitals and units; long-term care hospitals (LTCHs); psychiatric hospitals and units; children's hospitals; and cancer hospitals. Religious nonmedical health care institutions (RNHCIs) are also excluded from the IPPS. Various sections of the Balanced Budget Act of 1997 (Pub. L. 105–33), the Medicare, Medicaid and SCHIP [State Children's Health Insurance Program] Balanced Budget Refinement Act of 1999 (Pub. L. 106–113), and the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (Pub. L. 106–554) provide for the implementation of PPSs for rehabilitation hospitals and units (referred to as inpatient rehabilitation facilities (IRFs)), LTCHs, and psychiatric hospitals and units (referred to as inpatient psychiatric facilities (IPFs)), as discussed below. Children's hospitals, cancer hospitals, and RNHCIs continue to be paid solely under a reasonable cost-based system.

The existing regulations governing payments to excluded hospitals and hospital units are located in 42 CFR Parts 412 and 413.

a. Inpatient Rehabilitation Facilities (IRFs)

Under section 1886(j) of the Act, as amended, rehabilitation hospitals and units (IRFs) have been transitioned from payment based on a blend of reasonable cost reimbursement subject to a hospital-specific annual limit under section 1886(b) of the Act and the adjusted facility Federal prospective payment rate for cost reporting periods beginning on or after January 1, 2002 through September 30, 2002, to payment at 100 percent of the Federal rate effective for cost reporting periods beginning on or after October 1, 2002. IRFs subject to the blend were also permitted to elect payment based on 100 percent of the Federal rate. The existing regulations governing payments under the IRF PPS are located in 42 CFR Part 412, Subpart P.

b. Long-Term Care Hospitals (LTCHs)

Under the authority of sections 123(a) and (c) of Pub. L. 106–113 and section 307(b)(1) of Pub. L. 106–554, the LTCH PPS was effective for a LTCH's first cost reporting period beginning on or after October 1, 2002. LTCHs that do not meet the definition of ''new'' under § 412.23(e)(4) are paid, during a 5-year

transition period, a LTCH prospective payment that is comprised of an increasing proportion of the LTCH Federal rate and a decreasing proportion based on reasonable cost principles. Those LTCHs that did not meet the definition of ''new'' under § 412.23(e)(4) could elect to be paid based on 100 percent of the Federal prospective payment rate instead of a blended payment in any year during the 5-year transition. For cost reporting periods beginning on or after October 1, 2006, all LTCHs are paid 100 percent of the Federal rate. The existing regulations governing payment under the LTCH PPS are located in 42 CFR Part 412, Subpart O.

c. Inpatient Psychiatric Facilities (IPFs)

Under the authority of sections 124(a) and (c) of Pub. L. 106–113, inpatient psychiatric facilities (IPFs) (formerly psychiatric hospitals and psychiatric units of acute care hospitals) are paid under the IPF PPS. Under the IPF PPS, some IPFs are transitioning from being paid for inpatient hospital services based on a blend of reasonable cost-based payment and a Federal per diem payment rate, effective for cost reporting periods beginning on or after January 1, 2005. For cost reporting periods beginning on or after January 1, 2008, all IPFs will be paid 100 percent of the Federal per diem payment amount. The existing regulations governing payment under the IPF PPS are located in 42 CFR 412, Subpart N.

3. Critical Access Hospitals (CAHs)

Under sections 1814, 1820, and 1834(g) of the Act, payments are made to critical access hospitals (CAHs) (that is, rural hospitals or facilities that meet certain statutory requirements) for inpatient and outpatient services based on 101 percent of reasonable cost. Reasonable cost is determined under the provisions of section 1861(v)(1)(A) of the Act and existing regulations under 42 CFR Parts 413 and 415.

4. Payments for Graduate Medical Education (GME)

Under section 1886(a)(4) of the Act, costs of approved educational activities are excluded from the operating costs of inpatient hospital services. Hospitals with approved graduate medical education (GME) programs are paid for the direct costs of GME in accordance with section 1886(h) of the Act; the amount of payment for direct GME costs for a cost reporting period is based on the hospital's number of residents in that period and the hospital's costs per resident in a base year. The existing regulations governing payments to the various types of hospitals are located in 42 CFR Part 413.

B. Provisions of the Deficit Reduction Act of 2005 (DRA)

The Deficit Reduction Act of 2005 (DRA), Pub. L. 109–171, made a number of changes to the Act relating to prospective payments to hospitals and other providers for inpatient services. The final rule implements amendments made by (1) section 5001(a), which, effective for FY 2007 and subsequent years, expands the requirements for hospital quality data reporting; and (2) section 5001(c), which requires the Secretary to select, by October 1, 2007, at least two hospital-acquired conditions that meet certain specified criteria that will be subject to a quality adjustment in DRG payments during FY 2008.

In this final rule with comment period, we also discuss our development of a plan to implement, beginning with FY 2009, a value-based purchasing plan for section 1886(d) hospitals, in accordance with the requirements of section 5001(b) of Pub. L. 109–171.

C. Provisions of the Medicare Improvements and Extension Act under Division B, Title I of the Tax Relief and Health Care Act of 2006

In this final rule with comment period, we discuss the provisions of section 106(b)(1) of the Medicare Improvements and Extensions Act under Division B, Title I of the Tax Relief and Health Care Act of 2006 (MIEA–TRHCA), Pub. L. 109–432, which requires MedPAC to submit to Congress, not later than June 30, 2007, a report on the Medicare wage index classification system applied under the Medicare Prospective Payment System. Section 106(b) of the MIEA–TRHCA requires the report to include any alternatives that MedPAC recommends to the method to compute the wage index under section 1886(d)(3)(E) of the Act.

In addition, we discuss the provisions of section 106(b)(2) of the MIEA–TRHCA, which instructs the Secretary of Health and Human Services, taking into account MedPAC's recommendations on the Medicare wage index classification system, to include in the FY 2009 IPPS proposed rule one or more proposals to revise the wage index adjustment applied under section 1886(d)(3)(E) of the Act for purposes of the IPPS.

We note that we published a notice in the **Federal Register** on March 23, 2007 (72 FR 13799) that addressed the provisions of section 106(a) of the MIEA–TRHCA relating to the extension of geographic reclassifications of hospitals under section 508 of Pub. L. 108–173 (that expired on March 31, 2007) through September 30, 2007.

D. Provisions of the Pandemic and All-Hazards Preparedness Act

On December 19, 2006, Congress enacted the Pandemic and All-Hazards Preparedness Act, Pub. L. 109–417. Section 302(b) of Pub. L. 109–417 makes two specific changes that affect EMTALA implementation in emergency areas during an emergency period. Specifically section 302(b)(1)(A) of Pub. L. 109–417 amended section 1135(b)(3)(B) of the Act to state that sanctions may be waived for the direction or relocation of an individual for screening where, in the case of a public health emergency that involves a pandemic infectious disease, that direction or relocation occurs pursuant to a State pandemic preparedness plan. In addition, sections 302(b)(1)(B) and (b)(1)(C) of Pub. L. 109–417 amended section 1135(b)(3)(B) of the Act to state that, if a public health emergency involves a pandemic infectious disease (such as pandemic influenza) the duration of a waiver or modification under section 1135(b)(3) of the Act (relating to EMTALA) shall be determined in accordance with section 1135(e) of the Act as that subsection applies to public health emergencies.

In this final rule with comment period, we are making changes to the EMTALA regulations to conform them to the sanction waiver provisions of section 302(b) of Pub. L. 109–417.

E. Issuance of a Notice of Proposed Rulemaking

On May 3, 2007, we issued in the **Federal Register** (72 FR 24680) a notice of proposed rulemaking that set forth proposed changes to the Medicare IPPS for operating costs and for capital-related costs in FY 2008. We also set forth proposed changes relating to payments for GME and IME costs and payments to certain hospitals and units that continue to be excluded from the IPPS and paid on a reasonable cost basis that would be effective for discharges occurring on or after October 1, 2007. Below is a summary of the major changes that we proposed to make:

1. DRG Reclassifications and Recalibrations of Relative Weights

We proposed to adopt a Medicare Severity DRG (MS–DRG) classification system for the IPPS to better recognize severity of illness. We presented the methodology we used to establish the MS–DRGs and discussed our efforts to

further analyze alternative severity-adjusted DRG systems and to refine the relative weight calculations for DRGs.

We presented a proposed listing and discussion of hospital-acquired conditions, including infections, which were evaluated and proposed to be subject to the statutorily required quality adjustment in DRG payments for FY 2008.

We proposed limited annual revisions to the DRG classification system in the following areas: Intestinal transplants, neurostimulators, intracranial stents, cochlear implants, knee and hip replacements, spinal fusions and spinal disc devices, and endoscopic procedures.

We presented our reevaluation of certain FY 2007 applicants for add-on payments for high-cost new medical services and technologies, and our analysis of the FY 2008 applicant (including public input, as directed by Pub. L. 108–173, obtained in a town hall meeting).

We proposed the annual update of the long-term care diagnosis-related group (LTC–DRG) classifications and relative weights for use under the LTCH PPS for FY 2008. We proposed that the LTC–DRGs would be revised to mirror the proposed MS–DRGs for the IPPS.

2. Proposed Changes to the Hospital Wage Index

In section III. of the preamble to the proposed rule, we proposed revisions to the wage index and the annual update of the wage data. Specific issues addressed included the following:

- The FY 2008 wage index update, using wage data from cost reporting periods that began during FY 2004.
- Analysis and implementation of the proposed FY 2008 occupational mix adjustment to the wage index.
- Proposed changes relating to expiration of the imputed rural floor for the wage index and application of budget neutrality for the rural floor.
- Proposed changes in the determination of the wage index for multicampus hospitals.
- The proposed revisions to the wage index based on hospital redesignations and reclassifications, including reclassifications for multicampus hospitals.
- The proposed adjustment to the wage index for FY 2008 based on commuting patterns of hospital employees who reside in a county and work in a different area with a higher wage index.
- The timetable for reviewing and verifying the wage data that were in effect for the FY 2008 wage index.
- The labor-related share for the FY 2008 wage index, including the labor-related share for Puerto Rico.

3. Other Decisions and Proposed Changes to the IPPS for Operating Costs and GME Costs

In section IV. of the preamble to the proposed rule, we discussed a number of the provisions of the regulations in 42 CFR Parts 412, 413, and 489, including the following:

- The reporting of hospital quality data as a condition for receiving the full annual payment update increase.
- Development of the Medicare value-based purchasing plan and reports on the ''listening sessions'' held.
- The proposed updated national and regional case-mix values and discharges for purposes of determining RRC status and a proposed policy change relating to the acquired rural status of RRCs.
- The statutorily-required IME adjustment factor for FY 2008 and a proposed policy change relating to determining counts of residents on vacation or sick leave and in orientation for IME and direct GME purposes.
- Proposed changes relating to the waiver of sanctions for requirements for emergency services for hospitals under EMTALA during national emergencies.
- Proposed policy changes relating to the disclosure to patients of physician ownership of hospitals and patient safety measures.
- Discussion of the fourth year of implementation of the Rural Community Hospital Demonstration Program.

4. Proposed Changes to the IPPS for Capital-Related Costs

In section V. of the preamble to the proposed rule, we discussed the payment policy requirements for capital-related costs and capital payments to hospitals and proposed changes relating to adjustments to the Federal capital rate to address continuous large positive margins.

5. Proposed Changes to the Payment Rates for Excluded Hospitals and Hospital Units: Rate-of-Increase Percentages

In section VI. of the preamble to the proposed rule, we discussed payments to excluded hospitals and hospital units, and proposed changes for determining LTCH CCRs under the LTCH PPS.

6. Services Furnished to Beneficiaries in Custody of Penal Authorities

In section VII. of the preamble to the proposed rule, we clarified when individuals are considered to be in ''custody'' for purposes of Medicare payment for services furnished to beneficiaries who are under penal authorities.

7. Determining Proposed Prospective Payment Operating and Capital Rates and Rate-of-Increase Limits

In the Addendum to the proposed rule, we set forth proposed changes to the amounts and factors for determining the FY 2008 prospective payment rates for operating costs and capital-related costs. We also established the proposed threshold amounts for outlier cases. In addition, we addressed the proposed update factors for determining the rate-of-increase limits for cost reporting periods beginning in FY 2008 for hospitals and hospital units excluded from the PPS.

8. Impact Analysis

In Appendix A of the proposed rule, we set forth an analysis of the impact that the proposed changes would have on affected hospitals.

9. Recommendation of Update Factors for Operating Cost Rates of Payment for Inpatient Hospital Services

In Appendix B of the proposed rule, as required by sections 1886(e)(4) and (e)(5) of the Act, we provided our recommendations of the appropriate percentage changes for FY 2008 for the following:

- A single average standardized amount for all areas for hospital inpatient services paid under the IPPS for operating costs (and hospital-specific rates applicable to SCHs and MDHs).
- Target rate-of-increase limits to the allowable operating costs of hospital inpatient services furnished by hospitals and hospital units excluded from the IPPS.

10. Discussion of Medicare Payment Advisory Commission Recommendations

Under section 1805(b) of the Act, MedPAC is required to submit a report to Congress, no later than March 1 of each year, in which MedPAC reviews and makes recommendations on Medicare payment policies. MedPAC's March 2007 recommendations concerning hospital inpatient payment policies addressed the update factor for inpatient hospital operating costs and capital-related costs under the IPPS and for hospitals and distinct part hospital units excluded from the IPPS. We addressed these recommendations in Appendix B of the proposed rule. For further information relating specifically to the MedPAC March 2007 reports or to obtain a copy of the reports, contact

MedPAC at (202) 220–3700 or visit MedPAC's Web site at: *www.medpac.gov.*

F. Public Comments Received on the Proposed Rule

We received approximately 900 timely pieces of correspondence in response to the FY 2008 IPPS proposed rule issued in the **Federal Register** on May 3, 2007. These public comments addressed issues on multiple topics in the proposed rule. We present a summary of the public comments and our responses to them in the applicable subject matter sections of this final rule with comment period.

II. Changes to DRG Classifications and Relative Weights

A. Background

Section 1886(d) of the Act specifies that the Secretary shall establish a classification system (referred to as DRGs) for inpatient discharges and adjust payments under the IPPS based on appropriate weighting factors assigned to each DRG. Therefore, under the IPPS, we pay for inpatient hospital services on a rate per discharge basis that varies according to the DRG to which a beneficiary's stay is assigned. The formula used to calculate payment for a specific case multiplies an individual hospital's payment rate per case by the weight of the DRG to which the case is assigned. Each DRG weight represents the average resources required to care for cases in that particular DRG, relative to the average resources used to treat cases in all DRGs.

Congress recognized that it would be necessary to recalculate the DRG relative weights periodically to account for changes in resource consumption. Accordingly, section 1886(d)(4)(C) of the Act requires that the Secretary adjust the DRG classifications and relative weights at least annually. These adjustments are made to reflect changes in treatment patterns, technology, and any other factors that may change the relative use of hospital resources.

B. DRG Reclassifications

1. General

As discussed in the preamble to the FY 2007 IPPS final rule (71 FR 47881 through 47971), we are focusing our efforts in FY 2008 on making significant reforms to the IPPS consistent with the recommendations made by MedPAC in its ''Report to the Congress, Physician-Owned Specialty Hospitals'' in March 2005. MedPAC recommended that the Secretary refine the entire DRG system by taking into account severity of illness and applying hospital-specific relative value (HSRV) weights to DRGs.[1] We began this reform process by adopting cost-based weights over a 3-year transition period beginning in FY 2007 and making interim changes to the DRG system for FY 2007 by creating 20 new CMS DRGs and modifying 32 others across 13 different clinical areas involving nearly 1.7 million cases. As described below in more detail, these refinements were intermediate steps towards comprehensive reform of both the relative weights and the DRG system that is occurring as we undertook further study.

Currently, cases are classified into CMS DRGs for payment under the IPPS based on the principal diagnosis, up to eight additional diagnoses, and up to six procedures performed during the stay. In a small number of DRGs, classification is also based on the age, sex, and discharge status of the patient. The diagnosis and procedure information is reported by the hospital using codes from the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM).

The process of forming the DRGs was begun by dividing all possible principal diagnoses into mutually exclusive principal diagnosis areas, referred to as Major Diagnostic Categories (MDCs). The MDCs were formed by physician panels to ensure that the DRGs would be clinically coherent. The diagnoses in each MDC correspond to a single organ system or etiology and, in general, are associated with a particular medical specialty. Thus, in order to maintain the requirement of clinical coherence, no final DRG could contain patients in different MDCs. Most MDCs are based on a particular organ system of the body. For example, MDC 6 is Diseases and Disorders of the Digestive System. This approach is used because clinical care is generally organized in accordance with the organ system affected. However, some MDCs are not constructed on this basis because they involve multiple organ systems (for example, MDC 22 (Burns)). For FY 2007, cases are assigned to one of 538 DRGs in 25 MDCs. The table below lists the 25 MDCs.

MAJOR DIAGNOSTIC CATEGORIES

[MDCs]

1	Diseases and Disorders of the Nervous System.
2	Diseases and Disorders of the Eye.
3	Diseases and Disorders of the Ear, Nose, Mouth, and Throat.
4	Diseases and Disorders of the Respiratory System.
5	Diseases and Disorders of the Circulatory System.
6	Diseases and Disorders of the Digestive System.
7	Diseases and Disorders of the Hepatobiliary System and Pancreas.
8	Diseases and Disorders of the Musculoskeletal System and Connective Tissue.
9	Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast.
10	Endocrine, Nutritional and Metabolic Diseases and Disorders.
11	Diseases and Disorders of the Kidney and Urinary Tract.
12	Diseases and Disorders of the Male Reproductive System.
13	Diseases and Disorders of the Female Reproductive System.
14	Pregnancy, Childbirth, and the Puerperium.
15	Newborns and Other Neonates with Conditions Originating in the Perinatal Period.
16	Diseases and Disorders of the Blood and Blood Forming Organs and Immunological Disorders.
17	Myeloproliferative Diseases and Disorders and Poorly Differentiated Neoplasms.
18	Infectious and Parasitic Diseases (Systemic or Unspecified Sites).
19	Mental Diseases and Disorders.
20	Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders.

[1] Medicare Payment Advisory Commission: *Report to the Congress, Physician-Owned Specialty Hospitals*, March 2005, page viii.

MAJOR DIAGNOSTIC CATEGORIES—Continued
[MDCs]

21	Injuries, Poisonings, and Toxic Effects of Drugs.
22	Burns.
23	Factors Influencing Health Status and Other Contacts with Health Services.
24	Multiple Significant Trauma.
25	Human Immunodeficiency Virus Infections.

In general, cases are assigned to an MDC based on the patient's principal diagnosis before assignment to a DRG. However, under the most recent version of the CMS GROUPER (Version 24.0), there are 9 DRGs to which cases are directly assigned on the basis of ICD–9–CM procedure codes. These DRGs are for heart transplant or implant of heart assist systems, liver and/or intestinal transplants, bone marrow transplants, lung transplants, simultaneous pancreas/kidney transplants, pancreas transplants, and for tracheostomies. Cases are assigned to these DRGs before they are classified to an MDC. The table below lists the nine current pre-MDCs.

PRE-MAJOR DIAGNOSTIC CATEGORIES
[Pre-MDCs]

DRG 103	Heart Transplant or Implant of Heart Assist System.
DRG 480	Liver Transplant and/or Intestinal Transplant.
DRG 481	Bone Marrow Transplant.
DRG 482	Tracheostomy for Face, Mouth, and Neck Diagnoses.
DRG 495	Lung Transplant.
DRG 512	Simultaneous Pancreas/Kidney Transplant.
DRG 513	Pancreas Transplant.
DRG 541	ECMO or Tracheostomy with Mechanical Ventilation 96+ Hours or Principal Diagnosis Except for Face, Mouth, and Neck Diagnosis with Major O.R.
DRG 542	Tracheostomy with Mechanical Ventilation 96+ Hours or Principal Diagnosis Except for Face, Mouth, and Neck Diagnosis without Major O.R.

Once the MDCs were defined, each MDC was evaluated to identify those additional patient characteristics that would have a consistent effect on the consumption of hospital resources. Because the presence of a surgical procedure that required the use of the operating room would have a significant effect on the type of hospital resources used by a patient, most MDCs were initially divided into surgical DRGs and medical DRGs. Surgical DRGs are based on a hierarchy that orders operating room (O.R.) procedures or groups of O.R. procedures by resource intensity. Medical DRGs generally are differentiated on the basis of diagnosis and age (0 to 17 years of age or greater than 17 years of age). Some surgical and medical DRGs are further differentiated based on the presence or absence of a complication or comorbidity (CC).

Generally, nonsurgical procedures and minor surgical procedures that are not usually performed in an operating room are not treated as O.R. procedures. However, there are a few non-O.R. procedures that do affect DRG assignment for certain principal diagnoses. An example is extracorporeal shock wave lithotripsy for patients with a principal diagnosis of urinary stones.

Once the medical and surgical classes for an MDC were formed, each diagnosis class was evaluated to determine if complications, comorbidities, or the patient's age would consistently affect the consumption of hospital resources. Physician panels classified each diagnosis code based on whether the diagnosis, when present as a secondary condition, would be considered a substantial CC. A substantial CC was defined as a condition which, because of its presence with a specific principal diagnosis, would cause an increase in the length of stay by at least one day in at least 75 percent of the patients. Each medical and surgical class within an MDC was tested to determine if the presence of any substantial CC would consistently affect the consumption of hospital resources.

A patient's diagnosis, procedure, discharge status, and demographic information is entered into the Medicare claims processing systems and subjected to a series of automated screens called the Medicare Code Editor (MCE). The MCE screens are designed to identify cases that require further review before classification into a DRG.

After patient information is screened through the MCE and any further development of the claim is conducted, the cases are classified into the appropriate DRG by the Medicare GROUPER software program. The GROUPER program was developed as a means of classifying each case into a DRG on the basis of the diagnosis and procedure codes and, for a limited number of DRGs, demographic information (that is, sex, age, and discharge status).

After cases are screened through the MCE and assigned to a DRG by the GROUPER, the PRICER software calculates a base DRG payment. The PRICER calculates the payment for each case covered by the IPPS based on the DRG relative weight and additional factors associated with each hospital, such as IME and DSH payment adjustments. These additional factors increase the payment amount to hospitals above the base DRG payment.

The records for all Medicare hospital inpatient discharges are maintained in the Medicare Provider Analysis and Review (MedPAR) file. The data in this file are used to evaluate possible DRG classification changes and to recalibrate the DRG weights. However, in the FY 2000 IPPS final rule (64 FR 41500), we discussed a process for considering non-MedPAR data in the recalibration process. In order for us to consider using particular non-MedPAR data, we must have sufficient time to evaluate and test the data. The time necessary to do so depends upon the nature and quality of the non-MedPAR data submitted. Generally, however, a significant sample of the non-MedPAR data should be submitted by mid-october for consideration in conjunction with the next year's proposed rule. This

date allows us time to test the data and make a preliminary assessment as to the feasibility of using the data. Subsequently, a complete database should be submitted by early December for consideration in conjunction with the next year's proposed rule.

As we proposed in the FY 2008 IPPS proposed rule, for FY 2008, we are adopting significant changes to the current DRGs. As described in detail below, we proposed significant improvement in the DRG system to recognize severity of illness and resource usage by proposing to adopt Medicare Severity DRGs (MS–DRGs). The changes we proposed (and are adopting in this final rule with comment period) will be reflected in the FY 2008 GROUPER, Version 25.0, and will be effective for discharges occurring on or after October 1, 2007. As noted in the proposed rule, our DRG analysis was based on data from the December 2006 update of the FY 2006 MedPAR file, which contained hospital bills received through December 31, 2006, for discharges occurring in FY 2006. For this final rule with comment period, our analysis is based on more recent data from the March 2007 update of the FY 2006 MedPAR file, which contains hospital bills received through March 31, 2007, for discharges occurring in FY 2006.

2. Yearly Review for Making DRG Changes

Many of the changes to the DRG classifications we make annually are the result of specific issues brought to our attention by interested parties. As we indicated in the proposed rule, we encourage individuals with concerns about DRG classifications to bring those concerns to our attention in a timely manner so they can be carefully considered for possible inclusion in the annual proposed rule and, if included, may be subjected to public review and comment. Therefore, similar to the timetable for interested parties to submit non MedPAR data for consideration in the DRG recalibration process, concerns about DRG classification issues should be brought to our attention no later than early December in order to be considered and possibly included in the next annual proposed rule updating the IPPS.

The actual process of forming the DRGs was, and will likely continue to be, highly iterative, involving a combination of statistical results from test data combined with clinical judgment. We describe in detail below the process we used to develop the MS–DRGs that we proposed and are adopting in this final rule with comment period. In addition, in deciding whether to make further modification to the MS–DRGs for particular circumstances brought to our attention, we considered whether the resource consumption and clinical characteristics of the patients with a given set of conditions are significantly different than the remaining patients in the MS–DRG. We evaluated patient care costs using average charges and lengths of stay as proxies for costs and relied on the judgment of our medical advisors to decide whether patients are clinically distinct or similar to other patients in the MS–DRG. In evaluating resource costs, we considered both the absolute and percentage differences in average charges between the cases we selected for review and the remainder of cases in the MS–DRG. We also considered variation in charges within these groups; that is, whether observed average differences were consistent across patients or attributable to cases that were extreme in terms of charges or length of stay, or both. Further, we considered the number of patients who will have a given set of characteristics and generally preferred not to create a new DRG unless it would include a substantial number of cases.

C. MedPAC Recommendations for Revisions to the IPPS DRG System

In the FY 2006 and FY 2007 IPPS final rules, we discussed a number of recommendations made by MedPAC regarding revisions to the DRG system used under the IPPS (70 FR 47473 through 47482 and 71 FR 47881 through 47939).

In Recommendations 1–3 in the 2005 Report to Congress on Physician Owned Specialty Hospitals, MedPAC recommended that CMS:

- Refine the current DRGs to more fully capture differences in severity of illness among patients.
- Base the DRG relative weights on the estimated cost of providing care.
- Base the weights on the national average of the hospital-specific relative values (HSRVs) for each DRG (using hospital-specific costs to derive the HSRVs).
- Adjust the DRG relative weights to account for differences in the prevalence of high-cost outlier cases.
- Implement the case-mix measurement and outlier policies over a transitional period.

As we noted in the FY 2006 IPPS final rule, we had insufficient time to complete a thorough evaluation of these recommendations for full implementation in FY 2006. However, we did adopt severity-weighted cardiac DRGs in FY 2006 to address public comments on this issue and the specific concerns of MedPAC regarding cardiac surgery DRGs. We also indicated that we planned to further consider all of MedPAC's recommendations and thoroughly analyze options and their impacts on the various types of hospitals in the FY 2007 IPPS proposed rule.

For FY 2007, we began this process. In the FY 2007 IPPS proposed rule, we proposed to adopt Consolidated Severity DRGs (CS DRGs) for FY 2008 (if not earlier). However, based on public comments received on the FY 2007 IPPS proposed rule, we decided not to adopt the CS DRGs. Rather, we decided to make interim changes to the existing DRGs for FY 2007 by creating 20 new DRGs involving 13 different clinical areas that would significantly improve the CMS DRG system's recognition of severity of illness. We also modified 32 DRGs to better capture differences in severity. The new and revised DRGs were selected from 40 existing CMS DRGs that contained 1,666,476 cases and represent a number of body systems. In creating these 20 new DRGs, we deleted 8 and modified 32 existing DRGs. We indicated that these interim steps for FY 2007 were being taken as a prelude to more comprehensive changes to better account for severity in the DRG system by FY 2008. In the FY 2007 IPPS final rule, we indicated our intent to pursue further DRG reform through two initiatives. First, we announced that we were in the process of engaging a contractor to assist us with evaluating alternative DRG systems that were raised as potential alternatives to the CS DRGs in the public comments. Second, we indicated our intent to review over 13,000 ICD–9–CM diagnosis codes as part of making further refinements to the current CMS DRGs to better recognize severity of illness based on the work that CMS (then HCFA) did in the mid-1990's to adopt severity DRGs. We describe in detail below the progress we have made on these two initiatives, our actions for FY 2008, and our plans for continued analysis of reform of the DRG system for FY 2009. We note that revising the DRGs to better recognize severity of illness has implications for the outlier threshold, the application of the postacute care transfer policy, the measurement of real case-mix versus apparent case-mix, and the IME and DSH payment adjustments. We discuss these implications in more detail in the following sections.

In the FY 2007 IPPS proposed rule, we discussed MedPAC's recommendations to move to a cost-based HSRV weighting methodology beginning with the FY 2007 IPPS

proposed rule. Although we proposed to adopt HSRV weights for FY 2007, we decided not to adopt the proposed methodology in the final rule after considering the public comments we received on the proposal. Instead, in the FY 2007 IPPS final rule, we adopted a cost-based weighting methodology without the hospital-specific portion of the methodology. The cost-based weights are being adopted over a 3-year transition period in ⅓ increments between FY 2007 and FY 2009. In addition, in the FY 2007 IPPS final rule, we indicated our intent to further study the hospital-specific methodology as well as other issues brought to our attention with respect to the cost-based weights. There was significant concern in the public comments that we account for charge compression—the practice of applying a higher charge markup over costs to lower cost than higher cost items and services—if we are to develop relative weights based on cost. Further, public commenters expressed concern about potential inconsistencies between how costs and charges are reported on the Medicare cost reports and charges on the Medicare claims. In the FY 2007 IPPS final rule, we used costs and charges from the cost report to determine departmental level cost-to-charge ratios (CCRs) to apply to charges on the Medicare claims to determine the cost-based weights. The commenters were concerned about potential distortions to the cost-based weights that would result from inconsistent reporting between the cost reports and the Medicare claims. After publication of the FY 2007 IPPS final rule, we entered into a contract with RTI International to study both charge compression and to what extent our methodology for calculating DRG relative weights is affected by inconsistencies between how hospitals report costs and charges on the cost report and how hospitals report charges on individual claims. Further, as part of its study of alternative DRG systems, the RAND Corporation is analyzing the HSRV cost-weighting methodology.

As we present below, we believe that revisions to the DRG system to better recognize severity of illness and changes to the relative weights based on costs rather than charges are improving the accuracy of the payment rates in the IPPS. We agree with MedPAC that these refinements should be pursued. Although we continue to caution that any system that groups cases will always present some opportunities for providers to specialize in cases they believe to have higher margins, we believe that the changes we have adopted and the continuing reforms we proposed, and are adopting in this final rule with comment period, for FY 2008 will improve payment accuracy and reduce financial incentives to create specialty hospitals.

D. Refinement of DRGs Based on Severity of Illness

For purposes of the following discussions, the term ''CMS DRGs'' means the DRG system we currently use under the IPPS; the term ''Medicare-Severity DRGs (MS–DRGs)'' means the revisions that we proposed to make (and are adopting in this final rule with comment period) to the current CMS DRGs to better recognize severity of illness and resource use based on case complexity. Although we have found the terms ''CMS DRGs'' and ''MS–DRGs'' useful to distinguish the current DRG system from the DRGs that we proposed to adopt for FY 2008, we invited public comments on how to best refer to both the current DRGs and the proposed DRGs to avoid confusion and improve clarity.

Comment: One commenter responded to our request for name suggestions for the new DRG system. The commenter agreed that the name should differentiate which DRG scheme is being referenced. The commenter did not provide an alternative suggestion.

Response: We agree with the importance of being able to differentiate between the current and the revised DRG system. We believe the name ''Medicare Severity DRGs (MS–DRGs)'' is an appropriate name for this revised system. Therefore, we are adopting as final our reference to the revised DRG system as the ''Medicare Severity DRGs (MS DRGs).''

1. Evaluation of Alternative Severity-Adjusted DRG Systems

In the FY 2007 IPPS final rule, we stated our intent to engage a contractor to assist us with an evaluation of alternative DRG systems that may better recognize severity than the current CMS DRGs. We noted it was possible that some of the alternative systems would better recognize severity of illness and are based on the current CMS DRGs. We further stated that if we were to develop a clinical severity concept using the current CMS DRGs as the starting point, it was possible that several of the issues raised by commenters (in response to the CS DRGs, which, in the FY 2007 IPPS proposed rule, we proposed to adopt for FY 2008 or earlier) would no longer be a concern. We noted that if we were to propose adoption of severity DRGs for FY 2008, we would consider the issues raised by commenters on last year's proposed rule as we continued to make further refinements to account for complexity as well as severity to better reflect relative resource use. We stated that we believed it was likely that at least one of several alternative severity-adjusted DRG systems suggested for review (or potentially a system we would develop ourselves) would be suitable to achieve our goal of improving payment accuracy beginning in FY 2008.

On September 1, 2006, we awarded a contract to the RAND Corporation to perform an evaluation of alternative severity-adjusted DRG classification systems. RAND is evaluating several alternative DRG systems based on how well they are suited to classifying and making payments for hospital inpatient services provided to Medicare patients. Each system is being assessed on its ability to differentiate among severity of illness. A final report is due on or before September 1, 2007.

RAND's draft interim report focused on the following criteria:

- Severity-adjusted DRG classification systems.
- How well does each classification system explain variation in resource use?
- How would the classification system affect a hospital's patient mix?
- Are the groupings manageable, administratively feasible and understandable?
- Payment accuracy—What are the payment implications of selected models?

In response to our request, several vendors of DRG systems submitted their products for evaluation. The following products were evaluated by RAND:

3M/Health Information Systems (HIS)

- CMS DRGs modified for AP–DRG Logic (CMS+AP–DRGs)
- Consolidated Severity-Adjusted DRGs (CS DRGs)

Health Systems Consultants (HSC)

- Refined DRGs (HSC–DRGs)

HSS/Ingenix

- All-Payer Severity DRGs with Medicare modifications (MM–APS–DRGs)

Solucient

- Solucient Refined DRGs (Sol–DRGs)

Vendors submitted their commercial (off-the-shelf) software to RAND in late September 2006. The five systems were compared to the CMS DRGs that were in effect as of October 1, 2006 (FY 2007). RAND assigned FY 2004 and FY 2005 Medicare discharges from acute care hospitals to the FY 2007 CMS DRGs and

to each of the alternative severity-adjusted DRG systems. RAND's initial analysis provided an overview of each alternative DRG classification system, their comparative performance in explaining variation in resource use, differences in DRG grouping logic, and case mix change.

A Technical Expert Panel comprised of individuals representing academic institutions, hospital associations, and MedPAC was formed in October 2006. The members received the preliminary draft report of RAND's alternative severity-adjusted DRG systems evaluation in early January 2007. The panel met with RAND and CMS on January 18, 2007, to discuss the preliminary draft report and to provide additional comments. RAND incorporated items raised by the panel into its preliminary draft report and submitted a revised interim report to CMS in mid-March 2007. CMS posted RAND's interim report on the CMS Web site in late March 2007. Interested individuals can view RAND's interim report on the CMS Web site at: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.*

At this time, RAND has completed its evaluation of the alternative severity adjusted DRG systems. RAND's interim report reflects its evaluation of five alternative DRG systems using the criteria described above. Since the proposed rule, RAND evaluated the Medicare Severity DRG (MS–DRG) system using the same criteria applied to the other DRG systems. We are continuing to work with RAND to evaluate alternate methodologies for establishing relative weights using the MS–DRGs. Once RAND completes its work on the alternate methodologies for establishing relative weights, we will be in a better position to evaluate the issue of charge compression and potential improvements to our methodology to determine cost-based relative weights. We plan to review RAND's analysis of these issues and determine if it will be appropriate to propose additional adjustments to the MS–DRGs or the relative weight methodology in the FY 2009 IPPS proposed rule.

We instructed RAND to evaluate the MS–DRGs using the same criteria that it applied to the other DRG systems. Consistent with conclusions we made in the IPPS proposed rule, RAND's findings demonstrate that MS–DRGs explain 43 percent of the cost variation; a 9.1 percent improvement over the CMS DRGs. RAND reports that the explanatory power of the MS–DRGs is higher than the CMS+AP–DRGs, but lower than the other systems analyzed. The MS–DRGs have the lowest adjusted R^2 values among the severity-adjusted systems in seven MDCs. In three of these MDCs, the R^2 values are actually lower than under the CMS DRGs: MDC 19 (Mental Diseases and Disorders), MDC 20 (Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders) and MDC 22 (Burns). RAND attributes the reduction in R^2 values to how the CMS DRGs were collapsed to form the base DRGs and recommends future examination. We agree that RAND's findings provide us with potential issues to examine to further improve the MS–DRGs for FY 2009.

Although RAND's findings related to R^2 in certain MDCs are of concern, we believe the MS–DRGs remain an improvement over the current CMS DRGs and have significant advantages over the other DRG systems being evaluated. Specifically, they are more up-to-date because of our review of secondary diagnoses and classification into MCCs and CCs. Further, they are understandable, available in the public domain, and will have fewer transition issues than the other systems. As MS–DRGs are a modification of the current CMS DRGs, they allow for updates and maintenance to continue using the same process as under the current CMS DRGs.

Depending on the criteria being evaluated, the relative merits of each system being evaluated by RAND are different. For instance, the CS DRGs performed well in explaining resource variation but have the highest potential for case-mix growth. Other than the MS–DRGs, the CMS+AP–DRGs did the poorest among the systems evaluated in explaining variation in resource usage but did the best on producing reliable and stable results. The remaining systems generally performed somewhere in between on most of the measures that RAND used in its comparative analysis. The MS–DRGs are the result of modifications to the CMS DRGs to better account for severity. Unlike the other systems, the MS–DRGs are available in the public domain, and as a result, systems implementation and other costs are likely to be at a minimum. As suggested above, RAND found that the MS–DRGs are an improvement over the CMS DRGs and compare favorably to the alternative DRG systems being evaluated on some criteria and not as well on others.

As RAND has completed its evaluation of the alternative DRG systems, including the MS–DRGs, consistent with RAND's findings, we believe it is appropriate at this time to adopt the MS–DRG system for the Medicare IPPS in FY 2008. While there will be an opportunity for the public to comment on RAND's findings, we expect to permanently adopt the MS–DRGs for the IPPS. We do not think it is likely that there will be persuasive public comments suggesting that one of the alternative DRG systems being evaluated by RAND is clearly superior. In our view, none of the systems appears to be clearly superior or inferior to the other systems based on the criteria RAND used for the evaluation. Given the strong support in the public comments for the MS–DRGs and the fact they compare well overall to the alternative DRG systems being evaluated by RAND, we believe it is likely that the MS–DRGs will be the system that Medicare uses permanently for the IPPS. However, because we are interested in public input on this issue, we are making RAND's final report available on the CMS Web Site at: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.*

Interested members of the public can write to the following address to make their views known to us about the RAND Report:

Division of Acute Care, Center for Medicaid Management, 7500 Security Boulevard, C4–08–06, Baltimore, MD 21244, Attn: Mady Hue.

In the FY 2008 IPPS proposed rule, we proposed to adopt the MS–DRGs for FY 2008. We are providing the following update on RAND's progress in evaluating the MS–DRGs against the alternative DRG systems. In the proposed rule, we also invited public comment regarding RAND's preliminary analysis of each vendor-supplied alternative severity-adjusted DRG system described below. A summary of any public comments that we received and our responses to those comments are presented under each subject area.

a. Overview of Alternative DRG Classification Systems

Analysis of how each of the six severity adjusted DRG systems performs began by using the current CMS DRGs as a baseline. Two of the six systems (CS DRGs and MM–APS–DRGs) are derivatives of all-patient severity-adjusted DRG systems that have been modified by their developers for the Medicare population and two of the systems (HSC–DRGs and Sol–DRGs) are all-patient systems that incorporate severity levels into the CMS DRGs. The CMS+AP–DRGs are a combination of CMS DRGs and a modification for the Medicare population of the major CC

(MCC) severity groupings used in the AP–DRG system. (The AP–DRG system was developed by 3M/HIS specifically for the State of New York to capture the non-Medicare population.) The MS–DRG system modifies the current CMS DRGs by collapsing any paired DRGs (DRGs distinguished by the presence or absence of CCs and/or age) into base DRGs and then splits the base DRGs into MCC/CC-severity levels.

Table A below shows how each of the six alternative severity-adjusted systems classifies patients into base DRGs and their corresponding severity levels.

TABLE A.—LOGIC OF CMS AND ALTERNATIVE DRG SYSTEMS

	CMS–DRG	CMS+AP–DRG	HSC–DRG	Sol–DRG	MM–APS–DRG	CS DRG	MS–DRG
Number of MDCs	25	25	25	25	25	25	25
Number of base DRGs	379	379	391	393	328	270	335
Total number of DRGs	538	602	1,293	1,261	915	863	745
Number of DRGs <500 discharges.	97 (18%)	97 (16%)	374 (29%)	474 (38%)	115 (13%)	113 (13%)	38 (5.2%)
Number of CC (severity) subclasses.	2	3	3 (med) or 4 (surg)	3 (med) or 4 (surg)	3	4	3
CC subclasses	With CC, without CC for selected base DRGs	Without CC, With CC for selected base DRGs and Major CC across DRGs within MDC	No CC, Class C CC, Class B CC, Class A CC (Surgical only)	Minor/no substantial CCs, Moderate CCs, Major CCs, Catastrophic CCs (Surgical only)	Without CC, With CC, With Major CC with some collapsing at base DRG level	Minor, Moderate, Major, Severe with some collapsing at DRG level	Without CC, With CC, With Major CC with collapsing between severity levels for same base DRG.
Multiple CCs recognized	No	No	No	No	Yes (in computation of weight)	Yes	No.
CC assignment logic	Presence/absence	Presence/absence	Presence/absence	Presence/absence	Presence/absence	18-step process	Presence/absence.
MDC assignment	Principal diagnosis	Principal diagnosis	Principal diagnosis	Principal diagnosis	Principal diagnosis	Principal diagnosis with rerouting	Principal diagnosis.
Death used in DRG assignment.	Yes (in selected DRGs)	Yes (in selected DRGs)	Yes (“early death” DRGs)	Yes (“early death” DRGs)	Yes (in selected DRGs)	No	Yes (in selected DRGs and CC assignments).

RAND’s evaluation of the logic for each system demonstrated the following:

• Four systems add severity levels to the base CMS DRGs; the CS DRGs add severity levels to the base APR DRGs, which are comparable but not identical to the base CMS DRGs. Both the CS DRGs and MM–APS–DRGs collapse some base DRGs with low Medicare volume. The MS–DRGs collapse the current CMS DRG splits and either leave the base DRG undivided or divide it into two or three severity levels.

• The HSC–DRGs and the Sol–DRGs use uniform severity levels for each base DRG (three for medical and four for surgical). The general structure of the MS–DRG logic establishes three severity levels for each base DRG: With MCC, with CC, and without CC. However, CMS consolidated severity levels for the same base DRG if they do not meet specific statistical criteria. The general structure of the MM–APS–DRG logic includes three severity levels for each base DRG, but some severity levels for the same base DRG are consolidated to address Medicare low-volume DRGs and nonmonotonicity issues. Monotonicity is when the average costs for a severity group consistently rise as the severity level of the group increases. For example, in a monotonic system, if within a base DRG there are three severity groups and level 1 severity is less than level 2 severity and level 2 severity is less than level 3 severity, the average costs for a level 3 case would be greater than the average costs for a level 2 case, which would be greater than the average costs for a level 1 case. When a DRG is nonmonotonic, the mean cost in the higher severity level is less than the mean cost in the lower severity level. The general structure of the CS DRGs includes four severity levels for each base DRG. However, severity level consolidations occur to address Medicare low-volume DRGs and nonmonotonicity. The CS DRGs consolidate both adjacent severity levels for the same base DRG and the same severity level across multiple base DRGs (especially for severity level 4).

• Under the CMS+AP–DRGs and MM–APS–DRGs, each diagnosis is assigned a uniform CC-severity level across all base DRGs (other than CCs on the exclusion list for specific principal diagnoses). The remaining systems assign diagnoses to CC-severity level classifications by groups of DRGs.

• Under the grouping logic used by all systems other than the CS DRGs, each discharge is assigned to the highest severity level of any secondary diagnosis. The MS–DRGs assign discharges with no CC but certain high cost devices to a higher severity level. The CS DRGs adjust the initial severity level assignment based on other factors, including the presence of additional CCs. None of the other systems adjusts the severity level classification for additional factors or CCs. However, the MM–APS–DRG system handles additional CCs through an enhanced relative weight.

• The HSC–DRGs and the Sol–DRGs have a medical ''early death'' DRG within each MDC. The CS DRGs do not use death in the grouping logic. In addition, most complications of care do not affect the DRG assignment. The MS–DRGs use death in making an assignment in selected DRGs and do not count certain conditions as MCCs and CCs (such as cardiac arrest) in patients who die during the inpatient stay.

b. Comparative Performance in Explaining Variation in Resource Use

In evaluating the comparative performance of each alternative DRG system, RAND used MedPAR data from FY 2004 and FY 2005. RAND excluded data from CAHs, Indian Health Service hospitals, and hospitals that have all-inclusive rate charging practices. Consistent with CMS practice, RAND did not exclude data from Maryland hospitals, which operate under an IPPS waiver. Records that failed edits for data consistency or that had missing variables that were needed to determine standardized costs were also excluded.

RAND reported that evaluation of each alternative severity-adjusted DRG system is a complex process due to differences in how each of the severity levels are applied, the number of severity-adjusted DRGs in each system, and the average number of discharges assigned to each DRG. In addition, the manner in which the DRGs for patients 0 to 17 years of age are assigned in the severity-adjusted systems affects the number of low volume DRGs using Medicare discharges. Low-volume, severity-adjusted DRGs can affect the relative performance of a classification system. However, the percentage of Medicare discharges assigned to these DRGs is small—approximately 0.7 percent in the HSC–DRG and Sol–DRG systems compared to 0.1 percent in the CMS DRGs.

To facilitate compatrisons across the severity-adjusted DRG system, RAND assigned a severity level to each MS–DRG consistent with the method used for the other DRG systems. The severity level is based on the lowest severity level. If a base MS–DRG divided into two DRGs, one for both discharges with no CC and discharges with CCs and the other for discharges with MCCs, RAND assigned Level 0 to the DRG for discharges with no MCC and Level 2 to the DRG for discharges with MCCs. RAND also assigned Severity Level 0 to base DRGs that do not split by CC level. Table B summarizes the distribution of DRGs and discharges across severity levels by classification system, exclusive of MDC 15, ungroupable discharges, and statistical outliers. In comparison to the other severity-adjusted systems, the MS–DRGs have a much higher percentage of discharges assigned to the lowest severity level. This includes base DRGs that are not divided into severity subgroups, the no CC severity level, and the no MCC severity level in those base DRGs that are split based on the presence of a MCC only. Sixty percent of discharges are assigned to Severity Level 0 DRGs compared to only 20 percent in the CS DRG system. There are several reasons for the higher percentage, including the reassessment of CC assignments, the collapsing of the no CC and CC severity levels in 43 base MS–DRGs, and no severity subgroups in 53 base MS–DRGs.

Table B: Distribution of DRGs and Discharges by Severity-Level Assignments

Distribution of DRGs and Discharges by Severity of Illness Levels						
CMS DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	358	128			25	511
N Discharges	6,782,845	5,074,736			278,401	12,135,982
% Discharges	56%	42%			2%	100%
CMS+AP DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	358	128	64		25	575
N Discharges	5,842,981	3,933,710	2,262,260		97,030	12,135,981
% Discharges	48%	32%	19%		1%	100%
HSC-DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	373	349	348	175		1245
N Discharges	2,788,346	5,501,541	3,145,959	700,136		12,135,982
% Discharges	23%	45%	26%	6%		100%
Sol-DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	368	336	331	169		1204
N Discharges	2,923,930	6,609,026	2,113,606	489,520		12,136,082
% Discharges	24%	54%	17%	4%		100%
MM-APS-DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	325	316	265			906
N Discharges	3,892,398	6,283,024	1,960,560			12,135,982
% Discharges	32%	52%	16%			100%
CS-DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	261	262	263	59		845
N Discharges	2,475,008	5,588,117	3,308,104	764,821		12,136,050
% Discharges	20%	46%	27%	6%		100%
MS-DRGs						
	SOI Level 0	SOI Level 1	SOI Level 2	SOI Level 3	Age 0-17 DRGs	Total
N DRGs	325	196	215			736
N Discharges	14,617,298	5,695,676	3,958,990			24,271,964
% Discharges	60%	23%	16%			100%

Severity-adjusted DRGs are designed to reduce the amount of cost variation within DRGs. To compare how much within-DRG variation occurs in each DRG system, RAND computed the mean standardized cost, standard deviation, and coefficient of variation (CV) for each DRG across the various systems. Each severity-adjusted system has a smaller proportion of DRGs with a CV >100 percent than the CMS DRGs. Seventeen percent of the 511 CMS DRGs to which Medicare patients were assigned in 2005 had a CV >100 percent. In contrast, 8 percent of the 736 MS–DRGs have a CV >100 percent. This is a slightly lower percentage than in the CMS+AP DRGs but slightly higher percentage than the other four severity-adjusted DRG systems. Only 1.7 percent of discharges are assigned to MS–DRGs with a CV >100 percent, which is comparable to the percentage of discharges assigned to DRGs with a CV >100 percent in the CS DRGs and the CMS+AP DRGs. The MM–APS DRGs and CMS+AP DRGs have slightly lower and higher percentages, respectively, of discharges assigned to DRGs with a CV >100 percent.

RAND utilized a general linear regression model to evaluate how well each severity-adjusted DRG system explains variation in costs per case. The initial results demonstrate that all six severity-adjusted DRG systems predict cost better than the CMS DRGs. The CS DRGs have higher adjusted R^2 values (explanatory power) than the other severity-adjusted systems in nearly every MDC. In general, the adjusted R^2 value for the CS DRGs is 0.4458, a 13-percent improvement over the adjusted R^2 value for the CMS DRGs. The HSC–DRGs demonstrate an 11-percent improvement, while the adjusted R^2 values for the MM–APS–DRGs and Sol–DRGs are 10.0 percent and 9.7 percent higher, respectively, than the CMS DRG R^2 value. The adjusted R^2 value for the MS–DRGs is 0.4300, a 9.1 percent improvement over the CMS DRGs. The CMS+AP–DRGs show the smallest improvement, nearly 8 percent.

Another aspect of RAND's evaluation was to identify the validity of each alternative DRG system as a measurement for resource costs. For a base DRG, the severity levels should be monotonic; that is, the mean cost per discharge should increase simultaneously with an increase in the severity level. A distinction between patient groups and varying treatment costs should be accomplished by the severity levels. When a DRG is nonmonotonic, the mean cost in the higher severity level is less than the mean cost in the lower severity level. RAND studied the percentage differences and absolute differences in cost between the severity levels within the base DRGs for each system under evaluation. For the analysis, RAND assigned the severity levels for discharges assigned to the CMS+AP–

DRGs and CS DRGs that include several base DRGs to the base DRG to which they would have been assigned at a lower severity level.

Table C shows the percentage difference between the mean standardized cost for discharges with severity levels 1 through 3 as applicable to the adjacent lower severity level within the base DRG (for example, Base DRG 1 Severity Level 1 compared with Base DRG 1 Severity Level 0). The first column of the table shows the number of DRGs with severity level 0 and the proportion of discharges assigned to those DRGs. The ''Other DRGs'' column, which is not applicable to the MS–DRGs, includes DRGs for age 0 to 17 years and any DRGs for which there was no base DRG with severity level 0 that could be used in the comparison, for example, no Medicare discharges were assigned to the base DRG severity level 0. For severity level 1 and higher, RAND computed the ratio of the mean cost for that level to the mean cost for the adjacent lower level (for example, mean $cost_{DRG\ Level\ 2}$/mean $cost_{DRG\ Level\ 1}$) and reported the results by the magnitude of the ratio. RAND used the number of discharges assigned to the higher severity level to calculate the percentage of discharges assigned to each ratio category.

For the two systems (CMS+AP–DRGs and CS DRGs) that include several base DRGs, RAND assigned those discharges to the lower severity level base DRG. Following that methodology, RAND was able to calculate how much more costly the discharges assigned to the consolidated or lower severity levels were than the discharges in the base DRG assigned to the next higher severity level. Results demonstrate that, overall, nonmonotonicity is not a factor across the alternative DRG systems. There are only a small percentage of discharges that are assigned to nonmonotonic DRGs. Unlike the other systems, all severity level 1 or level 2 MS–DRGs were monotonic.

Using the data from severity of illness levels 1 through 3 (except for the MM–APS–DRGs, which do not have a severity of illness level 3), RAND calculated the discharge-weighted mean cost difference between severity levels and the mean ratio of the cost per discharge for the higher severity level to the adjacent lower severity level. The greatest cost discrimination was present in the higher severity levels versus the lower severity levels across all the systems. Unlike the other systems, each MS–DRG was at least 20 percent more costly than the adjacent lower severity DRG. The remaining systems demonstrated equivalent percentage cost differences between the severity levels as shown in Table C below.

Table C.--Ratio of the Mean Standardized Cost of a Higher Severity Level to That of the Adjacent Lower Severity Level Within the Same Base DRG

DRGs with Severity Level 1-3 (as applicable)								
CMS DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	358	0	0	1	7	118	27	511
% DRGs	70%	0%	0%	0%	1%	23%	5%	100%
% Discharge	56%	0%	0%	1%	2%	39%	2%	100%
Mean $ Difference		NA	NA	$453	$2,222	$3,428	NA	
CMS+AP DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	358	4	0	12	30	366	29	799
% DRGs	45%	1%	0%	2%	4%	46%	3%	100%
% Discharge	48%	1%	0%	2%	8%	39%	1%	100%
Mean $ Difference		-$6,056		$1,480	$2,150	$4,457	NA	
HSC-DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	373	33	53	101	144	536	5	1245
% DRGs	30%	3%	4%	8%	12%	43%	0%	100%
% Discharge	23%	1%	4%	8%	13%	52%	0%	100%
Mean $ Difference		-$1,454	$686	$1,251	$1,796	$4,064	NA	
Sol-DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	368	25	47	77	114	564	9	1204
% DRGs	31%	2%	4%	6%	9%	47%	1%	100%
% Discharge	24%	0%	3%	5%	5%	58%	#REF!	100%
Mean $ Difference		-$1,245	$536	$1,200	$1,982	$4,762		
MM-APS-DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	325	2	6	30	70	473	0	906
% DRGs	36%	0%	1%	3%	8%	52%	0%	100%
% Discharge	32%	0%	2%	4%	11%	51%	0%	100%
Mean $ Difference		-$1,238	$525	$1,540	$2,906	$8,259		
Con-APR-DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	261	3	7	39	81	642	11	1044
% DRGs	25%	0%	1%	4%	8%	61%	1%	100%
% Discharge	20%	0%	1%	8%	16%	54%	1%	100%
Mean $ Difference		-$6,781	$508	$1,780	$1,803	$6,408		
MS-DRGs								
	Level 0 DRG	<1.0	1.0 to 1.1	1.1 to 1.2	1.2 to 1.3	> 1.3	Other DRGs	Total
N DRGs	325	0	0	1	22	388		736
% DRGs	44%	0%	0%	0%	3%	53%	0%	100%
% Discharge	60%	0%	0%	0%	4%	36%	0%	100%
Mean $ Difference				$3,894	$2,584	$4,620		

In examining whether each of the alternative DRG systems provided stability in the relative weights from year to year, RAND compared the relative weights derived from the MedPAR data in FY 2004 to the relative weights data from FY 2005. RAND's results demonstrate that generally, across all the systems, only a small percentage of DRGs had greater than a 5-percent change in relative weights. RAND did not repeat this analysis for the MS–DRGs. However, RAND had no reason to expect that the results would be substantially different for this system. For further details and discussion, we encourage readers to view RAND's full interim report on the CMS Web site at: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.*

c. Payment Accuracy and Case-Mix Impact

Similar to how CMS established the relative weights in the FY 2007 IPPS final rule, RAND used standardized costs as determined by the national CCR and the FY 2005 MedPAR data to construct relative weights for each of the DRG systems being evaluated. RAND analyzed the effect of variations in the explanatory power on the distribution of Medicare payments for each system under evaluation. The preliminary findings indicate payment accuracy is improved by each severity-adjusted system by redistributing payment from lower-cost discharges to higher-cost discharges. However, the total payment redistribution across systems differs and reflects the payment impact of improved explanatory power. Although these findings are estimates, the percent of total payment redistributed was the least under the CMS+AP–DRGs (7.1 percent) and the most under the CS DRGs (11.9 percent). The total payment redistribution under the MS–DRGs is 8.4 percent of the total payment. The redistribution is less than the CS DRG system, the same as the HSC–DRG system, and more than in the other systems, even though some of these systems have higher explanatory power.

Table D shows changes in case-mix index (CMI) by hospital category across alternative severity-adjusted DRG

systems. Results demonstrate that, under the severity-adjusted systems, urban hospitals have a higher average CMI than under the CMS DRGs, and rural hospitals have a lower CMI. The analysis suggests that any system adopted to better recognize severity of illness with a budget neutrality constraint will result in payment redistribution that can be expected to benefit urban hospitals at the expense of rural hospitals. This impact occurs because patients treated in urban hospitals are generally more severely ill than patients in rural hospitals and the CMS DRGs are not currently recognizing the full extent of these differences. For purposes of the study, RAND assumed no behavioral changes in coding practice or the types of patients treated.

On average, the CMI for urban hospitals increases under the severity-adjusted systems, and that for rural hospitals decreases. The change is greatest in the CS DRGs, where the CMI for rural hospitals is 2.4 percent lower than that under the CMS DRGs. The CMI for large urban hospitals (those located in metropolitan areas with more than 1 million population) and other urban hospitals is 0.6 and 0.1 percent higher, respectively, under the CS DRGs. Under the MS-DRGs, there is a slightly larger increase in the average CMI for large urban hospitals, a reduction in the CMI for other urban hospitals, and a smaller reduction for rural hospitals.

The CMI for larger hospitals increases, while that for smaller hospitals decreases across the systems. This result is consistent with a severity-adjusted DRG system shifting payment from less expensive cases to more expensive cases. Larger hospitals tend to have relatively more complex cases and severely ill patients than smaller hospitals do. Teaching hospitals also tend to treat more complex cases, but the impact on these facilities differs by severity-adjusted DRG system. Across all the severity-adjusted systems, nonteaching hospitals have a lower CMI, ranging from a 0.2 percent reduction under the HSC-DRGs and Sol-DRGs to a 0.5 percent reduction under the CS DRGs. In three of the systems (CMS+AP-DRG, HSC-DRG, and MM-APS-DRG), hospitals with large teaching programs (100 or more residents) would experience a larger increase than hospitals with smaller teaching programs. Under the Sol-DRG system, hospitals with large teaching programs would have a 0.1 percent increase, compared with a 0.2 percent increase for hospitals with smaller teaching programs. Under the CS DRG system, the CMI for hospitals with large teaching programs would be about the same, but that for hospitals with smaller teaching programs would increase 0.7 percent relative to the CMS DRGs.

TABLE D.—CMI CHANGE IN ALTERNATIVE DRG SYSTEMS RELATIVE TO THE CMS DRG CMI

	Number of hospitals	Number of discharges	CMS-DRG CMI	Percentage change from CMS-DRG CMI					
				CMS+AP-DRG (Percent)	HSC-DRG (Percent)	Sol-DRG (Percent)	MM-APS-DRG (Percent)	CSDRG (Percent)	MS-DRG (Percent)
ALL	3,890	12,165,763	1.00	0.0	0.0	0.0	0.0	0.0	0.0
By Geographic Location:									
Large urban areas (pop>1 million)	1,485	5,715,356	1.02	0.5	0.4	0.3	0.6	0.6	0.7
Other urban areas (pop<1 million)	1,186	4,578,447	1.04	−0.2	−0.2	−0.1	−0.2	0.1	−0.3
Rural hospitals	1,219	1,871,960	0.84	−1.3	−0.9	−1.0	−1.4	−2.4	−1.7
Bed Size (Urban):									
0—99 beds	685	611,139	0.91	−1.0	−1.1	−1.1	−1.3	−1.6	−1.2
100–199 beds	875	2,346,922	0.93	0.0	0.1	0.0	0.1	0.0	0.0
200–299 beds	511	2,446,737	1.00	0.1	0.2	0.3	0.3	0.6	0.3
300–499 beds	433	2,965,216	1.08	0.3	0.3	0.3	0.4	0.8	0.4
500 or more beds	167	1,923,789	1.17	0.6	0.3	0.2	0.4	0.4	0.5
Bed Size (Rural):									
0–49 beds	543	330,242	0.73	−2.5	−2.1	−2.2	−2.7	−5.0	−3.0
50–99 beds	398	595,599	0.80	−1.4	−1.0	−1.1	−1.6	−2.7	−2.0
100–149 beds	160	415,367	0.85	−1.1	−0.7	−0.8	−1.2	−2.0	−1.5
150–199 beds	69	260,910	0.91	−0.8	−0.6	−0.7	−0.8	−1.5	−1.0
200 or more beds	49	269,842	0.99	−0.6	−0.1	−0.1	−0.6	−0.5	−0.9
Urban by Region:									
New England	129	541,471	0.99	0.1	−0.2	−0.5	−0.5	−0.6	−0.5
Middle Atlantic	370	1,621,488	1.00	0.0	−0.4	−0.5	−0.3	−1.5	−0.1
South Atlantic	432	2,208,336	1.04	0.5	0.7	0.7	0.7	1.4	0.7
East North Central	410	1,856,164	1.03	0.6	0.7	0.6	0.8	1.5	0.6
East South Central	168	696,943	1.06	−0.2	−0.2	−0.2	−0.2	−0.3	−0.4
West North Central	164	657,322	1.08	−0.3	−0.3	0.0	−0.3	0.3	−0.3
West South Central	369	1,115,411	1.05	0.1	0.0	0.1	0.3	0.5	0.3
Mountain	153	465,093	1.08	0.4	0.2	0.5	0.4	1.0	0.7
Pacific	423	1,016,135	1.03	0.0	−0.2	−0.1	−0.1	0.2	0.3
Puerto Rico	53	115,440	0.87	−1.1	−1.4	−0.1	−1.2	−5.1	−1.3
Rural by Region:									
New England	34	49,842	0.90	−0.6	−0.6	−0.5	−1.1	−0.6	−1.1
Middle Atlantic	68	139,639	0.85	−1.1	−0.7	−0.7	−1.3	−1.5	−1.4
South Atlantic	191	409,116	0.82	−0.8	−0.4	−0.5	−0.9	−1.8	−1.2
East North Central	163	290,069	0.87	−1.1	−0.7	−0.9	−1.3	−1.8	−1.6
East South Central	201	328,326	0.82	−1.5	−0.9	−1.1	−1.4	−3.2	−1.9
West North Central	184	240,449	0.87	−1.6	−1.2	−1.1	−1.8	−2.5	−2.0
West South Central	227	266,419	0.80	−2.1	−1.8	−1.9	−2.0	−4.3	−2.5
Mountain	91	80,219	0.85	−1.2	−1.0	−0.4	−1.3	−1.2	−1.1
Pacific	60	67,881	0.86	−0.9	−1.0	−1.1	−1.4	−1.6	−1.6

TABLE D.—CMI CHANGE IN ALTERNATIVE DRG SYSTEMS RELATIVE TO THE CMS DRG CMI—Continued

	Number of hospitals	Number of discharges	CMS-DRG CMI	Percentage change from CMS-DRG CMI					
				CMS+AP-DRG (Percent)	HSC-DRG (Percent)	Sol-DRG (Percent)	MM-APS-DRG (Percent)	CSDRG (Percent)	MS-DRG (Percent)
By Payment Classification:									
Teaching Status:									
Non-teaching	2,791	6,115,193	0.92	−0.4	−0.2	−0.2	−0.4	−0.5	−0.4
Fewer than 100 Residents	853	4,061,451	1.04	0.1	0.2	0.2	0.2	0.7	0.2
100 or more Residents	246	1,989,119	1.16	0.8	0.3	0.1	0.5	0.0	0.6
Urban DSH:									
Non-DSH	778	2,574,640	1.02	−0.1	0.0	0.1	−0.2	0.5	0.0
100 or more beds	1,541	7,378,095	1.05	0.3	0.2	0.2	0.4	0.4	0.4
Less than 100 beds	352	341,068	0.82	−0.9	−0.8	−1.0	−1.1	−2.0	−1.1
Rural DSH:									
Non-DSH	238	300,747	0.87	−1.4	−1.0	−0.9	−1.7	−1.9	−1.7
SCH	402	599,823	0.83	−1.3	−1.0	−1.0	−1.4	−2.4	−1.8
RRC	132	466,395	0.92	−0.8	−0.3	−0.5	−0.7	−1.4	−1.1
Other Rural									
100 or more beds	60	135,146	0.80	−0.9	−0.8	−1.2	−1.3	−2.0	−1.5
Less than 100 beds	387	369,849	0.74	−2.1	−1.6	−1.7	−2.2	−4.3	−2.6
Urban teaching and DSH:									
Both teaching and DSH	829	4,705,476	1.09	0.5	0.3	0.3	0.5	0.5	0.5
Teaching and no DSH	204	1,108,092	1.06	0.0	0.1	0.0	−0.1	0.4	0.1
No teaching and DSH	1,064	3,013,687	0.95	−0.1	0.1	0.0	0.1	0.1	0.1
No teaching and no DSH	574	1,466,548	1.00	−0.2	−0.1	0.1	−0.3	0.5	0.0
Rural Hospital Types:									
RRC	145	519,808	0.92	−0.8	−0.4	−0.5	−0.7	−1.4	−1.1
SCH	423	457,119	0.79	−1.6	−1.2	−1.2	−1.7	−3.0	−2.1
MDH	180	164,453	0.75	−2.1	−1.7	−1.7	−2.3	−4.1	−2.7
SCH and RRC	76	266,027	0.92	−0.9	−0.7	−0.7	−1.1	−1.3	−1.3
MDH and RRC	8	19,746	0.85	−1.4	−0.6	−0.8	−1.6	−1.9	−1.7
Other Rural	387	444,807	0.77	−1.6	−1.2	−1.4	−1.8	−3.3	−2.1

RAND also noted that changes in documentation and coding that increase case mix will occur with each severity adjusted DRG system they evaluated. Increases in CMI after adopting the system could be the result of improved coding rather than increases in actual patient severity. RAND observed that the experience of Maryland hospitals using the APR DRG system provides some indication of the likely impact on case-mix of introducing a severity-adjusted system. RAND also noted that coding behaviors are expected to vary under alternative systems according to RAND. Therefore, the risk of case-mix growth due to improved documentation and coding exists with any system. However, RAND advises that the amount of risk can be assessed based on the logic of the DRG system and result in anticipated changes in coding behavior. For the analysis we presented in the proposed rule, RAND found that the CMS+AP–DRG system may have the lowest risk of case-mix increase, while the CS DRGs present the greatest risk. The remaining systems under evaluation demonstrated equivalent risk, based on the DRG logic and other features specific to each system.

RAND did not repeat the analysis of the potential for documentation and coding improvements to increase case-mix using the MS–DRGs because it only worked with FY 2005 data to evaluate them. Further, CMS did a detailed analysis of the likely impact of documentation and coding improvements on case-mix using the MS–DRGs. Section II.D.6. of the preamble of this rule describes in detail the CMI impact under the MS–DRGs using the State of Maryland's experience and data.

d. Other Issues for Consideration

RAND was asked to examine whether each of the alternative severity-adjusted DRG systems under evaluation appears to contain logic that is manageable, administratively feasible, and understandable. RAND's results describe the extent to which those features are present in the grouping logic of each system. A brief summary of these findings and other discussion points follow. For more complete details of the grouping logic for each system evaluated, we encourage readers to review RAND's interim report at the following CMS Web site: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.*

To increase and promote understanding of a DRG classification system, the grouping logic should include a uniform structure. With the exception of the CS DRGs, RAND found that there is uniformity in the hierarchical structure for assigning discharges to MDCs, DRGs, and severity levels for each system evaluated. The CS DRGs utilize a complex rerouting logic and severity of illness level assignment. However, the result is a higher explanatory power that accounts for limitations in the current system. Therefore, due to the complexities associated with that system, it may not easily be understood. However, if the results yield clinically coherent groups of patients with comparable costs, RAND concluded that the system may be worth exploring further. The HSC–DRG and Sol-DRG grouping logic uses a standard number of severity levels for each base DRG, although the result is an increase in the number of low-volume DRGs. The standard severity level structure provides increased understanding, although as mentioned

previously, low-volume, severity-adjusted DRGs can affect the relative performance of a classification system. The MM–APS–DRGs and CS DRGs use standard DRG severity levels. However, the method of collapsing DRGs varies due to the modifications made for Medicare use. The underlying logic of the MS–DRG system uses standard severity levels, but the criteria for establishing severity subgroups result in severity levels that vary by base DRG. Because the severity levels are often collapsed and the resulting subgroups depend on the particular DRG, it is a more complicated system to understand than those systems that uniformly define subgroups according to RAND. By only collapsing DRGs to determine relative weights, RAND notes it is possible to preserve the underlying DRG structure, which perhaps would lead to a more understandable system.

As stated earlier, there are also several transition issues that require attention when evaluating alternative severity-adjusted DRG systems. In determining how manageable, administratively feasible, and understandable the systems being evaluated are, consideration should be given to how they crosswalk or map to the current CMS DRGs. Because four of the systems under evaluation are based on the underlying CMS DRG grouping logic to establish their base DRGs (CMS+AP–DRGs, HSC–DRGs, Sol-DRGs, and MM–APS–DRGs), the CMS DRGs are able to crosswalk smoothly to these severity-adjusted DRGs. Conversely, crosswalking in reverse or backward mapping from the CMS+AP DRGs to the CMS DRGs is problematic due to the discharges in one severity level of the CMS+AP–DRG system compared to several base CMS DRGs. As expected, the CS DRGs do not crosswalk easily to the CMS DRGs due to the complex grouping logic. The MM–APS–DRGs pose unique complications as well due to the large number (over 1,000) of DRGs. Although the MS–DRGs are based on the CMS DRGs, there are challenges in crosswalking discharges between the two systems because of the revisions in the CC list and the sequential renumbering of the DRGs.

System updates are another important factor that may have serious implications. All of the DRG systems RAND evaluated were reported to make annual updates to reflect ICD–9–CM coding changes. However, the CC severity level assignments for each system have not routinely been reviewed and revised. The CC exclusion list and severity level assignments should be reviewed where appropriate to reflect current patterns of care, according to RAND. RAND found that the MS–DRGs are the most updated of the severity-adjusted DRG systems. CMS reviewed the CC list and severity-level assignments in developing the MS–DRGs. Further, the MS–DRGs incorporate recent refinements in the CMS DRGs to account for complexity as well as severity. According to RAND, the other CMS-based systems use CC lists and severity level assignments that are based on outdated analyses of the effect of a condition on treatment costs from either the 1988 Yale study or the 1994 CMS refinement study. The APR DRGs have not been reviewed for several years and are not as current as the severity-based systems according to RAND.

Accessibility to each of the severity-adjusted DRG system's logic and software is also a concern. Each system RAND analyzed is currently maintained as a proprietary product. In general, all of the vendors indicated a willingness to place their product in the public domain, under certain terms. As such, CMS believes it is likely there would need to be discussion as to whether there would be any limitations (such as the source code as well as the DRG logic) on the availability of the DRG systems to hospitals or competing vendors. None of these concerns would be an issue with the MS–DRGs. RAND further noted that because the MS–DRGs are in the public domain, there should be less disruption to existing arrangements for acquiring and installing the GROUPER software and integrating that software with other hospital systems. The intent of each vendor to provide public access to its GROUPER logic and software is described in further detail in RAND's interim report.

Comment: One commenter supported the efforts of CMS to evaluate several alternatives to the existing DRG system. The commenter expressed appreciation that CMS had incorporated comments submitted by the provider community in setting the criteria for evaluating the various DRG products. This commenter also stated it looked forward to reviewing the final recommendations when the RAND report is released.

Response: We appreciate the commenter's support of our efforts. As we indicated in the proposed rule, we have focused our efforts in response to public comments regarding the refinement of the current DRG system. With the assistance of RAND in the evaluation of alternative severity-adjusted DRG systems, our objective has been to select a classification system that will better recognize severity of illness, utilization of resources, and complexity of services. The ultimate goal of these combined objectives is to greatly improve the payment accuracy of the IPPS.

Comment: Several commenters supported the implementation of a severity-based system. However, they urged CMS to wait until RAND completes the final report before moving forward with a specific system. One commenter articulated its appreciation of the thorough analysis conducted on the other alternative severity-adjusted systems. However, the commenter remains concerned that CMS would consider moving forward with the MS–DRGs in the absence of completing an analysis of them using the same criteria applied to the other systems under review. Other commenters expressed concern that CMS may implement the proposed MS–DRGs for FY 2008 and then switch to a completely different severity-based system in FY 2009, or phase in a different system in subsequent years. One commenter stated that, given the potential for heightened administrative burdens as well as financial consequences, it would seem prudent that CMS invest the needed time and energy to confirm whether its belief in the proposed MS–DRG system can be validated. This same commenter added that by stating it is not precluded from adopting another system for FY 2009, CMS is tacitly acknowledging that the MS–DRG system may not be the best system. Another commenter stated that CMS' request for RAND to evaluate the proposed MS–DRGs indicates it is not satisfied that the MS DRGs are ready for long-term use in the IPPS.

Response: In the proposed rule, we indicated that we asked RAND to evaluate the proposed MS–DRG system using the same criteria it is applying to the other alternative severity-adjusted DRG systems. Our intent in not committing permanently to the MS–DRGs was not to suggest that we were not satisfied with the long-term application of the MS–DRG system or that we had concerns about it being the best system. Rather, we were interested in an objective evaluation of the MS–DRGs by RAND using the same criteria applied to the other alternative severity-adjusted systems. That is, before making a permanent commitment to the MS–DRGs, we were interested in knowing how well it demonstrates the ability to meet the objectives described previously—better recognition of severity of illness, utilization of resources, complexity of services and improved payment accuracy over the current CMS DRG system. While we proposed the MS–DRGs for

implementation in FY 2008, we were further interested in the public's response to the MS–DRGs and RAND's evaluation of them before making a final decision on a permanent DRG system to use for Medicare payment. Specifically, public comments on the FY 2007 IPPS proposed rule asked that CMS show evidence that the alternative system proposed results in an improved payment system compared to the current system, test the degree to which the variation in costs within cases at the DRG level is reduced, maintain the improvements made over the years to account for complexity of service and new technologies, and avoid a proprietary system that lacks transparency. We considered all these factors in the development of the MS–DRGs and had we not provided the proposed MS–DRG system to RAND for evaluation, we would not be able to make a fair comparison and final determination for the best course of action for Medicare long term. At the time of the proposed rule, we were unsure whether RAND would be able to complete its evaluation of the MS–DRGs by the time of this final rule with comment period. However, as summarized above, RAND has completed its analysis of the MS–DRG system and found that it compares favorably to the other DRG systems being evaluated on a number of criteria.

As RAND has completed its evaluation of alternative DRG systems, including the MS–DRGs, consistent with RAND's findings, we believe it is appropriate at this time to adopt the MS–DRG system for Medicare in FY 2008. We believe the MS–DRGs represent an improvement over the current CMS DRGs. While there will be an opportunity for the public to comment on RAND's findings, we expect to permanently adopt the MS–DRGs for the IPPS. We do not believe it is likely that there will be persuasive public comments suggesting that one of the alternative DRG systems being evaluated by RAND is clearly superior. We plan on using RAND's report to continue to examine ways to improve and refine the Medicare inpatient payment system and expect that any future refinements will be based on the MS–DRGs. Therefore, as final policy for FY 2008, we are adopting the MS–DRGs as the new classification system for the IPPS.

Comment: One commenter agreed that CMS should adopt a transparent and publicly available DRG system and applauded the proposed MS–DRGs. The commenter stated that the transparency of the current system has been a critical aspect of its success over the years, and this will be even more important to ensure the successful adoption of the new severity-adjusted system chosen.

Response: We appreciate the commenter's support for the proposal to use MS DRGs. We agree that transparency is an important factor in the selection of a new severity-adjusted DRG system. We refer readers to sections II.D.2. and 3. of the preamble of this final rule with comment period for a complete discussion of the MS–DRGs.

Comment: One commenter stated CMS should consider adopting a more robust severity-based DRG system than the proposed MS–DRGs. The commenter admitted that it regards the APR DRG system highly and indicated it should not be abandoned because it is more complicated to implement and because of the controversy surrounding its suggested implementation. The commenter also noted that, as RAND stated in its preliminary report, it is a more robust, accurate, and precise system, and it was reluctant to see CMS abandon this superior system entirely before receiving RAND's final report and recommendations. Further, the commenter stated that, while the MS–DRGs would unquestionably represent a major improvement over the current CMS DRGs, it believed CMS has the ability and should proceed with introducing a better and more robust system and continue exploring further options while waiting for RAND's final report.

Response: In the FY 2007 proposed rule (71 FR 24015), we proposed to adopt the CS DRGs which were based on a consolidated version of the APR DRGs. We received a significant number of public comments strongly urging us not to move forward with the CS DRGs. These comments are described in detail in the FY 2007 final rule (71 FR 47906 through 47912). Among other concerns, the public comments suggested that the system was overly complex and difficult to understand. Further, there was concern that the logic and source code would not be available in the public domain like the current CMS DRGs and that many of the improvements and refinements made to the CMS DRGs over the years would be abandoned. For these and other reasons, we decided not to adopt the CS DRGs for FY 2007. Our proposed adoption of MS–DRGs did not raise these same concerns in the public comments. Given that the MS–DRGs are a substantial improvement over the current CMS DRGs in their ability to recognize severity of illness and meet other objectives that we set for IPPS payment reform, we believe it is a better system to select for use by Medicare than the CS DRGs or APR DRGs.

Comment: One commenter, a vendor, submitted its DRG product to RAND for evaluation. The commenter expressed its concern that CMS developed a completely new and untested severity system while there are several alternate systems currently under evaluation by RAND. The commenter noted that its product has been in continuous use for 18 years and is based on the original Yale University methodology and developed under contract with the Health Care Financing Administration, now CMS, between 1986 and 1989.

The commenter urged CMS to continue with the current CMS DRGs for one more year. According to the commenter, introducing a new temporary severity system, the MS–DRGs, with the expectation that hospitals move to another system for FY 2009, will create unnecessary havoc for the hospital industry. The commenter noted that it is pleased with the work CMS has done in reviewing 13,549 secondary diagnosis codes to refine the CC list and believed the use of this new list will result in a greatly improved DRG GROUPER. However, the commenter stated it is not fair to compare the FY 2008 MS–DRGs (with the new CC list and new codes) with FY 2006 and FY 2007 alternative severity systems using the unrevised CC list. The commenter recommended that CMS create Version 25.0 CMS DRGs with the new CC list and new codes to allow the vendors of the alternative systems until November or December to incorporate the information into updated versions of their systems. The commenter also suggested that the RAND report deadline could be extended beyond September 1, 2007, to allow the comparison of alternative DRG systems to occur with the revised CC list.

In addition, the commenter believed the MS–DRGs have the following shortcomings:

- Although CMS' chief concern is Medicare patients, it is shortsighted to ignore non-Medicare patients in the proposed MS–DRG system, as the health care industry often focuses its attention on the Medicare relative value system for all of its hospital patients.
- The DRG system has always been comprehensive, including all possible ICD–9–CM diagnoses and procedures. Consolidating low-volume procedures and procedures now performed primarily in an outpatient setting creates confusion in the MS–DRG classification system. Procedures such as tonsillectomies, carpal tunnel release, and cataract extractions are different MDCs and are treated by different medical specialists. They are similar

only with respect to historical cost data and only for the time being.

• Eliminating newborns, maternity, and congenital anomalies from the usual MS–DRG severity level approach does not provide a comprehensive severity system.

Lastly, the commenter indicated that whatever software system is chosen for the public, it should be provided in a modern and accessible software language and format. The commenter recommended a ''C'' version, on CDs or DVDs, and suggested that continuing to place CMS software into the public domain written in IBM assembler and distributed through the National Technical Information Service (NTIS) on 9-track tapes or 3480 cartridges seems difficult to imagine, as this technology is over 40 years old.

Response: We disagree that we are implementing a ''completely new and untested severity system.'' While the MS–DRGs constitute a major reform to better recognize severity of illness, they are a refinement of the current CMS DRGs that have been in use for Medicare payment for over 20 years. Further, our proposed rule analysis—subsequently validated by RAND—suggested that they are major improvement over the current CMS DRGs. Most of the other systems represent less updated refinements of the CMS DRGs. While these systems have been in use for other purposes, we note that (other than the APR DRGs that are used for payment in Maryland and the AP DRGs that were used in New York's all payer ratesetting system in the 1990s), the other systems being evaluated have never been used for Medicare payment.

We stated in the FY 2008 IPPS proposed rule that we developed the MS–DRG system in response to public comments received as a result of the FY 2007 proposed rule (in response to the proposed CS DRGs). We also stated we submitted the MS–DRG system to RAND for evaluation and the final report was expected on or before September 1, 2007. At this time RAND has completed the evaluation of alternative severity-adjusted DRG systems, including the MS–DRGs. In the near future, we will post RAND's analysis of the MS–DRG system to the following CMS Web site: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.* This report is referred to as an Addendum to RAND's interim report that was released in March 2007. A completed final report incorporating the evaluation of all six severity adjusted DRG systems into one document will be posted to the CMS Web site after September 1, 2007.

As noted above, we share the commenter's concern about adopting one DRG system this year and potentially another one next year. We believe the MS–DRGs should be the system that is adopted for long-term use by Medicare for IPPS payment. However, we are interested in obtaining further public input on RAND's findings. We do not believe it is likely that there will be persuasive public comments suggesting that one of the alternative DRG systems evaluated by RAND is clearly superior to the MS–DRGs.

We appreciate the commenter's support of our efforts in the review of 13,549 secondary diagnosis codes. We agree that a new, updated CC list greatly improves the ability of a DRG GROUPER to reflect severity of illness and distribute payments more accurately. The intent of RAND's evaluation was to compare each of the alternative DRG systems in its current form. The fact that delays would be necessary to allow the other systems to adopt the improvements that CMS made to the CC list for the MS–DRGs suggests that the other systems would not be ready for implementation as soon. As noted elsewhere, we are interested in adopting comprehensive improvements to the DRG system for severity of illness at the earliest possible date. We do not believe it is in the public interest to delay adopting these improvements to wait for the alternative DRG systems to incorporate refinements to the CC list. Further, we note that CMS first discussed performing a comprehensive review of the CC list over 2 years ago. Each vendor could have undertaken a similar review of the CC list to improve its DRG product at any time.

We disagree with the commenter's assertion that our decision should turn on how the MS–DRGs can be used for non-Medicare payers. As we have stated many times in the past, we encourage private insurers and other non-Medicare payers to make refinements to Medicare's DRG system to better suit the needs of the patients they serve. With respect to the maternity and newborn DRGs, we cannot adopt the same approach to refine these DRGs that we did with the rest of the MS–DRGs because of the extremely low volume of Medicare patients there are in these DRGs. Medicare simply does not have enough cases in these DRGs to apply the same approach we did in the other MDCs. Whether we made revisions to these DRGs or not, private insurers and other private payers would have to develop their own DRGs or relative weights to address the needs of these patients that are not well-represented in the Medicare population. With respect to other pediatric patients, in our view, a significant advantage of the MS–DRGs over the prior CMS DRGs is the fewer number of low volume DRGs. By eliminating pediatric (ages 0 to 17 years) splits, the MS–DRGs will have fewer low-volume DRGs and less instability in the DRG relative weights for the cases paid using these DRGs.

With regards to the software, undere CMS' agreement with its contractor, the software provided by NTIS is the same public domain software that is provided to CMS for use by our system maintainers, regional offices, and fiscal intermediaries.MAC. We will consider this comment as we make updates to our information systems and related contracts.

As stated elsewhere in this final rule with comment period, we are adopting the MS–DRGs for implementation on October 1, 2007 (FY 2008). A detailed discussion summarizing the public comments received in response to the MS–DRG proposal is described in section II.D.2. of the preamble of this final rule with comment period.

2. Development of the Medicare Severity DRGs (MS–DRGs)

As discussed previously, we are committed to continuing our efforts of making refinements to the current CMS DRGs to better recognize severity of illness. In the FY 2007 IPPS final rule, we stated that we had begun a comprehensive review of over 13,000 diagnosis codes to determine which codes should be classified as CCs when present as a secondary diagnosis. We stated that we would also build on the severity DRG work we performed in the mid-1990's. We received a number of public comments on last year's proposed rule that supported the refinement of the current CMS DRGs so that they better recognize severity of illness for FY 2007.

We also committed to performing a more thorough reform of the entire DRG system to better recognize severity of illness for FY 2008. As a result of this broad based analysis, we developed the MS–DRGs that we proposed and are adopting in this final rule with comment period. The MS–DRGs represent a comprehensive approach to applying a severity of illness stratification for Medicare patients throughout the DRGs. As discussed in proposed rule and in section II.D.5. of the preamble of this final rule with comment period, the MS–DRGs maintain the significant advancements in identifying medical technology made

to the DRGs in past years. At the same time, they greatly improve our ability to identify groups of patients with varying levels of severity using secondary diagnoses. Further, they improve our ability to assign patients to different DRG severity levels based on resource use that is independent of the patient's secondary diagnosis—referred to in this discussion as ''complexity.'' We proposed to adopt the MS–DRGs for FY 2008 and also submitted the system to RAND to be considered as part of its evaluation of alternative DRG systems. In the proposed rule, we encouraged comments on our proposed methodology to establish a severity DRG system and the resulting DRGs.

a. Comprehensive Review of the CC List

Our efforts to better recognize severity of illness began with a comprehensive review of the CC list. Currently, 115 DRGs are split based on the presence or absence of a CC. For these DRGs, the presence of a CC assigns the discharge to a higher weighted DRG. The list of diagnoses designated as a CC was initially created at Yale University in 1980–1981 as part of the project to develop an ICD–9–CM version of the DRGs. The researchers at Yale University developed the ICD–9–CM DRGs using national hospital data with diagnoses and procedures coded in ICD–9–CM from the second half of 1979. Because hospitals only began reporting ICD–9–CM codes in 1979, discharge abstracts at that time were much less likely to fully report all secondary diagnoses. As a result, the Yale University researchers developed a liberal definition of a CC as any secondary diagnosis that ''would cause an increase in length of stay by at least 1 day in at least 75 percent of the patients.'' Because of the likely underreporting of secondary diagnoses in the 1979 data, the Yale University researchers also used age as a surrogate for identifying patients with a CC. The original version of the ICD–9–CM DRGs assigned patients to a CC DRG if they had a secondary diagnosis on the CC list or if the patient was 70 years or older.

With the implementation of the IPPS in FY 1984, the coding of secondary diagnoses by hospitals dramatically improved. During the first 4 years of the IPPS, the CC definition included the age 70 criterion. With the improved coding and reporting of diagnoses associated with the implementation of the IPPS, the use of age as a surrogate for CCs was no longer necessary. Thus, beginning in FY 1988, the age 70 criterion was removed from the CC definition and a CC DRG was defined exclusively by the presence of a secondary diagnosis on the CC list.

Except for new diagnosis codes that were added to ICD–9–CM after FY 1984 (for example, HIV), the CC list of diagnoses currently used in the CMS DRGs is virtually identical to the CC list created at Yale University. However, there have been dramatic changes not only in the accuracy and completeness of the coding of secondary diagnoses but also in the characteristics of patients admitted to hospitals and the practice patterns within hospitals as well.

Since the implementation of the IPPS, Medicare average length of stay has dropped dramatically from 9.8 days in 1983 to 5.7 days in 2005. The economic incentives inherent in DRGs motivated a change in practice patterns to discharge patients earlier from the hospital. These changes were facilitated by the increased availability of postacute care services, such as nursing homes and home health services, which allowed problems previously requiring continued hospitalization to be effectively treated outside the acute care hospital. Furthermore, there has also been a dramatic shift to outpatient surgery that avoids costly inpatient stays. Many surgical procedures formerly performed in the hospital are now routinely performed on an outpatient basis. As a result, patients admitted to the hospital today are on average more likely to have a CC than when the IPPS was implemented. The net effect of better coding of secondary diagnoses, reductions in hospital length of stay, increased availability of postacute care services, and the shift to outpatient care is that most patients (nearly 80 percent) admitted to a hospital now have a CC. As a result of the changes that have occurred during the 22 years since the implementation of the IPPS, the CC list as currently defined has lost much of its capacity to discriminate hospital resource use.

Currently, 115 CMS DRGs have a CC subdivision. Up until FY 2002, the number of DRGs with a CC subdivision remained essentially unchanged from the original FY 1984 version of the DRGs. As a means of improving the payment accuracy of the DRGs, beginning with the FY 2002 DRG update, each base CMS DRG without a CC subdivision was evaluated to determine if a CC subdivision was warranted. Over the past five DRG updates, only seven base CMS DRGs have had a CC subdivision added. The primary constraint preventing a significant increase in the number of base CMS DRGs with a CC subdivision is the low number of patients who would be assigned to the non-CC group. Thus, the expansion of the number of CMS DRGs subdivided based on a CC is constrained because the vast majority of patients would be assigned to the CC group and few patients would be assigned to the non CC group. To remedy these problems, we reviewed each of the 13,549 secondary diagnosis codes to evaluate their assignment as a CC or non-CC using statistical information from the Medicare claims data and applying medical judgment based on current clinical practice. We refer to this list in this section as the ''revised CC list.''

The need for a revised CC list prompted a reexamination of the secondary diagnoses that qualify as a CC. Our intent was to better distinguish cases that are likely to result in increased hospital resource use based on secondary diagnoses. Using a combination of mathematical data and the judgment of our medical advisors, we included the condition on the CC list if it could demonstrate that its presence would lead to substantially increased hospital resource use.

Diagnoses may require increased hospital resource use because of a need for such services as:

- Intensive monitoring (for example, an intensive care unit (ICU) stay).
- Expensive and technically complex services (for example, heart transplant).
- Extensive care requiring a greater number of caregivers (for example, nursing care for a quadriplegic).

There are 3,326 diagnosis codes on the current CC list. Our 2006 review of the CC list reduced the number of diagnosis codes on the CC list to 2,583. Based on the current CC list, 77.66 percent of patients have at least one CC present. Based on the revised CC list from our 2006 review, the percent of patients having at least one CC present would be reduced to 40.34 percent.

b. Chronic Diagnosis Codes

The 1979 data used in the original formation of the CC list often did not have the manifestations of a chronic disease fully coded. As a result, the CC list included many chronic diseases with a broad range of manifestations. Such chronic illness diagnoses usually do not cause a significant increase in hospital resource use unless there is an acute exacerbation present or there is a significant deterioration in the underlying chronic condition. Therefore, in the revised CC list, we removed chronic diseases without a significant acute manifestation. Recognition of the impact of the chronic disease is accomplished by separately coding the acute manifestation. For example, the mitral valve disease codes

(codes 396.0 through 396.9) are assigned to the current CC list. However, unless the mitral valve abnormalities are associated with other diagnoses indicating acute deterioration, such as acute congestive heart failure, acute pulmonary edema, or respiratory failure, they would not be expected to significantly increase hospital resource use. Therefore, the revised CC list did not include the mitral valve codes. Recognition of the contribution of mitral valve disease to the complexity of hospital care would be accomplished by separately coding those diseases on the CC list that are associated with an acute exacerbation or deterioration of the mitral valve disease.

The revised CC list applied the criterion that chronic diagnoses having a broad range of manifestations are not assigned to the CC list as long as there are codes available that allow the acute manifestations of the disease to be coded separately. For some diseases, there are ICD–9–CM codes that explicitly include a specification of the acute exacerbation of the underlying disease. For example, for congestive heart failure, the following codes specify an acute exacerbation of the congestive heart failure:

- 428.21, Acute systolic heart failure
- 428.41, Acute systolic and diastolic heart failure
- 428.43, Acute on chronic systolic heart failure
- 428.31, Acute diastolic heart failure
- 428.33, Acute on chronic diastolic heart failure

These congestive heart failure codes are included on the revised CC list. However, the following congestive heart failure codes do not indicate an acute exacerbation and are not included in the revised CC list:

- 428.0, Congestive heart failure not otherwise specified
- 428.1, Left heart failure
- 428.20, Systolic heart failure not otherwise specified
- 428.22, Chronic systolic heart failure
- 428.32, Chronic diastolic heart failure
- 428.40, Systolic and diastolic heart failure
- 428.9, Heart failure not otherwise specified

As a result of this approach, most chronic diseases were not assigned to the revised CC list. In general, a significant acute manifestation of the chronic disease must be present and coded for the patient to be assigned a CC. We made exceptions for diagnosis codes that indicate a chronic disease in which the underlying illness has reached an advanced stage or is associated with systemic physiologic decompensation and debility. The presence of such advanced chronic diseases, even in the absence of a separately coded acute manifestation, significantly adds to the treatment complexity of the patient. Thus, the presence of the advanced chronic disease inherently makes the reason for admission more difficult to treat. For example, under the revised CC list, stage IV, V, or end-stage chronic renal failure (codes 585.4 through 585.6) are designated as a CC, but stage I through III chronic renal failure (codes 585.1 through 585.3) are not. For obesity, a body mass index over 35 (codes V85.35 through V85.4) is a CC, but a body mass index between 19 and 35 is not. End-stage renal failure and extreme obesity are examples of chronic diseases for which the advanced stage of the disease is clearly specified.

However, for most major chronic diseases, the stage of the disease is not clearly specified in the code. These codes were evaluated based on the consistency and intensity of the physiologic decompensation and debility associated with the chronic disease. For example, quadriplegia (codes 344.00 through 344.09) requires extensive care with a substantial increase in nursing services and more intensive monitoring. Therefore, quadriplegia is considered a CC in the revised CC list.

c. Acute Diagnosis Codes

Examples of acute diseases included on the revised CC list included acute myocardial infarction (AMI), cerebrovascular accident (CVA) or stroke, acute respiratory failure, acute renal failure, pneumonia, and septicemia. These six diseases are representative of the types of illnesses we included on the revised CC list. Other acute diseases were designated as a CC if their impact on hospital resource use would be expected to be comparable to these representative acute diseases. For example, acute endocarditis was included on the CC list but urinary tract infection was not.

The revised CC list is essentially comprised of significant acute disease, acute exacerbations of significant chronic diseases, advanced or end stage chronic diseases and chronic diseases associated with extensive debility. Compared to the existing CC list, the revised CC list requires a secondary diagnosis to have a consistently greater impact on hospital resource use.

The following Table E compares the current CC list and the revised CC list. There are 3,326 diagnosis codes on the current CC list. The CC revisions reduce the number of diagnosis codes on the CC list to 2,583. Based on the current CC list, 77.66 percent of patients have at least one CC present, using FY 2006 MedPAR data. Based on the revised CC list, the percent of patients having at least one CC present is reduced to 40.34 percent. The revised CC list increases the difference in average charges between patients with and without a CC by 56 percent ($15,236 versus $9,743).

TABLE E.—COMPARISON OF CURRENT CC LIST AND REVISED CC LIST

	Current CC list	Revised CC list
Codes designated as a CC	3,326	2,583
Percent of patients with one or more CCs	77.66	40.34
Percent of patients with no CC	22.34	59.66
Average charge of patients with one or more CCs	$24,538	$31,451
Average charge of patients with no CCs	$14,795	$16,215

The analysis above suggests that merely reviewing and updating the CC list can lead to significant improvements in the ability of the CMS DRGs to recognize severity of illness. Although we could potentially adopt this one change to better recognize severity of illness in the CMS DRGs, we have undertaken additional analyses that further refine secondary diagnoses into MCCs, CCs and non-CCs as described below.

d. Prior Research on Subdivision of CCs into Multiple Categories

(1) Refined DRGs

During the mid-1980s, CMS (then HCFA) funded a project at Yale University to revise the use of CCs in the CMS DRGs. The Yale University project mapped all secondary diagnoses that were considered a CC in the CMS DRGs into 136 secondary diagnosis groups, each of which was assigned a CC complexity level. For surgical patients, each of the 136 secondary diagnosis groups was assigned to 1 of 4 CC complexity levels (non-CC, moderate CC, MCC, and catastrophic CC). For medical patients, each of the 136 secondary diagnosis groups was assigned to 1 of 3 CC complexity levels (non-CC, moderate/MCC, and catastrophic CC). All age subdivisions and CC subdivisions in the DRGs were

eliminated and replaced by the four CC subgroups for surgical patients, or the three CC subgroups for medical patients. The Yale University project did not reevaluate the categorization of secondary diagnosis as a CC versus a non-CC. Only the diagnoses on the standard CC list were used to create the moderate, major, and catastrophic subgroups. All secondary diagnoses in a secondary diagnosis group were assigned the same level, and a patient was assigned to the subgroup corresponding to the highest level secondary diagnosis. The number of secondary diagnoses had no effect on the subgroup assigned to the patient (that is, multiple secondary diagnoses at one level did not cause a patient to be assigned to a higher subgroup). The DRG system developed by the Yale University project demonstrated that a subdivision of the CCs into multiple subclasses would improve the predictability of hospital costs.

(2) 1994 Severity DRGs

We also examined the work we performed in the mid-1990's to revise the CMS DRGs to better recognize severity. In 1993, we reevaluated the use of CCs within the CMS DRGs. The reevaluation excluded the CMS DRGs associated with pregnancy, newborn, and pediatric patients (MDCs 14 and 15 and DRGs defined based on age 0–17). The major CC list from the AP-DRGs that are used for Medicaid payment by New York and other States was used to identify an initial list of MCCs. Using Medicare data, we reevaluated the categorization of each secondary diagnosis as a non-CC, CC, or an MCC. The end result was that 111 diagnoses that were non-CCs in the standard CMS DRGs were made a CC, 220 diagnoses that were a CC were made a non-CC, and 395 CCs were considered an MCC.

All CC splits in the CMS DRGs were eliminated, and an additional 24 DRGs were merged together. The resulting base CMS DRGs were then subdivided into three, two, or no subgroups based on an analysis of Medicare data. The result was 84 DRGs with no subgroups, 124 DRGs with two subgroups, and 85 DRGs with three subgroups. An additional 63 pregnancy, newborn, and pediatric DRGs not evaluated resulted in a total of 652 DRGs.

A patient was assigned to the CC subgroup corresponding to the highest level secondary diagnosis. Multiple secondary diagnoses at one level did not cause a patient to be assigned to a higher subgroup. The categorization of a diagnosis as non-CC, CC, or MCC was uniform across the CMS DRGs, and there were no modifications for specific DRGs. As part of the FY 1995 IPPS proposed rule, we made a complete file of the revised DRG descriptions available to the public. However, we never adopted the revised DRGs (55 FR 27756).

e. Medicare Severity DRGs (MS–DRGs)

We had several options in developing a refinement to the current CMS DRGs to better recognize increased resource use due to severity of illness. One option would involve simply taking the work performed in 1994 and then updating it with all the code changes that have taken place since then. We were reluctant to do this because of changes in medical practices as well as the substantial changes in ICD–9–CM codes since that time. Another option would have been to build on current CMS DRGs which include a number of advancements that better identify medical practices and technologies. Many commenters on the FY 2007 IPPS proposed rule urged us to take the latter approach because they believed the current base CMS DRGs clearly differentiate between the complexities of varying surgical procedures and medical devices. Therefore, we chose the option of developing a new severity DRG system based on the current CMS DRGs.

The development of the 1994 Severity DRGs involved three steps:

- Consolidation of existing DRGs into base DRGs.
- Categorization of each diagnosis as an MCC, CC, or non-CC.
- Subdivision of each base DRG into subclasses based on CCs.

We reviewed and revised each of the three steps and applied them to our current CMS DRGs to develop DRGs that better identify severity of illness among Medicare patients. We refer to this system that we proposed (and are adopting in this final rule with comment period) as the Medicare Severity DRGs (MS–DRGs). The purpose of the MS–DRGs is to more accurately stratify groups of Medicare patients with varying levels of severity.

(1) Consolidation of Existing CMS DRGs into Base MS–DRGs

The first step in our process was the consolidation of existing CMS DRGs into new proposed base MS–DRGs. We combined together the 115 pairs of CMS DRGs that are subdivided based on the presence of a CC. We further consolidated the CMS DRGs that are split on the basis of a major cardiovascular condition, AMI with and without major complication (CMS DRGs 121 and 122), and cardiac catheterization with and without complex diagnoses (CMS DRGs 124 and 125). We also consolidated the three pairs of burn CMS DRGs that were defined based on the presence of a CC or a significant trauma (CMS DRGs 506 and 507; 508 and 509; and 510 and 511). Next, we consolidated the 43 pediatric CMS DRGs that are defined based on age less than or equal to 17. These pediatric CMS DRGs contain a very low volume of Medicare patients. As shown in Table 10 of the FY 2007 IPPS final rule (71 FR 48318), only two of these pediatric CMS DRGs contained more than 100 patients (CMS DRGs 298 and 333). Seventeen of these pediatric DRGs had no patients (CMS DRGs 30, 33, 41, 48, 54, 58, 137, 252, 255, 282, 330, 340, 343, 393, 405, 446, and 448). As we have stated frequently, our primary focus in maintaining the CMS DRGs is to serve the Medicare population. We do not have the data or the expertise to maintain the DRGs in clinical areas that are not relevant to the Medicare population. We continue to encourage users of the CMS DRGs (or MS–DRGs that are being adopted) to make relevant adaptations if they are being used for a non-Medicare patient population.

In addition to the pediatric CMS DRGs defined by the age of the patient, there are a number of CMS DRGs that relate primarily to the pediatric or adult population that have very low volume in the Medicare population, such as male sterilization, tubal interruptions, circumcisions, tonsillectomies, and myringotomies. These CMS DRGs were consolidated into the most clinically similar MS–DRG.

Over the past two decades, the site of service for some elective procedures such as carpal tunnel release, cataract extraction, and laparoscopy has shifted from the inpatient to the outpatient setting, resulting in the CMS DRGs associated with these procedures having very low volume. These CMS DRGs were also consolidated into the most clinically similar MS–DRG. In addition, there were some clinically related CMS DRGs that had significant Medicare patient volume but had no significant difference in resource use. For example, thyroid (CMS DRG 290) and parathyroid (CMS DRG 289) procedures were virtually identical in terms of hospital resource use and were, therefore, consolidated. In total, 34 of these CMS DRGs were consolidated. The DRG consolidations are summarized in Table F below.

Four pairs of MS–DRGs (223 and 224; 228 and 229; 323 and 324; and 551 and 552) were defined based on the presence of a CC or some other condition. For example, MS–DRG 323 is defined based on the presence of a CC or the performance of extracorporeal shock

wave lithotripsy. For these MS–DRGs, the CC condition was removed and the pair of DRGs remains separate but defined based only on the other condition (that is, MS–DRG 323 became urinary stones with extracorporeal shock wave lithotripsy). As was done in the 1994 severity DRG work, we did not consolidate any of the CMS DRGs for maternity or newborn cases.

Before proceeding further, we made one additional change to a base DRG assignment after completing these consolidations. We assigned cranial-facial bone procedures to a new base DRG (Cranial/Facial Bone Procedures). These cases were previously assigned to DRGs 52 and 55 through 63. We also created a new base DRG, MS–DRG 245 (Automatic Implantable Cardiac Defibrillator (ACID) Lead and Generator Procedures). This DRG was created by removing automatic implantable cardiac defibrillator leads and generator procedures from the pacemaker DRG (CMS DRG 551; now new MS–DRGs 242 through 244).

Table F below shows how DRGs in the CMS DRGs (Version 24.0) were consolidated into new base MS DRGs. We refer readers to section II.D.2. of the preamble of the proposed rule and this final rule with comment period for a detailed discussion of CCs and MCCs under the MS–DRG system.

TABLE F.—DRG CONSOLIDATION

CMS–DRG version 24.0	DRG description	MS–DRGs version 25.0	New base MS–DRG description
6	Carpal Tunnel Release	40 41 42	Peripheral & Cranial Nerve & Other Nervous System Procedure with MCC, with CC, and without CC/MCC.
7, 8	Peripheral & Cranial Nerve & Other Nervous System Procedure.		
36	Retinal Procedures	116 117	Intraocular Procedures with and without CC/MCC.
38	Primary Iris Procedures.		
39	Lens Procedures with or without Vitrectomy.		
42	Intraocular Procedures Except Retina, Iris & Lens.		
43	Hyphema	124 125	Other Disorders of the Eye with and without MCC.
46, 47, 48	Other Disorders of the Eye.		
50	Sialoadenectomy	139	Salivary Gland Procedures.
51	Salivary Gland Procedures Except Sialoadenectomy.		
52	Cleft Lip & Palate Repair	133	Other Ear, Nose, Mouth & Throat O.R. Procedures with and without CC/MCC.
55	Miscellaneous Ear, Nose, Mouth & Throat Procedures.		
56	Rhinoplasty	131 132	New DRG—Cranial/Facial Bone Procedures with and without CC/MCC.
57, 58	Tonsillectomy & Adenoidectomy Procedure, Except Tonsillectomy &/or Adenoidectomy Only.		
59, 60	Tonsillectomy &/or Adenoidectomy Only.		
61, 62	Myringotomy with Tube Insertion.		
63	Other Ear, Nose, Mouth & Throat O.R. Procedures.		
67	Epiglottitis	152 153	Otitis Media & Upper Respiratory Infection with and without MCC.
68, 69, 70	Otitis Media & Upper Respiratory Infection.		
71	Laryngotracheitis.		
72	Nasal, Trauma & Deformity	154 155 156	Other Ear, Nose, Mouth & Throat Diagnoses with MCC, with CC, without CC/MCC.
73, 74	Other Ear, Nose, Mouth & Throat Diagnoses.		
185, 186	Dental & Oral Diseases Except Extractions & Restorations.	157 158 159	Dental & Oral Diseases with MCC, with CC, without CC/MCC.
187	Dental Extractions & Restorations.		
199	Hepatobiliary Diagnostic Procedure for Malignancy.	420 421 422	Hepatobiliary Diagnostic Procedures with MCC, with CC, without CC/MCC.
200	Hepatobiliary Diagnostic Procedure for Non-Malignancy.		

TABLE F.—DRG CONSOLIDATION—Continued

CMS–DRG version 24.0	DRG description	MS–DRGs version 25.0	New base MS–DRG description
244, 245	Bone diseases & Specific Arthropathies	553 554	Bone Diseases & Arthropathies with and without MCC.
246	Non-Specific Arthropathies.		
259, 260	Subtotal Mastectomy for Malignancy*	584 585	Breast Biopsy, Local Excision & Other Breast Procedures with and without CC/MCC.
261	Breast Procedures for Non-Malignancy Except Biopsy & Local Excision.		
262	Breast Biopsy & Local Excision for Non-Malignancy.		
267	Perianal & Pilonidal Procedures	579 580 581	Other Skin, Subcutaneous Tissue & Breast Procedures with MCC, with CC, without CC/MCC.
268	Skin, Subcutaneous Tissue & Breast Plastic Procedures.		
269, 270	Other Skin, Subcutaneous Tissue & Breast Procedure.		
289	Parathyroid Procedures	625 626 627	Thyroid, Parathyroid & Thyroglossal Procedures with MCC, with CC, without CC/MCC.
290	Thyroid Procedures.		
291	Thyroglossal Procedures.		
294	Diabetes > 35	637	Diabetes with MCC, with CC, without CC/MCC.
295	Diabetes < 35.		
338	Testes Procedures for Malignancy	711 712	Testes Procedures with and without CC/MCC.
339, 340	Testes Procedures, Non-Malignancy.		
342, 343	Circumcision	.....	Procedure 64.0 changed to non-O.R. Cases with only this procedure will go to medical DRGs.
351	Sterilization, Male	729 730	Other Male Reproductive System Diagnoses with and without CC/MCC
352	Other Male Reproductive System Diagnoses.		
361	Laparoscopy & Incisional Tubal Interruption	744 745	D&C, Conization, Laparascopy & Tubal Interruption with and without CC/MCC.
362	Endoscopic Tubal Interruption.		
363	D&C, Conization & Radio-Implant, for Malignancy.		
364	D&C, Conization Except for Malignancy.		
411	History of Malignancy without Endoscopy	843 844 845	Other Myeloproliferative Disease or Poorly Differentiated Neoplasm Diagnosis with MCC, with CC, without CC/MCC.
412	History of Malignancy with Endoscopy.		
413, 414	Other Myeloproliferative Disease or Poorly Differentiated Neoplasm Diagnosis.		
465	Aftercare with History of Malignancy as Secondary Diagnosis.	949	Aftercare with and without.
466	Aftercare without History of Malignancy as Secondary Diagnosis.	950	CC/MCC.

*Codes 85.22 and 85.23 in CMS DRGs 259 and 260 were moved to MS–DRG 582 and 583.

As summarized in Table G, the consolidation resulted in the formation of 335 base MS–DRGs.

TABLE G.—CONSOLIDATION OF CURRENT CMS DRGS INTO MS DRGS

	Number
Current CMS DRGs	538
Elimination of CC subgroups	−114
Elimination of MCC subgroups	−7

TABLE G.—CONSOLIDATION OF CURRENT CMS DRGS INTO MS DRGS—Continued

	Number
Elimination of CC complexity subgroups	−5

TABLE G.—CONSOLIDATION OF CURRENT CMS DRGS INTO MS DRGS—Continued

	Number
Elimination of age 0–17 subgroups	−43
Consolidation due to volume or resource similarity	−34
New DRG	+1
Revised Base DRGs	311
Newborn, maternity and error DRGs	+24
Base DRGs for severity subdivision	335

The end result of the consolidation of the CMS DRGs in the MS–DRGs was similar to the consolidation performed in the 1994 severity DRGs. The 1994 DRG consolidations resulted in 356 base DRGs plus 2 error DRGs. The number of the 1994 base DRGs is different because new CMS DRGs have been added since 1994, the 43 age 0–17 pediatric CMS DRGs were not consolidated, and some of the volume shifts to outpatient care had not yet occurred in 1994. In the 1994 severity DRGs, 24 DRGs were consolidated due to volume or resource similarity. Sixteen of these 1994 DRG consolidations are included in the 34 consolidations done in the 2007 consolidations. However, due to concerns expressed by our physician consultants, 8 of the DRG consolidations from 1994 were not done. For example, interstitial lung disease (DRGs 92 and 93) was not consolidated with simple pneumonia and pleurisy (DRGs 89, 90, 91) as was done in the 1994 consolidations.

Comment: One commenter expressed concern that the focus of MS–DRGs was on the Medicare population. As a result of this focus, many of the DRGs reflect severity and resource use only for the Medicare population. The commenter stated that certain diagnoses present differently at different ages or actually represent a different disease process. For instance, the commenter stated that hypertension in a child represents a very different disease than for adults. The commenter also stated that CMS DRGs 569 and 570 (Major Small and Large Bowel Procedures with CC and with or without Major Gastrointestinal Diagnosis, respectively) have different costs for a Medicare patient than a child. The commenter also indicated that CMS did not perform updates to MDC 14 (Obstetrics) and MDC 14 (Newborns and Other Neonates with Problems Arising in the Perinatal Period). The commenter stated that the MS-DRGs will not work well for other populations.

Response: The MS–DRGs were specifically designed for purposes of Medicare hospital inpatient services payment. As we stated above, we generally use MedPAR data to evaluate possible DRG classification changes and recalibrate the DRG weights. The MedPAR data only represent hospital inpatient utilization by Medicare beneficiaries. We do not have comprehensive data from non-Medicare payers to use for this purpose. The Medicare program only provides health insurance benefits for people over the age of 65 or who are disabled or suffering from end-stage renal disease. Therefore, newborns, maternity, and pediatric patients are not well-represented in the MedPAR data that we used in the design of the MS–DRGs. We simply do not have enough data to establish stable and reliable DRGs and relative weights to address the needs of non-Medicare payers for pediatric, newborn, and maternity patients. For this reason, we encourage those who want to use MS–DRGs for patient populations other than Medicare make the relevant refinements to our system so it better serves the needs of those patients.

(2) Categorization of Diagnoses

We decided to establish three different levels of CC severity into which we would subdivide the diagnosis codes. The proposed three levels are MCC, CC, and non-CC. Diagnosis codes classified as MCCs reflect the highest level of severity. The next level of severity includes diagnosis codes classified as CCs. The lowest level is for non-CCs. Non-CCs are diagnosis codes that do not significantly affect severity of illness and resource use. Therefore, secondary diagnoses that are non-CCs do not affect the DRG assignment under either the CMS DRGs or the MS–DRGs.

The categorization of diagnoses as an MCC, CC, or non-CC was accomplished using an iterative approach in which each diagnosis was evaluated to determine the extent to which its presence as a secondary diagnosis resulted in increased hospital resource use. In order to begin this iterative process, we started with an initial categorization of each diagnosis as an MCC, CC, or non-CC. As noted previously, the 1994 CC revision began by separating CCs into MCC and CC based on the AP–DRG major CCs. One way to begin this iterative process would have been to use the 1994 CC categorization. However, the 1994 CC categorization was based on FY 1992 data and ICD–9–CM diagnosis codes, which now are 15 years old. Since 1992, 1,897 new diagnosis codes have been added, and 346 diagnosis codes have been deleted. Because the revised CC list (explained in section II.C.2.a. of this preamble) was based on current ICD–9–CM codes and used recent data, we decided to utilize the revised CC list rather than the 1994 categorization as our starting point for determining whether each secondary diagnosis should be an MCC, a CC, or a non-CC.

The revised CC list categorizes each diagnosis as a CC or a non-CC. We decided to use this list in combination with the categorization under the AP–DRGs and the APR DRGs. The AP–DRGs and the APR DRGs are updated annually with current codes and provide a good comparison source to use with the revised CC list. We designated as an MCC any diagnosis that was a CC in the revised CC list and was an AP–DRG major CC and was an APR DRG default severity level 3 (major) or 4 (extensive). We designated as a non-CC any diagnosis that was a non-CC in the revised CC list and was an AP–DRG non-CC and was an APR DRG default severity level of 1 (minor). Any diagnoses that did not meet either of the above two criteria was designated as a CC.

The only exception to our approach was for diagnoses related to newborns, maternity, and congenital anomalies. These diagnoses are very low volume in the Medicare population and were not reviewed for purposes of creating the revised CC list. We used the APR DRGs to categorize these diagnoses. For newborn, obstetric, and congenital anomaly diagnoses, we designated the APR DRG default severity level 3 (major) and 4 (extreme) diagnoses as an MCC, the APR DRG default severity level 2 (moderate) diagnoses as a CC, and the APR DRG default severity 1 (minor) diagnoses as a non-CC. Table H summarizes the number of codes in each CC category.

TABLE H.—INITIAL CATEGORIZATION OF CC CODES

	Number of codes
MCC	1,096
CC	4,221
Non CC	8,232
Total	13,549

This initial CC categorization of diagnosis codes was used to begin the iterative process of determining the proposed final CC categorization for each diagnosis code.

(3) Additional CC Exclusions

For some CMS DRGs, the presence of specific secondary diagnoses affects the base DRG assignment. For example, in MDC 5 (Diseases and Disorders of the Circulatory System), the presence of an AMI code as the principal diagnosis or as a secondary diagnosis will cause the patient to be assigned to the AMI DRGs (CMS DRGs 121 through 123). Therefore, if the AMI code is present as a secondary diagnosis, it should not be used to assign the CC category for a patient because it is redundant within the definition of the base DRG. Similarly, for MDC 24 (Multiple Significant Trauma), specific combinations of significant trauma as principal or secondary diagnosis cause the assignment to the multiple trauma DRGs (CMS DRGs 484 through 487). Therefore, any secondary diagnosis of trauma is redundant with the definition of the multiple trauma DRGs and should not be used to determine the CC category for a patient. Any secondary diagnoses that are used to assign a specific proposed base MS–DRG were excluded from the determination of the CC category for patients assigned to that base MS–DRG.

Comment: Several commenters asked that we make changes to the CC and exclusion list for codes associated with sepsis. The commenters stated that two Systemic Inflammatory Response Syndrome (SIRS) codes, 995.91 (Sepsis) and 995.92 (Severe sepsis) are CCs under MS–DRGs. The commenters believed that if a patient has SIRS and pneumonia, both conditions should be coded, and that this coding would result in a patient admitted with SIRS being assigned to MS–DRG 871 (Septicemia without Mechanical Ventilation with MCC). The commenters stated that the pneumonia would count as a MCC in this case. The commenters requested that CMS exclude pneumonia from being a MCC when it occurs with sepsis. The commenters believed pneumonia should be excluded as an MCC for a patient with sepsis because it is an underlying and related condition, and that these patients should not be assigned to MS–DRG 871. The commenters stated that the other SIRS codes, 995.93 (Systemic Inflammatory Response Syndrome due to noninfectious process without acute organ dysfunction) and 995.94 (Systemic Inflammatory Response Syndrome due to noninfectious process with acute organ dysfunction) are excluded from acting as a CC for pancreatitis (code 577.0). The commenters asked that CMS not exclude codes 995.93 and 995.94 with code 577.0.

Response: The commenters are mistaken about codes 995.91 and 995.92. While these two codes are not CCs, they are on the MCC list. Our data and the judgment of our medical advisors support the assignment of these codes to the MCC list. Furthermore, we do not believe it is appropriate to exclude pneumonia as an MCC for sepsis and severe sepsis. These patients would be at an extremely high level of severity. SIRS is not always associated with pneumonia but when it is, the patient is at a higher severity level. Therefore, we are not making this change to the CC exclusion list by excluding pneumonia codes from acting as a MCC with code 995.91 and 995.92. On the second issue the commenters raised, they are incorrect that codes 995.91 and 995.92 are excluded from acting as a CC for code 577.0. These codes are not on the CC exclusion list for code 577.0. Therefore, both would act as a MCC for code 577.0. We are not making any changes to the CC exclusion list as a result of these comments.

(4) Analysis of Secondary Diagnoses

The 311 base MS–DRGs (335 total base DRGs minus the MDC 14, MDC 5, and error DRGs) were subdivided into three CC subgroups. Patients were assigned to the subgroup corresponding to the most extreme CC present. All but four of the base MS–DRGs had strictly monotonically increasing average charges across the three CC subgroups (that is, average charges progressively increased from the non-CC to the CC to the MCC subgroups). The four MS–DRGs that failed to have monotonically increasing charges all had at least one CC subgroup with very low volume. For example, the non CC subgroup for the pancreas transplant DRG (CMS DRG 513) had only 2 cases. The overall statistics by CC subgroup for the 311 base MS–DRG are contained in Table I. Patients in the MCC subgroup have average charges that are nearly double the average charges for patients in the CC subgroup. The CC subgroup with the largest number of patients is the non-CC subgroup with 41.1 percent of the patients.

TABLE I.—OVERALL STATISTICS FOR MS–DRGS EXCLUDING THOSE IN MDCS 14 AND 15

CC subgroup	Number of cases	Percent	Average charges
Major	2,604,696	22.2	$44,246
CC	4,293,744	36.6	24,131
Non-CC	4,818,411	41.1	18,435

In order to evaluate the initial assignment of secondary diagnoses to the three CC subclasses, we devised a system that determined the impact on resource use of each secondary diagnosis. For each secondary diagnosis, we measured the impact in resource use for the following three subsets of patients:

(a) Patients with no other secondary diagnosis or with all other secondary diagnoses that are non-CCs.

(b) Patients with at least one other secondary diagnosis that is a CC but none that is an MCC.

(c) Patients with at least one other secondary diagnosis that is an MCC.

Numerical resource impact values were assigned for each diagnosis as follows:

Value	Meaning
0	Significantly below expected value for the non-CC subgroup.
1	Approximately equal to expected value for the non-CC subgroup.
2	Approximately equal to expected value for the CC subgroup.
3	Approximately equal to expected value for the MCC subgroup.
4	Significantly above the expected value for the MCC subgroup.

Each diagnosis for which Medicare data were available was evaluated to determine its impact on resource use and to determine the most appropriate CC subclass (non-CC, CC, or MCC) assignment. In order to make this determination, the average charge for each subset of cases was compared to the expected charge for cases in that

subset. The following format was used to evaluate each diagnosis:

Code	Diagnosis	Cnt1	C1	Cnt2	C2	Cnt3	C3

Count (Cnt) is the number of patients in each subset and C1, C2, and C3 are a measure of the impact on resource use of patients in each of the subsets. The C1, C2, and C3 values are a measure of the ratio of average charges for patients with these conditions to the expected average charge across all cases. The C1 value reflects a patient with no other secondary diagnosis or with all other secondary diagnoses that are non-CCs. The C2 value reflects a patient with at least one other secondary diagnosis that is a CC but none that is a major CC. The C3 value reflects a patient with at least one other secondary diagnosis that is a major CC. A value close to 1.0 in the C1 field would suggest that the code produces the same expected value as a non-CC diagnosis. That is, average charges for the case are similar to the expected average charges for that subset and the diagnosis is not expected to increase resource usage. A higher value in the C1 (or C2 and C3) field suggests more resource usage is associated with the diagnosis and an increased likelihood that it is more like a CC or major CC than a non-CC. Thus, a value close to 2.0 suggests the condition is more like a CC than a non-CC but not as significant in resource usage as an MCC. A value close to 3.0 suggests the condition is expected to consume resources more similar to an MCC than a CC or non-CC. For example, a C1 value of 1.8 for a secondary diagnosis means that for the subset of patients who have the secondary diagnosis and have either no other secondary diagnosis present, or all the other secondary diagnoses present are non-CCs, the impact on resource use of the secondary diagnoses is greater than the expected value for a non-CC by an amount equal to 80 percent of the difference between the expected value of a CC and a non-CC (that is, the impact on resource use of the secondary diagnosis is closer to a CC than a non-CC).

Table J below shows examples of the results.

TABLE J.—EXAMPLES OF IMPACT ON RESOURCE USE OF SECONDARY DIAGNOSES

Code	Cnt1	C1	CntC2	C2	Cnt3	C3	CC subclass
401.1, Benign essential hypertension	12,308	0.955	40,113	1.715	5,297	2.384	Non CC.
530.81, Esophageal reflux	294,673	0.986	917,058	1.639	122,076	2.302	Non CC.
560.1, Paralytic Ileus	10,651	1.466	87,788	2.320	51,303	3.226	CC.
491.20, Obstructive chronic bronchitis	7,003	1.416	32,276	2.193	13,355	3.035	CC.
410.71, Subendocardial infarction initial episode	1,657	2.245	30,226	2.778	42,862	3.232	MCC.
518.81, Acute respiratory failure	5,332	2.096	118,937	2.936	223,054	3.337	MCC.

The resource use impact reports were produced for all diagnoses except obstetric, newborn, and congenital anomalies (10,690 diagnoses). These mathematical constructs were used as guides in conjunction with the judgment of our clinical staff to classify each secondary diagnosis reviewed as an MCC, CC or non-CC. Our clinical panel reviewed the resource use impact reports and modified 14.9 percent of the initial CC subclass assignments as summarized in Table K below. The rows in the table are the initial CC subclass categories and the columns are the final CC subclass categories.

Comment: Several commenters acknowledged the detailed description of the methodology used in categorizing secondary diagnoses as MCCs, CCs, or non-CCs. While they were appreciative of the detailed iterative process outlined in the proposed rule (72 FR 24702), the commenters requested that CMS provide the numerical values (the C1 to C3 values) that were assigned to classify each diagnosis as an MCC, CC or non-CC.

Response: We agree that it would be helpful to share the data we developed and used for each individual code as part of our CC evaluation process. We will post this data on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/* under the Downloads section.

TABLE K.—CC SUBCLASS MODIFICATIONS

Initial CC subclass	Final CC subclass				
	MCC	CC	Non-CC	Total	Percent
MCC	847	62	0	909	8.5
CC	542	2,579	737	3,858	36.1
Non-CC	0	272	5,651	5,923	55.4
Total	1,389	2,913	6,388	10,690	.....
Percent	13.0	27.2	59.8	.....	.....

Of the diagnoses initially designated as an MCC, 6.8 percent were made a CC (62/909), and of the diagnoses initially designated as non-CC, 4.6 percent were made a CC (272/5,923). The major shift occurred in the diagnoses initially assigned to the CC subclass. Fourteen percent of the diagnoses initially designated as a CC were made an MCC (542/3858), and 19.1 percent of the diagnoses initially designated a CC were made a non-CC (737/3,858). In determining the CC subclass assigned to a diagnosis, imprecise codes were, in general, not assigned to the MCC or CC

subclass. For example, the congestive heart failure codes have the following CC subclass assignments:

Code	CC subclass assignment
428.21, Acute systolic heart failure	MCC.
428.41, Acute systolic & diastolic heart failure	MCC.
428.43, Acute on chronic systolic heart failure	MCC.
428.31, Acute diastolic heart failure	MCC.
428.33, Acute on chronic diastolic heart failure	MCC.
428.1, Left heart failure	CC.
428.20, Systolic heart failure NOS	CC.
428.22, Chronic systolic heart failure	CC.
428.32, Chronic diastolic heart failure	CC.
428.40, Systolic & diastolic heart failure	CC.
428.0, Congestive heart failure NOS	Non-CC.
428.9, Heart failure NOS	Non-CC.

The acute heart failure codes are MCCs, and the chronic heart failure codes are CCs. However, Not Otherwise Specified (NOS) heart failure codes are non-CCs. Thus, the precise type of heart failure must be specified in order for an MCC or CC to be assigned.

There are currently 13,549 ICD–9–CM diagnosis codes. The external cause of injury and poisoning codes (E800 through E999) and congenital abnormality codes were not included in our current CC review for the MS–DRGs. We excluded the external cause of injury and poisoning codes from consideration as an MCC or a CC because they describe how an injury occurred, and not the exact nature of the injury. For instance, if a patient fell on the deck of a boat and fractured his or her skull, one would assign an E code to describe the fall on the boat. A separate diagnosis code would be assigned to describe the exact nature of any resulting injury such as a contusion, fractured bone, or skull fracture and concussion. A patient would be assigned to a severity level based on the exact nature of the injury and not the manner in which the injury occurred. Therefore, we decided not to classify any of the E codes as either an MCC or a CC. The congenital abnormality codes describe abnormalities when a baby is born. At times, a beneficiary may live with these congenital abnormalities for years without a problem. The congenital abnormalities may later lead to complications that require hospital admissions. Should these congenital abnormalities lead to medical problems that result in a hospital admission for a Medicare beneficiary, the exact nature of the condition being treated would also be assigned a code. This more precise code would be evaluated to determine whether or not it was an MCC or a CC. Therefore, we decided not to classify congenital abnormality codes as an MCC or a CC, but to instead use the other reported diagnosis codes that better describe the reason for the admission. Excluding the external cause of injury codes, we reviewed 10,690 diagnosis codes.

As was done in our 1994 severity proposal, diagnoses that were closely associated with patient mortality were assigned different CC subclasses, depending on whether the patient lived or died. These diagnoses are:

- 427.41, Ventricular fibrillation
- 427.5, Cardiac arrest
- 785.51, Cardiogenic shock
- 785.59, Other shock without mention of trauma
- 799.1, Respiratory arrest

Resource use for patients with these diagnoses who were discharged alive was consistent with an MCC. Resource use for patients with these diagnoses who died was consistent with a non-CC. Further, most patients who died could legitimately have one of these diagnoses coded. As a result, these diagnoses are assigned an MCC subclass for patients who lived and a non-CC subclass for patients who died.

For some secondary diagnoses assigned to the CC subclass, our medical advisors identified specific clinical situations in which the diagnosis should not be considered a CC. In such clinical situations, the CC exclusion list was used to exclude the secondary diagnosis from consideration in determining the CC subgroup, essentially making the secondary diagnosis a non-CC. For example, primary cardiomyopathy (code 425.4) is designated as a CC. However, for patients admitted for congestive heart failure, our medical advisors believed that primary cardiomyopathy should be treated as a non-CC. In order to accomplish that, the congestive heart failure principal diagnoses were added to the CC exclusion list for primary cardiomyopathy as a secondary diagnosis.

The list of diagnosis codes that we proposed to classify as an MCC (which we are adopting in this final rule with comment period) was included in Table 6J in the Addendum to FY 2008 IPPS proposed rule. The diagnosis codes that we proposed to classify as a CC (which are adopting in this final rule with comment period) were included in Table 6K in the Addendum to the proposed rule. The E-codes, which are diagnosis codes used to classify external causes of injury and poisoning, are not included in this list. All E codes are designated as non-CCs under the current CMS DRG system and our evaluation supports this non-CC designation as appropriate. We are including a list of changes to the MCC and CC lists as a result of public comments on the proposed rule later in section II.G.13. of the preamble of this final rule with comment period. We will post a complete final list of the MCC and CC codes on the CMS Web site at: *http://www/cms/hhs/gov/AcuteInpatientPPS/* under the Files for Download section.

Comment: One commenter supported the basic methodology used to identify MCCs and CCs. The commenter's analysis of discharge data generally confirms the notion that the presence of chronic disease does not usually have material impact on the expected cost of care. The commenter agreed that the emphasis on acute manifestations of chronic diseases is both clinically and financially appropriate. The commenter stated that the current CC list is nearly 25 years old and does not reflect the extent to which clinical practice has changed during that period, with concomitant changes in expected resource use. The commenter further stated that the current CC list also does not reflect the nature of changes in coding practices during that period, changes that have undermined the value of the current CC list. The commenter stated that the elimination of common secondary diagnoses such as code 428.0 (Congestive heart failure, unspecified)

and code 427.31 (Atrial fibrillation) from the CC list will help to restore CC status as a meaningful indicator of differential expected resource use. The commenter also believed that elimination of these diagnosis codes will address the current situation in which nearly 80 percent of Medicare discharges contain one or more CCs.

Response: We agree that it was important to perform a careful review of the CC list to develop lists that more accurately identify patients with significantly different severity levels. We believe that by using both statistical data as well as input from our medical advisors, we were able to develop the MCCs and CCs that do a much better job of classifying Medicare patients with varying levels of severity. We also agree that is important to remove chronic diagnoses from the CC list that do not have a significant impact on severity. We also believe that nonspecific codes such as code 428.0 should not be included on the CC list. The ICD–9–CM coding system has more specific codes to identify the specific type of heart failure. These more specific codes have data supporting their inclusion on the MCC and CC list. Our medical advisors also supported the inclusion of the more specific heart failure codes on the MCC and CC list. We also agree that patients with atrial fibrillation (code 427.31) do not necessarily have a higher level of severity. The Medicare data suggest that when this condition appears on the claim and the patient has no other secondary diagnosis that is a CC, the charge data suggest the condition produces an expected value for a non-CC rather than a CC case. Further in the judgment of our medical advisors, the condition should not be on the CC list. When the atrial fibrillation leads to additional cardiac problems, the additional problems may be represented by codes that are on the MCC or CC list. We agree that by removing codes from the CC list that do not contribute to significantly higher levels of severity, we can better recognize severity of illness and more accurately reimburse hospitals.

We spent extensive time carefully reviewing the ICD–9–CM diagnosis codes to develop the MCC and CC list. Our current CC list for Version 24.0 of the CMS DRGs contains 3,326 codes. The MS–DRGs have 3,342 codes on the MCC list and 4,922 codes on CC list. While we did remove codes from the CC list and add others to the list, we believe that the end result is a better classification of conditions for identifying differences in severity of illness. We appreciate the commenter's support for our efforts.

Comment: Several commenters supported the MCC and CC lists as a better means of identifying severity. The commenters recommended that CMS consider adopting the revised CC list in FY 2008 as an interim step toward IPPS reform. The commenters recommended that CMS delay implementation of the new severity system until FY 2009 but adopt the revised CC list in FY 2008. The commenters stated that by implementing the revised CC list in FY 2008, CMS could move forward in its goal of utilizing a system that more accurately recognizes the severity of illness of patients. The commenters believed this option would allow a more accurate DRG system to be in place while CMS is evaluating the final RAND report to determine which severity-based DRG system to propose for implementation in FY 2009.

Another commenter who supported the move to MS–DRGS and CMS' efforts in creating the MCC and CC lists stated that it had been working with CMS for years to develop a mechanism to appropriately account for the resources involved in the care of patients with severe sepsis. The commenter believed that the MS–DRGs in which severe sepsis is recognized as a major complication, along with acute respiratory distress syndrome, organ failure, and other conditions where resource use is more intense, will go a long way towards better recognition of severity of illness.

One commenter applauded CMS for the work it has put into developing a system that will consider complexity of care as well as severity of illness in determining Medicare payment for hospital inpatient services. The commenter particularly supported the recognition of hemophilia and end-stage renal disease as MCCs. The commenter stated that these conditions clearly meet the criteria for treatment as MCCs because they often require ''expensive and technologically complex'' services that lead to substantially increased resource use and reflect the highest level of severity. The commenter encouraged CMS to add other diagnoses as the evidence warrants.

Response: Comments and responses on whether to implement MS–DRGs in FY 2008 or at a later date are discussed in detail in section II.D. of the preamble of this final rule with comment period. We appreciate the support for our efforts in creating the MCC and CC lists and agree that it is important to examine data using the system and continue to refine the MCC and CC lists.

Comment: One commenter commended CMS on the systematic way it reviewed 13,549 secondary diagnosis codes to evaluate their assignment as a CC or non-CC using a combination of mathematical data and the judgment of its medical advisors. The commenter stated that, as part of the effort to better recognize severity of illness, CMS conducted the most comprehensive review of the CC list since the creation of the DRG classification. However, the commenter disagreed with the classification of many common secondary diagnoses as non-CCs. Specifically, the commenter questioned threshold levels that were used and at what point in the analysis CMS decided that a code was not a CC. For example, the commenter asked what was considered ''intensive monitoring,'' inquiring whether intensive monitoring refers to additional nursing care on a daily basis, additional testing, intensive care unit care, extended length of stay, all of these factors, or some other factor. In some instances, the commenter noted that similar or comparable codes within the same group have remained a CC/MCC, while other clinically similar codes or codes requiring similar resources may have been omitted. Without greater transparency, and a code-by-code explanation, the commenter was unable to determine why significant secondary diagnoses requiring additional resources have been removed from the CC list. For the most part, the commenter's analysis concentrated on reviewing current CCs that have been omitted from the revised CC list.

The commenter made the following overall recommendations with regard to the CC list:

- CMS should make the final revised CC list publicly available as quickly as possible so that hospitals may focus on understanding the impact of the revised CC list, training and educating their coders, and working with physicians for any documentation improvements required to allow the reporting of more specific codes where applicable.
- CMS should consider additional refinements to the revised CC list and, in particular, address issues where the ICD–9–CM codes may need to be modified to provide the distinction between different levels of severity.
- In situations where a new code is required, CMS should default to leaving the codes as CCs until new codes can be created.

Response: The process of evaluating both claims data and clinical issues is a challenging one. Our medical advisors performed an extensive evaluation of codes for the MCC and CC lists, combining their medical judgment and claims data. We have reviewed a number of specific codes raised by

commenters and considered whether or not the codes should be a MCC or CC. These numerous code requests are discussed below. Also, as mentioned earlier, we plan to post the data we used to evaluate each code on the CMS Web site. These data may assist the public in making recommendations for additional changes to the MCC and CC lists. Any revisions made to the MS–DRGs or the MCC and CC lists are being made available with this final rule with comment period. As suggested by the commenter, we plan to evaluate further refinements to the MCC and CC lists each year as we obtain additional recommendations and data under the MS–DRG system.

Comment: One commenter acknowledged the significant effort and consideration CMS has given to developing both the mathematical and clinical judgment criteria in determining severity classifications. However, the commenter did not believe it was possible to fully assess the assignment of diagnosis codes in the severity classification because there was an incomplete description of the process in the proposed rule.

Response: As stated earlier, we plan to post on the CMS Web site the data used in analyzing how to classify each ICD–9–CM code as an MCC, CC, or non-CC. Our process for making CC/MCC decisions was an iterative one involving data review and clinical analysis. In the FY 2008 IPPS proposed rule (72 FR 24702 through 24705), we explained in detail our methodology for determining whether a secondary diagnosis qualified as an MCC, CC, or non-CC. Although posting these data results on the CMS Web site may be helpful in illustrating for commenters the data we used in classifying conditions as MCCs, CCs or non-CCs, we note that these data were combined with clinical judgment to make the final determinations. That is, the data were used as an adjunct to the judgment of our medical advisors. Clinical judgment may differ by individual physician. Thus, the data alone may be helpful but not definitive in helping commenters understand the reasons for some of our decisions. Nevertheless, we welcome further public input on potential revisions to the MCC and CC lists for FY 2009. We anticipate making updates to the MCC and CC lists each year as we receive additional recommendations and data. Again, below we respond to comments about specific codes.

Comment: One commenter commended CMS for undertaking a long-overdue comprehensive review and revision of the CC list. However, the commenter stated that more industry input is needed regarding the revised CC and MCC designations in the MS–DRG system. The commenter stated that the brevity of the public comment period, in combination with insufficient detail associated with the process and rationale for categorization of diagnoses as MCCs, CCs, and non-CCs, made it very difficult to conduct a thorough analysis of all of the codes on the MCC and CC lists. Another commenter stated that its members have only had an opportunity to do a cursory comparison of the current CMS CC list to the MS–DRG MCC and CC lists. The commenter stated that it should have the ability to do a complete analysis prior to implementation. The commenter believed such a review would be time intensive and likely to take a number of months of information exchange before it could be completed. Although the commenter acknowledged that the MCC and CC lists were included in the **Federal Register** notice and posted on the CMS Web site, the commenter believed the review was hampered by a lack of GROUPER software and a GROUPER Definitions Manual from being able to complete their review. The commenter also expressed concern that the analysis of secondary diagnoses was based on charges instead of costs. The commenter stated that if CMS' intent is to convert to a cost-based structure, a determination of the impact of secondary diagnoses should not be based on charges. The commenter added that this analysis appeared to be inconsistent with the evolution to a cost-based DRG weight system.

Response: We recognize the extensive time that is required by the public in order to perform a review of the MCC and CC lists. However, we note that a DRG Definitions Manual and GROUPER have never been made available until after completion of the final rule in past years and public commenters never before suggested that we need to delay implementation of proposed changes to the IPPS. While we acknowledge that the changes proposed for FY 2008 are significantly more comprehensive than the changes we propose in a typical year, the base DRG assignments under the MS–DRGs are largely unchanged from the prior CMS DRGs. The major changes result from assignment of a case to a DRG severity level using the new classification of secondary diagnoses as MCCs, CCs or non-CCs. For this reason, we made extensive information available to allow public commenters to perform a variety of analyses. The proposed rule included comprehensive lists of the codes that we classified as MCCs and CCs, and we made this information available electronically on the CMS Web site. The FY 2006 MedPAR data that were used to simulate proposed rule policies were made available simultaneous with public display of the FY 2008 proposed rule. This data file included both the CMS DRG assigned to the case using the Version 24.0 GROUPER and the proposed MS–DRG assignment. Further, we provided—at no extra cost to the purchaser—an FY 2005 version of the MedPAR that also included the CMS and MS–DRG assignment at the case level. For these reasons, we do not believe the lack of availability of a GROUPER or a DRG Definitions Manual should have precluded commenters from being able to analyze the revised MCC and CC lists. In fact, we note that a number of public commenters did provide suggestions for further revisions to these lists, suggesting there was ample time to be able to do these analyses.

We have considered the suggestion that we analyze changes to the MCC and CC lists using average costs instead of charges. We adopted a cost-based weighting methodology because of our concern that differential markups among routine and ancillary services made charges a poor proxy for costs when setting relative weights for dissimilar types of cases. That is, different types of cases would use very different mixes of routine and ancillary services with variable markups and could create distortions in relative weights that are based on charges. However, we are less concerned about using charges when comparing cases that share the same primary diagnosis, which are likely to use similar mixes of services when deciding whether to make a DRG change. In these cases, we believe charges may provide a reasonable proxy for costs because the cases use similar services with similar markups.

The methodology that we use to develop cost-based weights is very complex and works well to give us a measure of relative average resource use when combining a high number of cases together in a single DRG. We would need to analyze whether a methodology that tries to determine average costs at the case or code level would provide reliable results for making decisions about MCCs and CCs or DRG changes. Nevertheless, we appreciate this comment and will continue to give it further consideration as we evaluate alternative approaches to updating the MCC and CC lists and the MS–DRGs in the future.

Comment: One commenter stated that CMS should address the inconsistencies

within the CC list identified by its physician and hospital reviewers. The commenter also recommended that, where necessary, CMS should obtain additional input from physicians in the appropriate specialties to determine the standard of care and consequent increased hospital resource use of some of the conditions. The commenter provided a list of conditions that were removed from the revised CC list and urged CMS to maintain them on the CC list.

Response: We agree that the review of codes for the MCC and CC list was a daunting task requiring careful review by our panel of medical advisors. We used a number of physicians in this process, including internists and surgeons, to evaluate the effect of specific codes on a patient's severity levels. When necessary, our panel contacted other medical specialists, such as orthopedists and oncologists, to obtain additional input. We appreciate the CC issues brought to our attention. We reexamined specific codes brought to our attention below. We expect that we will continue to revise and update both the CC list and MCC list as we gain experience and data under the MS–DRG system. We anticipate making additional changes in the future with this added information.

Comment: One commenter stated that, in some cases, the current ICD–9–CM classification system does not adequately distinguish between acute and chronic forms of a condition. In the MS–DRG system, this distinction appears to be critical in predicting resources utilized at the patient level. The commenter recommended that CMS work with the NCHS to make ICD–9–CM code modifications to improve this acute and chronic distinction. Additionally, the commenter suggested that CMS and HHS should take immediate steps for the adoption of ICD–10–CM, as this system is much better than ICD–9–CM at distinguishing clinical severity, which is a key aspect of any severity-adjusted DRG system. The commenter believed that continued use of ICD–9–CM severely limits the ability of a severity-adjusted DRG system to recognize severity of illness.

Response: We encourage anyone with specific recommendations for revisions to the ICD–9–CM diagnosis codes to contact Donna Pickett, National Center for Health Statistics, Centers for Disease Control and Prevention at: (301) 458–4434. Information on requesting changes to the ICD–9–CM diagnosis codes can be found on the Web site at: *http://www.cdc.gov/nchs/icd9.htm.* The Department is continuing to evaluate whether to move to ICD–10.

Comment: One comment disagreed with CMS' elimination of many chronic conditions from the CC list. The commenter stated that patient care resources are utilized to prevent acute exacerbation of a chronic condition. The commenter believed that to not include these conditions on a CC list is a major flaw in the logic. The commenter supported inclusion of chronic conditions on the CC list as means to recognize the resources utilized to manage these conditions effectively, whether they are currently in an acute phase. The commenter did not mention specific chronic conditions that should be added to the MCC and CC lists.

Response: We address comments on specific conditions below. However, as a general matter, we found the Medicare data do not generally support that chronic or ''unspecified'' conditions are more resource intensive than conditions with an acute manifestation of a chronic disease that are described by specific codes. After carefully considering this issue, our medical advisors agreed that unspecified or chronic conditions generally are not suggestive of a higher level of severity of illness in and of themselves when there are more specific codes available to further describe the patient's specific condition or an acute manifestation of a chronic disease. We note that unspecified and chronic conditions are very commonly found in the Medicare patient population. The purpose of the MS–DRGs is to identify those conditions that lead to higher severity of illness and resource use relative to the average Medicare patient. These conditions suggest average or less than average resource use across the entire Medicare population. If we were to classify chronic and unspecified conditions as MCCs and CCs, the MS–DRGs ability to better recognize severity of illness would be significantly diminished.

Condition-Specific Comments

We received a number of recommendations of codes to be added to the CC list and the MCC list. We have divided these recommendations into three general categories and will address them accordingly. The three categories are:

- Nonspecific codes
- Symptoms, chronic conditions, and low severity conditions
- High severity codes that were erroneously left off of the CC or MCC list.

The first category of recommendations includes a number of codes that are nonspecific. For instance, one frequent recommendation for addition to the CC list is the nonspecific code 428.0 (Congestive heart failure, unspecified). This code is one of several codes that identify patients who have heart failure. Depending on the degree of certainty by the physician of the exact nature of the heart failure, a code can be assigned to indicate a very specific and acute form of heart failure, or a more general, nonspecific code can be assigned to represent a patient with heart failure, but the exact nature of the heart failure is unknown. Other nonspecific conditions include disorders of a heart valve. If the exact nature of the disorder of a heart valve is known, a specific code can be assigned. If the exact nature or degree of the disorder of the valve is not known, a more general, nonspecific code can be assigned. As discussed earlier in this final rule with comment period, our claims data and the clinical analysis of our medical advisors indicate that patients described by the more general, nonspecific codes are not at a higher severity level. If a patient's condition worsens and develops additional diagnoses or complications, these more specific conditions may be on the CC list or MCC list. The most frequently mentioned, nonspecific code by commenters was code 428.0. Therefore, we will provide a detailed summary of these comments and our response. There were a number of other nonspecific conditions suggested for additions to the CC list. We will address these conditions after summarizing the comments on congestive heart failure.

The second category includes a variety of codes representing symptoms, chronic conditions, and other conditions that do not describe a high level of severity. These conditions do not themselves indicate a high severity level using our mathematical analysis of the claims data combined with the clinical analysis by our medical advisors. As stated earlier, we did not include most chronic conditions on the CC list or the MCC list unless the code also indicates an acute exacerbation that would raise the severity level. If a patient has a chronic condition that deteriorates or develops into an acute complication, the more acute condition or complication may be on the CC list or the MCC list.

The third category of codes includes codes that commenters suggested should have been included on the CC list or the MCC list because they clearly describe a high level of severity. Upon further review, we agree that this third group of codes meet the criteria for being included on the CC list or MCC list. The claims data and our medical advisors' clinical analysis clearly support the addition of these codes to the CC list or the MCC list.

(a) Codes Representing Nonspecific Conditions

• Congestive Heart Failure—Code 428.0

Comment: One commenter endorsed the implementation of the revised CC list. The commenter stated that CMS used new criteria for refining the CC and MCC lists, which led to the removal of codes currently on the CC list. The commenter compared the old and revised CC lists and found that the revision added 2,002 codes and dropped 425 codes, for a net increase of 1,577 codes. The commenter stated that, even though the number of added codes far exceeds the number of dropped codes, in the last three MedPAR files, the dropped codes were used an average of 40,864 times, while the added codes were used an average of only 887 times. The commenter stated that many of the dropped codes pertain to unspecified conditions for which more specific codes are available and included on the revised CC list. The highest volume code, code 428.0, was applied to an average of 2.3 million Medicare fee-for-service cases a year during the past 3 years. This code is the most widely used secondary diagnosis code, despite the fact that 12 more specific codes were added in FY 2003. The additional codes are shown in the Table L below.

TABLE L.—INCIDENCE OF SECONDARY DIAGNOSIS CODING FOR HEART FAILURE FY 2004–FY 2006

ICD–9–CM code	Description	New in FY 2003
428.0	Congestive heart failure, unspecified.	
428.1	Left heart failure.	
428.20	Systolic heart failure; unspecified	x
428.21	Systolic heart failure; acute	x
428.22	Systolic heart failure; chronic	x
428.23	Systolic heart failure; acute on chronic	x
428.30	Diastolic heart failure; unspecified	x
428.31	Diastolic heart failure; acute	x
428.32	Diastolic heart failure; chronic	x
428.33	Diastolic heart failure; acute on chronic	x
428.40	Combined systolic and diastolic heart failure; unspecified	x
428.41	Combined systolic and diastolic heart failure; acute	x
428.42	Combined systolic and diastolic heart failure; chronic	x
428.43	Combined systolic and diastolic heart failure; acute on chronic	x
428.9	Heart failure, unspecified.	

The commenter stated that, by making code 428.0 a non-CC, hospitals will react by coding more precisely using the more definitive heart failure codes, raising the CMI, which results in documentation and coding-related overpayments. The commenter argued that, if the revised CC list were implemented before hospitals had a chance to improve their coding to accommodate the revisions, ''case-mix creep and IPPS overpayments would ensure.''

Response: This commenter suggests reasons why Medicare should adopt the MS–DRGs over a transition period and does not appear to be opposed to our decision not to classify congestive heart failure as either an MCC or a CC. The commenter also suggests how hospitals will respond to the coding incentives that will be presented by revisions to the MCC and CC lists as well as the MS–DRGs. The issue of adopting the MS–DRGs over a transition is addressed in detail in section II.E. of the preamble of this final rule with comment period. We further address the implications of the coding incentives raised in this public comment in section II.D.6. of the preamble of this final rule with comment period that discusses an adjustment to IPPS rates for improvements in documentation and coding.

Comment: A number of other commenters urged CMS to classify the condition under code 428.0 as a CC. The commenters indicated that code 428.0 identifies an acute condition, not a benign or a chronic condition. Some commenters stated that any inpatient with congestive heart failure requires increased nursing care to closely monitor and assess physical symptoms and vital signs for indications of increased congestion. Patients often need to undergo repeated laboratory studies.

Another commenter stated that the proposed rule incorrectly characterized the diastolic and systolic heart failure codes as congestive heart failure. The commenter pointed out that according to the Fourth Quarter 2002 issue of Coding Clinic for ICD–9–CM, congestive heart failure is not an inherent component of the codes in category 428 for systolic and diastolic heart failure. Therefore, according to Coding Clinic, the commenter stated that code 428.0 should be assigned as an additional code when the patient has systolic or diastolic congestive heart failure. The commenter added that code 428.0 may appropriately be assigned by itself when congestive heart failure is documented, but there is no documentation of systolic or diastolic heart failure. The commenter stated that, in ICD–9–CM, there is no distinction between an acute exacerbation of congestive heart failure and chronic congestive heart failure. Code 428.0 is assigned for both. The commenter added that codes 402.11 (Benign hypertensive heart disease with congestive heart failure) and 402.91 (Unspecified hypertensive heart disease with congestive heart failure) are on the CC list. The commenter suggested that code 428.0 be included on the revised CC list as well.

Another commenter who objected to the removal of code 428.0 from the CC list stated that, currently, ICD–9–CM codes do not distinguish between acute, chronic, or acute exacerbation of chronic congestive heart failure. All forms of this condition are assigned to code 428.0. The commenter indicated that medical record documentation may not typically include information on whether the congestive heart failure is systolic or diastolic (acute versions of heart failure with this specificity are considered MCCs). The commenter requested that code 428.0 be added as an MCC until a new code can be created to identify acute exacerbation of congestive heart failure. The commenter stated that the fact that there is ''congestion'' is medically more problematic and more resource intensive and may necessitate care in the intensive care unit and a prolonged

hospital stay. The commenter stated that coding guidelines necessitate that acute pulmonary edema of cardiac origin be assigned code 428.0.

Response: Given the number of public comments on this one condition, our medical advisors reviewed the data and clinical issues surrounding code 428.0 again. They strongly recommend that we not change this code to a CC. There are three reasons for this recommendation. First, as stated earlier, we developed a policy of classifying nonspecific codes as non-CCs when a more specific code was available that identified the more specific nature of the patient's illness. Second, data for this and other nonspecific codes do not support assigning it to a higher severity level. Third, in the clinical judgment of our medical advisors, the use of a nonspecific code means that the physician had not identified a medical condition that indicates the patient is at a higher severity level or requires greater resources. This code is vague and does not provide any description of the exact nature of the heart failure. Data for this very commonly reported code clearly indicate that these patients are at a low severity level. However, claims data and our general policy of assigning nonspecific codes to a lower severity level were not the only factors that we used to classify a code as an MCC, CC, or non-CC. As stated above, the data were only used as an adjunct to the judgment of our medical advisors. In the judgment of our medical advisors, the condition described by code 428.0 does not suggest an increase in patient severity of illness. In this case, 12 more specific codes are available to indicate the more severe forms of heart failure. If the physician includes more precise information in the medical record that would allow the coder to identify a more specific code to describe the type of heart failure, the documentation will reflect that the hospital treated a more severely ill patient and the case will be assigned to a higher severity level.

While we decided to classify code 428.0 as a non-CC based on our policy concerning nonspecific codes, the data, and the judgment of our medical advisors, we note that heart failure is an important national health issue. We believe it is very important for hospitals and physicians to use the most specific codes that describe the incidence of heart failure in their patients. In order to accurately and completely evaluate health care outcomes for the treatment of heart failure, detailed and accurate information is needed on patients with this condition. Physicians and hospitals will undermine efforts to obtain more information on patients with this disease when they use a nonspecific code when there is a more detailed code to describe their patient. We highly encourage physicians and hospitals to work together to use the most specific codes that describe their patients'' conditions. Such an effort will not only result in more accurate payment by Medicare but will provide better information on the incidence of this disease in the Medicare patient population.

Comment: As stated earlier, a number of commenters requested CMS to add additional nonspecific codes to the CC list. These codes represent a variety of nonspecific conditions affecting multiple body systems. The commenters stated that the following nonspecific codes may increase the severity level for a patient, and should, therefore, be added to the CC list.

- 070.70, Unspecified viral hepatitis C
- 287.30, Primary thrombocytopenia, unspecified
- 287.5, Thrombocytopenia, unspecified
- 303.00, Acute alcohol intoxication, unspecified
- 345.90, Epilepsy, unspecified, without intractable epilepsy
- 403.90, Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified
- 424.0, Mitral valve disorders
- 424.1, Aortic valve disorders
- 426.13, Other second degree atrioventricular block
- 426.6, Other heart block
- 426.9, Conduction disorder, unspecified
- 447.6, Arteritis, unspecified
- 458.9, Hypotension, unspecified
- 451.2, Thrombophlebitis of lower extremities, unspecified
- 459.0, Hemorrhage, unspecified
- 585.5, Chronic kidney disease, unspecified
- 707.0, Decubitus ulcer, unspecified
- 780.39, Other convulsions

Response: As previously stated, we did not classify nonspecific codes to the MCC list or the CC list when more specific codes were available to identify the condition of the patient. In general, we found that the data did not support classifying unspecified codes as either MCCs or CCs. Further, after detailed discussions of potential clinical scenarios among our medical advisors, there was a consensus that a specified condition for the patient generally signals higher degree of severity of illness. If the physician was to diagnose additional information about the patient's condition or should the patient's condition worsen, a more precise code would be assigned that may be a CC or an MCC. As a result of these comments, our medical advisors again reviewed these codes and determined that their original decisions were correct. That is, they do not believe that these nonspecific codes should be classified as MCCs or CCs when more specific codes are available that provide more information about patient severity of illness. For these reasons, we are not adding the codes listed above to the CC list.

(b) Symptoms, Chronic Conditions, and Low Severity Conditions

Comment: Commenters requested that we add a number of codes to the CC list that describe symptoms, chronic conditions, and low severity conditions. These conditions include the following codes:

- 070.54, Chronic viral hepatitis C
- 250.4x, Diabetes mellitus with renal manifestations
- 250.5x, Diabetes mellitus with ophthalmic manifestations
- 250.6*x*, Diabetes mellitus with neurological manifestations
- 250.7x, Diabetes mellitus with peripheral circulatory disorders
- 250.8x, Diabetes mellitus with other specified manifestations
- 263.0, Moderate Malnutrition
- 263.1, Mild malnutrition
- 276.51, Dehydration
- 276.52, Hypovolemia
- 276.6, Fluid overload
- 276.7, Hyperpotassemia
- 276.9, Electrolyte and fluid disorders
- 280.0, Iron deficiency anemias, secondary to blood loss (chronic)
- 284.8, Aplastic anemias, not elsewhere classified
- 287.39 Other primary thrombocytopenia
- 287.4 Secondary thrombocytopenia
- 303.01 Acute alcohol intoxication, continuous
- 303.02 Acute alcohol intoxication, episodic
- 306.00, Blindness
- 389.9, Deafness
- 413.9, Angina pectoris
- 427.31, Atrial fibrillation
- 428.1, Left heart failure (change from CC to MCC)
- 451.0, Thrombophlebitis of superficial vessels of lower extremities;
- 492.8, Other emphysema
- 496, Chronic airway obstruction, not elsewhere classified
- 585.3, Chronic kidney disease, stage III (moderate)
- 599.7, Hematuria
- 710.0, Systemic lupus erythematosus
- 731.3, Major osseous defects

- 786.03, Apnea
- 788.20, Urinary retention
- 799.02, Hypoxemia
- V45.1, Renal dialysis status

Response: As discussed earlier, we did not assign chronic conditions to the CC list or the MCC list. These conditions do not themselves indicate a high severity level using our mathematical analysis of the claims data combined with the clinical judgment by our medical advisors. As stated earlier, we did not include most chronic conditions on the CC list or the MCC list unless the code also indicates an acute exacerbation that would raise the severity level. If the chronic condition worsens and the patient develops an acute complication, the more specific code for the acute exacerbation would identify the increased level of severity of illness and, if warranted, would be on the CC or the MCC list. We also did not include general symptoms on the CC list because, alone, they do not suggest a high level of severity of illness. Codes identifying symptoms such as hematuria, apnea, or hypoxemia that are found in many patients may indicate a wide range of patient severity and describe a transient finding. Should the physician diagnose a more specific condition that led to the symptoms, more information about the patient and their severity of illness would be known. The specific diagnosis may indicate higher severity of illness and the code that describes it may be included on the CC list or the MCC list. We also did not include conditions on the CC list or the MCC list that do not generally raise the severity level of a patient. If the code describes patients who range from mild to severe, we believe it is best to use additional secondary diagnosis codes that would be reported to better describe the true nature of the patient's condition. These more precise codes may be on the CC list or the MCC list.

Our clinical advisors reviewed claims data and the clinical issues surrounding patients who had the symptoms, chronic diagnoses, and less severe conditions listed above. They recommend that we not add the codes listed above to the CC list because these conditions do not significantly increase a patient's severity of illness. Therefore, we are not adding the codes listed above to the CC list.

(c) High Severity Codes That Were Erroneously Left Off of the CC List or the MCC List

As stated earlier, a number of commenters recommended the addition of codes to the CC list or the MCC list for conditions that the commenters stated clearly represented a high severity level. The commenters provided information on the degree to which these conditions are life threatening and require extensive amounts of resources. The commenters questioned why these conditions were left off of the CC and MCC lists. Commenters recommended the removal of two codes from the CC list because the commenters believed they do not increase the patient's severity level or lead to more resource use. We discuss these conditions below.

Comment: Commenters requested that we add the following five codes to the CC list. The commenters stated that these conditions clearly increase the severity level and lead to more resource use.

- 285.1, Acute posthemorrhagic anemia
- 403.91, Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease
- 426.53, Other bilateral bundle branch block
- 426.54, Trifascicular block
- 451.11, Phlebitis and thrombophlebitis, femoral vein (deep) (superficial)

Response: We agree with the commenters that the five codes listed above should have been included on the CC list. Upon further review of our data and discussions among our medical advisors, there was consensus that these codes describe patients with a higher severity level. Therefore, we are adding them to the CC list.

Comment: Commenters requested that we remove the following two codes from the CC list and make them non-CCs. The commenters indicated that there are more specific heart failure codes that would be assigned along with these codes that would indicate whether or not the patient had a severe form of heart failure. The commenters stated that these two codes do not indicate the exact nature of the heart failure and therefore should not be on the CC list.

- 402.11, Hypertensive heart disease, benign, with heart failure
- 402.91, Hypertensive heart disease, unspecified, with heart failure

Response: We agree with the commenters. Upon further review, we do not believe the codes meet the criteria to be considered CCs. The codes do not describe the exact nature of the heart failure. The more specific heart failure codes that would be reported along with these codes would be used to justify the assignment to a high severity level. Therefore, we are removing the two codes from the CC list.

Comment: Commenters requested that we add the following four codes to the MCC list. The commenters indicated that these four codes describe patients at the highest level of severity. Patients with these conditions would use an extensive amount of resources. Furthermore, the commenters added, codes that describe similar conditions are currently on the MCC list. The commenters believed these codes were erroneously excluded from the MCC list.

- 282.69, Other sickle-cell disease with crisis
- 345.2, Petit mal status
- 345.71, Epilepsia partialis continua, with intractable epilepsy
- 780.01, Coma

Response: We agree that we made an error in excluding these four codes from the MCC list. Therefore, we are adding the four codes to the MCC list. We provide a summary of all the additions and deletions to the CC list and the MCC list at the end of this section.

Additional Comments on CC List

We received several additional comments concerning the CC and MCC lists which we summarize below. Some of the comments involved the commenter's confusion about our proposed CC and MCC lists. Others involved a disagreement with our proposal of not making significant changes to the DRGs to better distinguish severity of illness in pregnancies and newborns, even though they are not a significant part of the Medicare population. We also received recommendations for alternative ways to classify conditions as CCs that do not meet our current criteria. In addition, we received comments on our proposal of not classifying specific conditions as a CC/MCC when the patient dies. We discuss these issues below.

- Other Myelopathy—Code 336.8

Comment: One commenter requested that we add code 336.8 (Other myelopathy) to the CC list.

Response: Code 336.8 is already on the CC list. Therefore, we are not making any further change for code 336.8.

- Ascites—Code 789.5

Comment: One commenter requested that we add the code 789.5 (Ascites) to the CC list

Response: We note that code 789.5 is being deleted as of October 1, 2007, when two new codes are being created, code 789.51 (Malignant ascites) and code 789.59 (Other ascites). Both of these new codes are on the CC list. Therefore no additional change is required for ascites.

- Aplastic Anemias, Not Elsewhere Classified—Code 284.8

Comment: One commenter objected to the removal of code 284.8 (Aplastic anemias, not elsewhere classified (NEC)) from the CC list.

Response: Code 284.8 was placed on the MCC list. Thus, while it is not classified as a CC as the comment suggested, it is an MCC. We are maintaining code 284.8 on the MCC list, as we agree that this is a condition that places a patient at a high severity level.

• Complications of Pregnancy, Childbirth and Puerperium—Codes 630 through 677

Comment: One commenter objected to the removal of codes from category 630 through 677 (Complications of pregnancy, childbirth and puerperium) of the CC list. The commenter was concerned about the number and wide breadth of codes from Chapter 11 of the ICD–9–CM, Complications of pregnancy, childbirth and puerperium (categories 630–677), that are being removed from the CC list . The commenter acknowledged CMS'' position that, due to the low volume in the Medicare population, diagnoses related to newborns, maternity and congenital anomalies codes in this section were not reviewed. Of special concern to the commenter were conditions such as infections, acute renal failure, air and pulmonary embolism, cardiac arrest, shock, among others, that are MCCs or CCs and would be coded as such if not for the fact that the ICD–9–CM classification considers problems associated with pregnancy, childbirth and the puerperium to be so clinically significant that they require special combination codes. The combination codes are intended to identify that the presence of the pregnancy complicates the condition. For example, code 415.19 (Other pulmonary embolism and infarction) is an MCC, while code 673.20 (Obstetrical blood-clot embolism, unspecified) is not even a CC.

The commenter recommended that codes in Chapter 11 be carefully evaluated and validated with clinical experts, similar to the process to which the codes in other chapters were submitted. The commenter believed that combination codes should be treated consistently. If the condition is considered a CC or MCC in a nonpregnant patient, the corresponding pregnancy-related combination code also should be a CC or MCC.

Response: As we stated in our proposed rule and elsewhere in this final rule with comment period, we focused our attention in developing the MS–DRGs for the Medicare population. We did not conduct a detailed review of Chapter 11 codes. We encourage other payers who want to use MS–DRG to update the system for their own population. Diagnoses related to newborns, maternity, and congenital anomalies are very low volume in the Medicare population and were not reviewed for purposes of creating the MCC and CC lists. We used the APR DRGs to categorize these diagnoses. This DRG system is used for the all payer ratesetting system in Maryland and will be based on data that better reflects the newborn and maternity population than Medicare. For newborn, obstetric, and congenital anomaly diagnosis, we classified severity level 3 (major) and 4 (extreme) diagnoses as an MCC. We designated default severity level 2 (moderate) diagnoses as a CC and all other diagnoses as a non-CC. We encourage the commenter to review the MCC and CC lists in on the CMS Web site. Many codes in the 630 to 677 range appear on the MCC list.

• Extreme Immaturity—Code 765.0

Comment: One commenter objected to codes in category 765.0 (Extreme immaturity) not being classified as CCs. The commenter stated that codes in category 765.0 represent infants with a birth weight of less than 1000 gm. The commenter indicated that common problems with very low birthweight babies are low oxygen levels at birth; inability to maintain body temperature; difficulty feeding and gaining weight; infection; breathing problems, such as respiratory distress syndrome; neurological problems, such as intraventricular hemorrhage; gastrointestinal problems, such as necrotizing enterocolitis; and sudden infant death syndrome (SIDS). The commenter stated that while some of these problems have unique ICD–9–CM codes that could be reported, not all of them do (for example, inability to maintain body temperature).

Response: While we appreciate the commenter's concern about the CC classifications for newborns, we state again that we did not examine these newborn codes as part of our development of the MS–DRGs. We focused our efforts on the Medicare population and used the APR DRG classification for newborn diagnoses for Medicare. If the APR DRG classification of this condition were to change, we would also adopt the same designation for Medicare.

• Exclusion of MCCs and CC When a Patient Dies

Comment: Several commenters addressed codes that represent diagnoses associated with patient mortality. The commenter indicated that, in the proposed rule, CMS noted that diagnoses that were closely associated with patient mortality were assigned different CC subclasses, depending on whether the patient lived or died.

These diagnoses are:

• 427.41, Ventricular fibrillation;
• 427.5, Cardiac arrest;
• 785.51, Cardiogenic shock;
• 785.59, Other shock without mention of trauma; and
• 799.1, Respiratory arrest.

The commenters agreed that these diagnoses should be considered MCCs for patients who are discharged alive. However, the commenters disagree with CMS'' proposal to make these diagnoses non-CCs when a patient dies. The commenters urged CMS to consider the patient's length of stay or other factors when these codes are reported and count them as an MCC when a patient dies during the admission. The commenters agreed that a patient who expires soon after admission may not have significant resources associated with these conditions. However, the commenters believed that this is not true when a patient has been hospitalized longer, such as for a week.

Response: Our medical advisors examined this issue again and continue to believe it is not appropriate to classify a case as an MCC based on one of the codes above if the patient dies. While we understand the concern of the commenters, we do not believe that a long length of stay patient will necessarily lead to the conclusion that it is appropriate to code these conditions in a patient that dies in the hospital. It is a possible that a terminally ill patient with a long length of stay required no special resuscitation efforts that would suggest higher resource use associated with coding of these conditions. We are concerned that changing our policy to allow use of these codes for a patient that died in the hospital could lead to accurate and widespread coding of the conditions when they are not indicative of a higher patient resource costs. Therefore, we are continuing our policy of classifying the diagnoses listed above as MCCs only if the patient is discharged alive. We will evaluate alternative approaches such as looking at the length of stay and other factors for these patients and make future DRG revisions, as needed.

• Selected Conditions in Joint Replacement Patients

Comment: One commenter asked that we classify certain codes as MCCs or CCs for patients having a joint replacement. The commenter specifically requested that the following codes be made either MCCs or CCs when occurring in a joint replacement patient:

- 731.3, Major osseous defect
- 278.0, Obesity
- 278.01, Morbid obesity
- V85.35, Body mass index 35.0–35.9, adult
- V85.37, Body mass index 37.0–37.9, adult

Response: We do not believe that we should make further changes to the MS–DRG assignments based on combinations of selected diagnoses. These types of analyses could be done with virtually any MS–DRG and would add significant complexity to the DRG system that we do not believe is warranted at this time. Our medical advisors reviewed both the data and clinical issues surrounding these codes and determined that they would not significantly increase the severity level for Medicare patients on average across all patients. Therefore, they are not CCs. We are not changing these codes to CCs. They will remain non-CC for all cases.

The following table summarizes changes to the proposed MCC (Table 6J) and CC (Table 6K) lists published in the proposed rule. These changes are a result of review of comments and were discussed in detail above. A complete, updated CC and MCC list will be posted on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/* under Downloads. We will continue to evaluate our criteria for the development of the CC and MCC list to determine if refinements to these criteria are needed. As we gain data and experience under MS–DRGs, we believe that there may be refinements to these criteria.

CHANGES TO MCC AND CC LIST AS A RESULT OF COMMENTS

Add to CC list:	
285.1	Acute posthemorrhagic anemia.
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease.
426.53	Other bilateral bundle branch block.
426.54	Trifascicular block.
451.11	Phlebitis and thrombophlebitis, femoral vein (deep) (superficial).
Remove from CC list:	
345.2	Petit mal status.
345.71	Epilepsia partialis continua, with intractable epilepsy.
402.11	Hypertensive heart disease, benign, with heart failure.
402.91	Hypertensive heart disease, unspecified, with heart failure.
780.01	Coma.

CHANGES TO MCC AND CC LIST AS A RESULT OF COMMENTS—Continued

Add to MCC list:	
282.69	Other sickle-cell disease with crisis.
345.2	Petit mal status.
345.71	Epilepsia partialis continua, with intractable epilepsy.
780.01	Coma.
Remove from MCC list:	
None.	

3. Dividing MS–DRGs on the Basis of the CCs and MCCs

In developing the MS–DRGs, two of our major goals were to create DRGs that would more accurately reflect the severity of the cases assigned to them and to create groups that would have sufficient volume so that meaningful and stable payment weights could be developed. As noted above, we excluded the CMS DRGs in MDCs 14 and 15 from consideration because these DRGs are low volume. As stated previously, we do not have the expertise or data to maintain the CMS DRGs for newborns, pediatric, and maternity patients. We continue to maintain MDCs 14 and 15 without modification in order to have MS–DRGs available for these patients in the rare instance where there is a Medicare beneficiary admitted for maternity or newborn care.

In designating an MS–DRG as one that will be subdivided into subgroups based on the presence of a CC or MCC, we developed a set of criteria to facilitate our decision-making process. In order to warrant creation of a CC or major CC subgroup within a base MS–DRG, the subgroup had to meet all of the following five criteria:

- A reduction in variance of charges of at least 3 percent.
- At least 5 percent of the patients in the MS-DRG fall within the CC or MCC subgroup.
- At least 500 cases are in the CC or MCC subgroup.
- There is at least a 20-percent difference in average charges between subgroups.
- There is a $4,000 difference in average charges between subgroups.

Our objective in developing these criteria was to create homogeneous subgroups that are significantly different from one another in terms of resource use, that have enough volume to be meaningful, and that improve our ability to explain variance in resource use. These criteria are essentially the same criteria we used in our 1994 severity analysis. In developing the MS–DRGs, we continued to apply our longstanding policy that each DRG should contain patients who are similar from a clinical perspective.

To begin our analysis, we subdivided each of the base MS–DRGs into three subgroups: non-CC, CC, and MCC. Each subgroup was then analyzed in relation to the other two subgroups using the volume, charge, and reduction in variance criteria. The criteria were applied in the following hierarchical manner:

- If a three-way subdivision met the criteria, we subdivided the base MS–DRG into three CC subgroups.
- If only one type of two-way subdivisions met the criteria, we subdivided the base MS–DRG into two CC subgroups based on the type of two-way subdivision that met the criteria.
- If both types of two-way subdivisions met the criteria, we subdivided the base MS– DRG into two CC subgroups based on the type of two-way subdivision with the highest R^2 (most explanatory power to explain the difference in average charges).
- Otherwise, we did not subdivide the base MS–DRG into CC subgroups.

For any given base MS–DRG, our evaluation in some cases showed that a subdivision between a non-CC and a combined CC/MCC subgroup was all that was warranted (that is, there was not a great enough difference between the CC and MCC subgroups to justify separate CC and MCC subgroups). Conversely, in some cases, even though an MCC subgroup was warranted, there was not a sufficient difference between the non-CC and CC subgroups to justify separate non-CC and CC subgroups.

Based on this methodology, a base MS–DRG may be subdivided according to the following three alternatives, rather than the current ''with CC'' and ''without CC'' division.

- DRGs with three subgroups (MCC, CC, and non-CC).
- DRGs with two subgroups consisting of an MCC subgroup but with the CC and non-CC subgroups combined. We refer to these groups as ''with MCC'' and ''without MCC.''
- DRGs with two subgroups consisting of a non-CC subgroup but with the CC and MCC subgroups combined. We refer to these two groups as ''with CC/MCC'' and ''without CC/MCC.''

As a result of the application of these criteria, 745 MS–DRGs were created as shown in the following table.

TABLE M.—NUMBER OF CC SUBGROUPS

Subgroups	Number of base MS–DRGs	Number of MS–DRGs
No subgroups ...	53	53
Three subgroups	152	456
Two subgroups: CC and major CC; non-CC ..	43	86
Two subgroups: non-CC and CC; major CC	63	126
Subtotal	311	721
MDC 14	22	22
Error DRGs	2	2
Total ...	335	745

The 745 MS–DRGs represent an increase over the 652 DRGs we proposed in our 1994 CC revision analysis. The increase in the number of DRGs is primarily the result of an increase in the number of proposed base MS–DRGs that are subdivided into three CC subgroups. The distribution of patients across the different types of CC subdivisions is contained in Table N below. The table shows that 51.7 percent of the patients are assigned to base MS–DRGs with three CC subgroups, and only 11.8 percent of the patients are assigned to base MS–DRGs with no CC subgroups.

TABLE N.—DISTRIBUTION OF PATIENTS BY TYPE OF CC SUBDIVISION

CC subdivision	Count	Percent
None	1,382,810	11.8
(MCC and CC), Non-CC	629,639	5.4
MCC, (CC and Non-CC)	3,650,321	31.2
MCC, CC, and Non-CC	6,054,081	51.7

Using Medicare charge data (without applying any criteria to remove statistical outlier cases), the reduction in variance (R^2) was computed for current CMS DRGs, the MS–DRGs with all 311 base MS–DRGs subdivided into 3 CC subgroups, and the MS–DRGs collapsed into 745 DRGs. Table O below shows that the R^2 for the MS–DRGs with all 311 base MS–DRGs subdivided into 3 CC subgroups (957 DRGs composed of 311 base MS–DRGs subdivided into 3 CC subgroups plus an additional 22 MDC 14 and MDC 15 DRGs as well as 2 error DRGs) is 10.62 percent higher than the current CMS DRGs. Collapsing the 957 MS–DRGs down to 745 MS–DRGs lowers this increase in R^2 slightly to 9.41 percent. Although adopting a 3-way split for each base MS–DRG would produce a DRG system with higher explanatory power, the 957 MS–DRGs would not meet the criteria we specified above for subdividing each base DRG. The criteria we specified above would create a monotonic DRG system. We believe that the value of having a monotonic DRG system outweighs the slight decrease in explanatory power. For this reason, we proposed to adopt the 745 MS–DRGs.

TABLE O.—EXPLANATORY POWER (R^2) FOR MS–DRGS

	R^2	Percent change
Current CMS DRG	36.19	.....
2007 CMS Severity DRGs with 3 CC Subgroups	40.03	10.62
2007 CMS Severity DRGs Collapsed to 714 DRGs	39.59	9.41

Comment: One commenter supported our five criteria for establishing severity subgroups. The commenter believed the use of specific quantitative criteria to determine how specific base DRGs are divided into terminal categories that reflect severity levels is logical and designed to ensure that only substantively important differences in resource requirements are recognized by the MS–DRG system. The commenter did note that CMS had not explicitly included statistical significance in these criteria and urged CMS to consider CC or MCC splits only when they meet minimal standards of both size and statistical significance.

Response: We appreciate the commenter's support for our five criteria for establishing severity subgroups. We will consider the commenter's other suggestion as we make further refinements to the MS–DRGs.

Comment: One commenter disagreed with our five criteria for establishing severity subgroups. The commenter stated that these criteria are too restrictive, lack face validity, and create perverse admission selection incentives for hospitals by significantly overpaying for cases without a CC and underpaying for cases with a CC. The commenter recommended that the existing five criteria be modified for low-volume subgroups to assure materiality. For higher volume MS–DRG subgroups, they recommended that two other criteria be considered, particularly for nonemergency, elective admissions. These two criteria are:

- Is the per-case underpayment amount significant enough to affect admission vs. referral decisions on a case-by-case basis?
- Is the total level of underpayments sufficient to encourage systematic admission vs. referral policies, procedures, and marketing strategies?

The commenters also recommended refining the five existing criteria for MCC/CC/without subgroups as follows:

- Create subgroups if they meet the five existing criteria, with cost difference between subgroups ($1,350) substituted for charge difference between subgroups ($4,000).
- If a proposed subgroup meets criteria # 2 and # 3 (at least 5 percent of discharges in the subgroup and at least 500 cases) but fails one of the others, create the subgroup if either of the following criteria is met:
  - —At least $1,000 cost difference per case between subgroups; or
  - —At least $1,000,000 overall cost should be shifted to cases with a CC (or MCC) within the base DRG for payment weight calculations.

The commenter stated that this approach would affect DRGs where the total dollars under consideration may be quite high (for example, in the hundreds of millions), due to large numbers of procedures, but the percentage difference in average charges falls short of the 20 percent difference in average charges between subgroups.

Response: We disagree that the five criteria for establishing severity subgroups are too restrictive and will lead to overpayments for cases without a CC and underpay for cases with a CC. Relative to the current CMS DRGs, the statistical data above suggest that the construction of the MS–DRGs using these criteria will improve payment accuracy. The explanatory of the MS–DRGs to predict resource use is more than 9 percent greater than under the current CMS DRGs. Further, under the current CMS DRGs, nearly 78 percent of patients are in the highest severity level, while only 22.2 percent are in the

highest severity level under the MS–DRGs. In addition to having a better distribution of cases among severity levels, the MS–DRGs have more significant difference in average charges over the different severity levels compared to the current CMS DRGs (72 FR 24706).

The commenter does not appear to disagree with these statistics suggesting that improvements will result from the MS–DRGs. Rather, the commenter is suggesting that we should create more subgroups with smaller differences in average charges (or costs). We do not believe the first two alternative criteria are practical or necessary to apply. They would require us to make subjective judgments about whether a hospital would treat patients or refer them elsewhere solely based on payment incentives. We do not believe it is possible or appropriate for us to make judgments about whether a hospital would decide to treat or not treat a patient based on how much they are paid. Further, with the exception of cardiac specialty hospitals, we have no evidence hospitals are selectively treating or avoiding particular types of patients because of incentives present in Medicare's IPPS payments. The reforms we are making are intended to pay hospitals more accurately for the patients they are already treating and avoid incentives for more specialty hospitals to form. Therefore, we do not believe it is practical or necessary to use the first two criteria suggested by the commenter.

With respect to the last criteria, we note that the MS–DRGs represent a significant expansion in the number of DRGs from 538 in FY 2007 to 745 in FY 2008. The commenter is suggesting that we create additional subgroups with less variation between the subgroups. Payments under a prospective payment system are predicated on averages. Thus, most individual cases within any DRG system will have costs that are either higher or lower than the average for that group. While creating groups that have lower differences in average charges or costs between the groups may lessen variation around the average and improve explanatory power, it will also create more low-volume groups and increase the likelihood that the relative weights will be nonmonotonic and have instability in their values from year to year. We believe the value of a lower number of DRGs outweighs the benefit we would obtain from a slight increase in R^2 and the risk of having nonmonotonic DRGs that would come from adopting the commenter's suggestions.

4. Conclusion

We believe the MS–DRGs represent a substantial improvement over the current CMS DRGs in their ability to differentiate cases based on severity of illness and resource consumption. As developed, the MS–DRGs increase the number of DRGs by 207, while maintaining a reasonable patient volume in each DRG. The MS–DRGs increase the explanation of variance in hospital resource use relative to the current CMS DRGs by 9.41 percent. Further, the data shown below in Table P and Table Q illustrate how assignment of cases to different severity of illness subclasses improves in the MS–DRGs relative to the CMS DRGs.

TABLE P.—OVERALL STATISTICS FOR CMS DRGS

CC subclass—current CMS DRG	Percent	Average charges
One or more CCs	77.66	$24,538
Non-CC	22.34	14,795

TABLE Q.—OVERALL STATISTICS FOR MS–DRGS

CC subgroup	Number of cases	Percent	Average charges
MCC	2,607,351	22.2	$44,219
CC	4,298,362	36.6	24,115
Non-CC	4,826,980	41.1	18,416

Under the current CMS DRGs, 78 percent of cases are assigned to the highest severity levels (CC) and the remaining 22 percent are assigned to the lowest severity level (non-CC). Applying the three severity subclasses to FY 2006 data would result in approximately 22 percent of patients being assigned to the severity subgroup with the highest level of severity (MCC), 41 percent being assigned to the lowest severity subclass (non-CC), and the remaining 37 percent being assigned to the middle severity subclass (CC). Adding the new MCC subgroup greatly enhances our ability to identify and pay hospitals for treating patients with high levels of severity. As Table Q above shows, the new subgroups also have significantly different resource requirements. The MCC subgroup contains patients with average charges almost twice as large as for those in the CC group ($44,219 compared to $24,115).

In addition to resulting in improvements in the DRG system's recognition of severity of illness, we believe the MS–DRGs are responsive to the public comments that were made on last year's IPPS proposed rule with respect to how we should undertake further DRG reform. In the FY 2007 IPPS final rule, we identified three major concerns in the public comments about our proposed adoption of CS DRGs:

We received comments after the FY 2007 IPPS final rule suggesting that further adjustments were needed to the proposed DRG system. The commenters believed that the CS DRGs did not incorporate many of the changes to the DRG assignments that have been made over the years to the CMS DRGs. There was significant interest in the public comments in either revising the CS DRGs to reflect these changes or using the CMS DRGs as the starting point to better recognize severity.

We believe that the MS–DRGs are responsive to these suggestions. The MS–DRGs use the CMS DRGs as the starting point for revising the DRGs to better recognize resource complexity and severity of illness. We are generally retaining all of the refinements and improvements that have been made to the base DRGs over the years that recognize the significant advancements in medical technology and changes to medical practice. At the same time, the MS–DRGs greatly improve our ability to identify groups of patients with varying levels of severity. They retain all of the improvements made to the DRGs over the years, while providing a more equitable basis for hospital payment.

We received many comments on the FY 2007 IPPS rule about the potential use of a proprietary DRG system. The comments about the CS DRGs raised compelling issues about the potential government use of a proprietary system, including concerns about the availability, price, and transparency of the source code, logic and documentation of the DRG system. The commenters noted that CMS makes available these resources in the public

domain for purchase through the National Technical Information Service at nominal fees to cover costs. The commenters urged CMS not to adopt a proprietary DRG system that would not be available on the same terms as the current CMS DRGs.

There are no proprietary issues associated with the MS–DRGs. The MS–DRGs will be available on the same terms as the current CMS DRGs through the National Technical Information Service.

We also received other comments on the FY 2007 IPPS rule concerning the use of CS DRGs. The commenters stated that no alternatives to CS DRGs had been evaluated. The commenters suggested that alternative DRG systems can better recognize severity than the CS DRGs and should be evaluated before CMS decides which system to adopt. In response to these concerns, we contracted with RAND Corporation to evaluate several alternative DRG systems, including the MS–DRGs that we proposed and are finalizing in this final rule with comment period for FY 2008.

As indicated above, we believe the MS–DRGs offer significant improvements to the DRG system without many of the liabilities the public commenters on the FY 2007 IPPS rule identified with the CS DRGs. Thus, we believe the MS–DRGs offer significant improvements in recognition of severity of illness and complexity of resources and are adopting them for FY 2008.

Comment: Many commenters supported the MS–DRGs. One commenter stated that ''your proposal showcases the best of CMS, evidenced, for example, by an elegant and reasonable framework for severity-adjusted DRGs.'' Another commenter stated that it was ''about time that Medicare adopted a DRG system that allows for more equitable reimbursement for cases of severe illness with high risk of death or significant morbidity.'' Other commenters stated that it was very apparent that CMS dedicated an extensive amount of thought, planning, and resources toward the development of the MS DRGs, and that the system appears to be a very reasonable approach toward stratifying the patient grouping system more distinctly based on the severity of the patient's illness.

Many commenters found the MS–DRGs to represent a reasonable approach to DRG refinement, stating they are, in principle, a positive advancement and will create a more equitable and accurate payment system. Other commenters stated that the MS DRGs are an effective method for incorporating greater refinements to reflect variations in patient severity. Other commenters stated that hospitals providing services to more complex patients should be paid in a manner that reflects the nature of that care. These commenters stated that they do not want to see a payment system that rewards hospital inefficiency and it is reasonable that Medicare reimbursement policy assures that services are appropriately compensated. Other commenters stated that, over time, some DRGs have become more profitable than others. The commenters stated that making adjustments in rates helps to restore balance to the entire hospital inpatient payment system. These commenters endorsed CMS' efforts to achieve these goals through the adoption of the MS–DRGs.

Other commenters expressed their appreciation for CMS' recognition and consideration of issues raised in the public comments on last year's proposal to adopt CS DRGs. The commenters indicated that CMS took account of the public comments in crafting this year's MS–DRG proposal. The commenter applauded CMS for addressing many concerns that were expressed regarding CS DRGs. One of these commenters stated that MS–DRGs are significantly superior to the CS DRGs that were proposed last year. One commenter indicated that it had asked CMS to do the following when considering adoption of a new DRG system:

- Show evidence that the alternative resulted in an improved hospital payment system compared to the existing DRG system;
- Test the degree to which the variation in costs within cases at the DRG level is reduced;
- Consider whether there were easier ways to adjust for severity similar to the differentiation of patients in FY 2006 based on the absence or existence of a major cardiovascular diagnosis;
- Maintain the improvements made to differentiate cases based on complexity in the existing system; and
- Avoid creating a system that is proprietary and lacks transparency.

The commenter indicated that CMS made a concerted effort to develop a system that incorporates all of these goals and indicated their support for these meaningful improvements to the IPPS. Like this commenter, several other commenters were also in agreement that the proposed DRG system should not be proprietary to avoid limiting public access to the system. Another commenter who expressed appreciation for CMS' responsiveness to issues raised in last year's IPPS rule indicated that the MS–DRGs are logical, transparent, and nonproprietary, which well suits the needs of the health care community. Other commenters also expressed support for CMS' decision to make the MS–DRGs nonproprietary, open, and accessible, and available on the same terms as the current DRGs.

Another commenter stated that it had decades of experience doing work with DRG systems and believe that there has been a need for a severity adjustment mechanism in the CMS DRGs to facilitate more accurate payment under the IPPS. In its view, the MS–DRG methodology is an appropriate mechanism to add severity adjustments to IPPS for FY 2008. According to the commenter, the MS–DRGs' advantages include:

- They are based on the current CMS DRGs, whose technical features, data structures, and program algorithms have been fine-tuned over the years to accommodate the insertion and deletion of DRGs, changes in code/criteria lists, changes to CC and CC exclusion lists, changes in hierarchy, addition or deletion of DRG criteria, among others.
- Additional severity adjustments will not require substantial modifications to this basic, extensible, and highly efficient architecture. The architecture will facilitate the addition of new categories necessitated by the introduction of new technologies or the application of the methodology to non-Medicare populations.

The commenter recommended that CMS plan for a more flexible, four-character nomenclature in the severity DRG system as soon as reasonably possible. The commenter noted that all commercially available severity-adjusted DRG systems have adopted a nomenclature that employs an initial 3-digit base DRG designation followed by a 1-digit severity score. This approach is far more flexible and transparent. More importantly, the approach lends itself more readily to the addition of new base DRGs and the evolution of more granular severity-adjustment.

Many commenters were supportive of the MS–DRGs because they were derived from the existing system and, therefore, preserve the numerous policy decisions made over the years and embodied in the CMS DRGs. These commenters appreciated that severity stratifications were created from the existing base DRGs with the result of redistribution within, rather than across, the DRGs. Commenters also stated that the MS–DRGs provide CMS with the flexibility of making DRG reassignments within a base MS–DRG by moving more complex services up a severity level. Other commenters stated that the MS–

DRG system does a better job than last year's proposed CS DRGs or the current CMS DRGs of reflecting advancements in medical technology and other improvements in medical care.

Some commenters stated that, with the development and proposal of MS–DRGs, they saw little reason for CMS to continue assessing and considering alternative patient classification systems in the foreseeable future. These commenters stated that the MS–DRG system is more transparent, accessible, and understandable than the alternative systems being evaluated by RAND.

Some commenters stated that the MS–DRGs provide more accurate grouping for severity of illness while retaining the CMS–DRG refinements to account for more accurate payment of resource utilization. However, these commenters recommended that the implementation of MS–DRGs be delayed for one year to wait for the final RAND report and the availability of a GROUPER. One commenter stated that the MS–DRGs are an excellent attempt to define severity of illness based on DRGs for the Medicare population but urged us not to implement them in FY 2008 unless it is deemed to be the final system adopted from the ones being studied by RAND. Several commenters stated that hospitals will undergo enormous costs to ''educationally gear up'' for the MS–DRGs. The commenter stated that the hospital community must expend educational dollars in its attempt to improve coding to optimize each case's DRG assignment. These comments were concerned about the burden and expense that would be imposed on hospitals from adopting one significant DRG reform this year and another one next year. A number of other similar comments urged CMS not to move to MS–DRGs if it plans to implement another new severity system in FY 2009.

Response: We appreciate the support for MS–DRGs. We agree that, building on the current DRG system, we have maintained the best aspects of our past efforts while adding additional refinements to better identify severity. We also agree that it is beneficial to consider moving to a four-character nomenclature for MS–DRGs. We have already developed an internal version with four characters, with the fourth character indicating the severity levels. Systems restrictions prevent us from using this four-character numbering system in Medicare's data systems at this time. However, we will continue to evaluate the possibility of moving to such a numbering system.

With respect to the comments about the RAND project and the concern about adopting two different DRG reforms in succeeding years, we note that RAND has completed its evaluation of alternative DRG systems, including the MS–DRGs. Consistent with RAND's findings, we believe it is appropriate at this time to adopt the MS–DRG system for Medicare in FY 2008. While there will be an opportunity for the public to comment on RAND's findings, we expect to permanently adopt the MS–DRGs for the IPPS. We do not believe it is likely that there will be persuasive public comments suggesting that one of the alternative DRG systems being evaluated by RAND is clearly superior.

Comment: One commenter fully endorsed the move to MS–DRGs, but stressed the need of maintaining the current level of transparency in the DRG system, regardless of the chosen methodology. The commenter stated that many companies offer software that hospitals and health plans utilize in managing the billing, coding, and payment for hospital inpatient services under the DRGs. The development of this software is possible only because the current DRG methodology is a transparent system. By that, they mean that members of the public can obtain full access to the details underlying the system by purchasing information and software from the National Technical Information Service (NTIS) at a nominal charge in a timely manner (well in advance of the implementation of changes). The commenter appreciated the agency's commitment in the FY 2007 final rule to ''continue to strive to promote transparency in our decision making as well as in future payment and classification systems, as we have done in the past.'' The commenter commended CMS for its continued attention to the transparency issue and appreciates CMS' proposal to make the MS–DRGs available on the same terms as they currently do CMS DRGs through NTIS.

Response: We agree that it is important to provide updates and modifications to the DRG system in a transparent manner. We intend to continue our efforts to do so by providing the necessary information through our regulations, Web sites, and through NTIS. The MS–DRGs will be available to the public on the same terms as the CMS DRGs.

Comment: MedPAC reviewed the MS–DRGs and commended CMS for its commitment to improve the accuracy of Medicare payments for hospital acute inpatient services. MedPAC stated that CMS staff had made significant progress toward achieving this goal with the development of MS–DRGs coupled with cost-based weights. MedPAC's analysis showed that MS–DRGs will result in a substantial improvement in payment accuracy. MedPAC took several steps to evaluate the proposed MS–DRGs. First, they examined their face validity. An effective patient classification system, in the context of a payment system, should group together clinically similar cases that have similar costs. In addition, MedPAC stated that relative weights calculated for the classification groups (MS–DRGs) generally should exhibit a consistent hierarchy of values across levels of severity of illness for different conditions. Therefore, one issue is how much costs vary around the mean cost per case for cases grouped within MS–DRGs. Another issue is whether relative weights for different severity levels show the expected hierarchy across most clinical conditions. For comparison, MedPAC also looked at the cost variation and relationships among relative weights for cases grouped in the current DRGs and in the severity categories of the APR DRGs. MedPAC also examined how the MS–DRGs would affect payment accuracy in the IPPS, measured by how closely payments would track costs for different types of cases. MedPAC compared payment accuracy under the MS–DRGs with the results under the current CMS DRGs and the severity categories of the APR DRGs.

MedPAC found that MS–DRGs did a better job of grouping cases with similar costs into the same category. This was expected because the MS–DRGs break out high severity (and high cost) cases with MCCs into separate DRGs. For comparison, MedPAC also calculated the amount of variation in costs among cases within the severity classes of APR DRGs (Version 23). The average absolute difference for the APR DRGs, in turn, was 7.4 percent lower than the value for DRGs. MedPAC stated that this suggests that at least some opportunities are available for further refinement of the MS–DRGs. Although MedPAC found the MS–DRGs were not perfect, and may need to be further refined over time, it believed they represent a significant improvement over the current CMS DRGs. MedPAC's analysis showed that payment accuracy increased substantially when moving from the current DRGs to one based on the MS–DRGs.

Response: We agree with MedPAC that the MS–DRGs represent a significant improvement over the current CMS DRGs. As suggested above, we intend to use RAND's evaluation of the MS–DRGs to make further improvements to it. We appreciate MedPAC's suggestion to use the APR DRGs to also help us identify potential

areas where further improvements can be made to the MS–DRGs.

Comment: One comment stated that the ''Crosswalk from CMS DRGs to MS–DRGs'' was somewhat misleading. The commenter was concerned that some entities are interpreting it as a one-to-one mapping. The commenter suggested that it be clarified that an individual DRG code cannot be mapped directly to a MS–DRG. The commenter recommended that MS–DRG implementation be delayed so that CMS can release the MS–DRG GROUPER and allow hospitals time to analyze the impact prior to implementation.

Response: After public display of the proposed rule, we were asked to provide additional information on the CMS Web site showing how the current CMS DRGs map to the new MS–DRGs. Although we provided this information, we were concerned about its usefulness because of the very issue raised in this public comment. That is, there is not a one-to-one crosswalk between the 538 DRGs that exist under the CMS DRGs and the 745 MS–DRGs. While this information may not have been as useful as originally anticipated by members of the public that requested it, we believe the fact that there is not a one-to-one crosswalk between the CMS DRGs and the MS–DRGs was well understood by the public based on the description of each system in the proposed rule. In addition, we made other information available to the public that would allow for a detailed analysis of the MS–DRG proposal as well as the continuing transition to cost-based weights. We made available two MedPAR files (FY 2005 and FY 2006) that included the CMS DRG and MS–DRG assignment for each case. In addition, we made available charge-based, cost-based, and blended weights under the CMS DRGs and the blended weights under the MS–DRGs. With this information, we believe the public had detailed information to be able to do a comprehensive analysis of our proposal to adopt MS–DRGs. We do not believe that there should have been any confusion associated with the publicly requested CMS DRG to MS–DRG crosswalk on the CMS Web site, and we do not see this comment as a reason to delay implementation of the MS–DRGs.

Comment: A number of commenters urged CMS to process more than nine diagnosis and six procedure codes. The commenters stated that this particular concern is more acute with MS–DRGs where a hospital needs to make sure that CMS processes codes that are MCCs and CCs because they determine DRG assignment. The commenters also stated that vendors and health care groups make decisions about quality of care based upon the CMS claim file. The commenters asked CMS to commit to a timeframe when it will revise its systems to accept all 25 diagnosis and procedure codes provided via electronic transmissions.

Response: We recognize the importance of using and analyzing as much clinical data from claims as possible. Unfortunately, current system limitations preclude CMS from processing more than nine diagnoses and six procedures at this time. We will continue to review this matter in conjunction with our other information systems priorities.

Comment: Several commenters stated that ICD–10–CM and ICD–10–PCS would provide a much better foundation for a severity-adjusted DRG system than ICD–9–CM. The value of MS–DRGs or any other severity-adjusted DRG system that relies on claims data will be limited by the continued use of an obsolete, non-specific classification system. ICD–10–CM and ICD–10–PCS would provide greater clinical detail, and up-to-date clinical information for capturing information on disease severity, including complications, comorbidities and risk factors, as well as more detailed information on the use of medical technology and its impact on resource utilization and outcomes. The longer adoptions of contemporary classifications are delayed, the more CMS must develop alternatives that become costly to administer and for providers costly to continually implement.

One commenter stated that, in previous years, the commenter's recognition of the industry's need for consistency in medical coding, improved data integrity, and more precise and contemporary data reflecting 21st century medicine has led it to advocate for adoption and coordinated implementation of ICD–10–CM and ICD–10–PCS in their previous comments on the IPPS. The commenter stated that it is unfortunate that, as new initiatives that rely heavily on coded data gain momentum (such as present on admission reporting, pay-for-performance, and DRG refinements to better recognize severity of illness), ICD–10–CM and ICD–10–PCS still have not been implemented as replacements for ICD–9–CM.

One commenter stated that if the obsolete ICD–9–CM coding system had been replaced earlier, claims data that would significantly add to the knowledge needed to measure severity, quality, and other factors under consideration would now be available. The commenter stated that the proposed MS–DRG system and other proposals in this year's proposed rule are excellent examples of how ICD–10–CM and ICD–10–PCS could improve the ability to refine reimbursement systems in order to better reflect severity of illness. The commenter urged CMS and HHS to take immediate action to secure the adoption and implementation of these two classification systems, and supporting transaction standards as early as possible.

Response: We are continuing to carefully analyze issues associated with implementing ICD–10.

Comment: Several commenters opposed the reuse of the current CMS DRG numbers in the MS–DRG system. Although one commenter acknowledged the advantages of maintaining the current 3-digit numerical scheme, it believed the use of the same DRG numbers in both the CMS DRG and MS–DRG systems will create confusion when analyzing longitudinal data, given the same DRG number will have a different meaning in the two systems. The commenter suggested that delaying implementation of a severity-adjusted DRG system until FY 2009 would allow additional time for making more extensive systems modifications, such as adopting an alphanumeric or 4-digit numerical structure for the new DRG system. Another commenter suggested that CMS begin numbering with a 4-digit number so that there will not be confusion about which system is being used.

Response: We agree that it is beneficial to consider moving to a 4-character nomenclature for MS–DRGs. We have already developed an internal version with four characters, with the fourth character indicating the severity levels. Systems restrictions prevent us from using this 4-character numbering system in Medicare's data systems at this time. However, we will continue to evaluate the possibility of moving to such a numbering system in the future. We do not expect the changes to our data systems that would be necessary to adopt a 4-digit DRG numbering system will occur with a year's delay of the MS–DRGs. Therefore, we do not believe that we should delay the improvements in recognition of severity of illness in our payment system for this reason. If there is public interest, we will make our internal 4-digit numbering system available on the CMS Web site to assist the public in understanding the future numbering system we would be likely to adopt. Such information may also be useful to the public to engage in the types of analysis suggested by this public comment.

Comment: One commenter stated that the Medicare CMS DRG GROUPER is used by some payers for their commercial, non-Medicare business. The commenter understands that CMS may want to move to MS–DRGs for Medicare patients, but is concerned about its continued access to the current GROUPER program, should Medicare decide to replace CMS DRGs with MS–DRGs. The commenter requested that the existing CMS GROUPER remain intact for commercial insurers to utilize for their non-Medicare contracts. The commenter suggested this could be done by keeping the GROUPER in the CMS database with the title ''CMS GROUPER.'' The commenter stated CMS would not need to update the weights of the CMS GROUPER or make any other adjustments.

Response: The focus of CMS' efforts is in developing and maintaining a DRG system that is appropriate for its Medicare population. We have, and will continue to, encourage other payers to make any necessary modifications to this program to meet their needs. The current versions of the CMS DRGs will remain in the public domain. However, we do not intend to make any updates to them once we move to the MS–DRGs or another severity DRG system. We do not believe that Medicare should undertake the effort and expense to maintain and update a DRG system that will have no application for Medicare beneficiaries. We encourage other payers to avail themselves of any DRG logic in our nonproprietary system from past years and use this information as appropriate to develop updates and refinements annually to suit the needs of their own patient populations.

5. Impact of the MS–DRGs

Unlike the CS DRGs we proposed last year for FY 2008, the payment impacts from the MS–DRGs we proposed to adopt (and are finalizing in this final rule with comment period) for FY 2008 would largely be redistributive within each base MS–DRG. Such a result occurs because we collapse the current CC/non-CC, age and other distinctions that exist in the CMS DRGs and redivide them based on MCCs, CCs, and non-CCs. Thus, within each base MS–DRG, some cases will be paid more and some less, but the base MS–DRGs are retained so there is no redistribution between types of cases as would have occurred under the proposed CS DRGs. In the proposed rule, we encouraged readers to review Table 5 in the Addendum to the proposed rule for a list of the proposed MS–DRGs and the proposed respective relative weight from the revisions we proposed to better recognize severity of illness to better understand how payment for cases within each base MS–DRG will be affected.

As indicated above, all of the severity DRG systems being evaluated by RAND can be expected to result in similar redistributions in case-mix among hospitals. The payment models used by RAND and CMS (and RTI as well) all assume static utilization. That is, payment impact models simulate the effects of a change in policy, assuming no change to Medicare utilization. Any system adopted to better recognize severity of illness with a budget neutrality constraint will result in case-mix changes that can be expected to benefit urban hospitals at the expense of rural hospitals. This impact occurs because patients treated in urban hospitals are generally more severely ill than patients in rural hospitals and the CMS DRGs are not currently recognizing the full extent of these differences. Similarly, there will be differential impacts among other categories of hospitals (for example, teaching, disproportionate share, large urban, and other urban hospitals) depending on the mix of cases that each hospital treats. The impact of the MS–DRGs can be expected to have similar effects on case-mix as the DRG systems being analyzed by RAND. These conclusions are confirmed by RAND's analysis earlier in this final rule with comment period as well as the payment impacts we illustrated in the proposed rule and again in this final rule with comment period.

Comment: One commenter believed that a ''stop loss'' provision should be instituted as part of the transition. Similar to that under the IPF PPS, no hospital can receive less than 70 percent of what they would otherwise have been paid under the old system. Another commenter asked that CMS investigate mechanisms for dampening large payment rate fluctuations.

Response: Changes in payments from MS–DRGs will be mitigated in any single year by adopting them over a 2-year transition period. We believe a 2-year transition period for implementation of the MS–DRGs addresses the concern of these commenters. Further information is provided in section II.E. of the preamble of this final rule with comment period about how MS–DRG relative weights are being determined to reflect implementation over a 2-year period.

6. Changes to Case-Mix Index (CMI) From the MS–DRGs

After the 1983 implementation of the IPPS DRG classification system, CMS observed unanticipated growth in inpatient hospital case-mix (the average relative weight of all inpatient hospital cases), which we use as a proxy measurement for severity of illness. We had projected the rate of growth in case-mix for the period 1981 to 1984 to be 3.4 percent. The realized rate of growth during this period, which included the introduction of the IPPS, was 8.4 percent, a variance in excess of 1.6 percent per year. The unexpected growth in payments was due to increases in the hospital case-mix index (CMI) beyond the previously projected trend. Hospitals' CMI values measure the expected treatment cost of the mix of patients treated by a particular hospital. There are three factors that determine changes in a hospital's CMI:

(a) Admitting and treating a more resource intensive patient-mix (due, for example, to technical changes that allow treatment of previously untreatable conditions and/or an aging population);

(b) Providing services (such as higher cost surgical treatments, medical devices, and imaging services) on an inpatient basis that previously were more commonly furnished in an outpatient setting; and

(c) Changes in documentation (more complete medical records) and coding practice (more accurate and complete coding of the information contained in the medical record).

We note that changes in patient-mix and medical practice signal *real* changes in underlying resource utilization and cost of treatment. While these changes may have occurred in response to incentives from IPPS policies, they represent real changes in resource needs. In contrast, changes in CMI as a result of improved documentation and coding do not represent real increases in underlying resource demands. For the implementation of the IPPS in 1983, improved documentation and coding were found to be the primary cause in the underprojection of CMI increases, accounting for as much as 2 percent in the annual rate of CMI growth observed post-PPS.[2]

The Medicare Trustees Technical Review Panel [3] has previously determined the annual measured change in CMI for inpatient hospital services to oscillate around an underlying real trend of 1 percent annual growth. In 1991 the Medicare-specific trend in real CMI growth was found in a then-HCFA

[2] Carter, Grace M. and Ginsburg, Paul: The Medicare Case Mix Index Increase, Medical Practice Changes, Aging and DRG Creep, Rand, 1985.

[3] Review of Assumptions and Methods of The Medicare Trustees' Financial Projections; Technical Review Panel on the Medicare Trustees Reports, December 2000.

funded study [4] to be within a range of 1 to 1.4 percent. In the annual study conducted by CMS, there has been no evidence to support a real case-mix increase in excess of the annually projected 1 percent upper bound in the period. MedPAC findings have echoed this with its recent study of real case-mix change finding growth rates for years 2002, 2003, and 2004 of 1 percent, 0.6 percent, and 0.4 percent, respectively.[5]

In the proposed rule, we indicated that we believe that adoption of the proposed MS–DRGs would create a risk of increased aggregate levels of payment as a result of increased documentation and coding. MedPAC notes that ''refinements in DRG definitions have sometimes led to substantial unwarranted increase in payments to hospitals, reflecting more complete reporting of patients' diagnoses and procedures.'' MedPAC further notes that ''refinements to the DRG definitions and weights would substantially strengthen providers' incentives to accurately report patients' comorbidities and complications.'' To address this issue, MedPAC recommended that the Secretary ''project the likely effect of reporting improvements on total payments and make an offsetting adjustment to the national average base payment amounts.'' [6]

The Secretary has broad discretion under section 1886(d)(3)(A)(vi) of the Act to adjust the standardized amount so as to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix. While we modeled the changes to the DRG system and relative weights to ensure budget neutrality, we are concerned that the large increase in the number of DRGs will provide opportunities for hospitals to do more accurate documentation and coding of information contained in the medical record. Coding that has no effect on payment under the current CMS–DRGs may result in a case being assigned to a higher paid DRG under the proposed MS–DRGs. Thus, more accurate and complete documentation and coding may occur because it will result in higher payments under the MS–DRG system. For the proposed rule, we stated that the potential for more accurate and complete documentation and coding will apply equally under the acute IPPS as well as under the LTCH PPS because the same DRGs are used for both payment systems. However, for reasons explained elsewhere in this final rule with comment period, we are limiting this analysis to the IPPS.

CMS in the past has adjusted standardized amounts under the IRF PPS to account for case-mix increases due to improvements in documentation and coding. In 2004, RAND [7] published a technical report as part of the follow-up to the implementation of the IRF PPS. The initial weights used within the IRF PPS were based on a mix of CY 1999 and CY 1998 data. The study reviewed the changes between this base data set and the IRF PPS implementation year of 2002. The report found that the weight per discharge for IRFs had grown by 3.4 percent between the CY 1999 data set and the CY 2002 data set. In a detailed analysis of both statistical patterns in acute stay records and directly measured coding practices, RAND found that the level of case-mix increase associated with documentation and coding-induced changes in the transition year ranged between 1.9 and 5.8 percent, with the upper end of the estimate associated with real declines in resource use. (We note that RAND revised its report in late 2005 to reflect an upper bound of 5.9 percent, instead of the 5.8 percent that we reported in the FY 2006 IRF PPS proposed and final rules.)

We used the results of this analysis to justify a 1.9 percent adjustment to payment rates for IRFs in FY 2006 (70 FR 47904) and a 2.6 percent adjustment to payment rates for IRFs in FY 2007 (71 FR 48370), for a combined total adjustment of 4.5 percent. The implementation year was marked by the transitioning of hospitals to the IRF PPS payment based on cost reports beginning January 1, 2002, and staggered to October 1, 2002. A combination of increased familiarity with the system by providers and the staggered transition could mean that documentation and coding-induced case-mix change continued as hospitals experienced ongoing changes in the early years of the IRF PPS and as the incentives within the system were more widely recognized. We also recognize that significant changes in IRF patient populations may be occurring as a result of recent regulatory changes, such as the phase-in of the 75-percent rule compliance percentage. We intend to continue analyzing changes in coding and case-mix closely, using the most current available data, as part of our ongoing monitoring of the IRF PPS and, based on this analysis, we intend to propose additional payment refinements for IRFs in the future as the analysis indicates such adjustments are warranted.

Furthermore, as part of our analysis of this issue, we considered the recent experience of the State of Maryland with adopting the APR DRG system. Maryland introduced APR DRGs for payment for three teaching hospitals in 2000. Between State fiscal years (SFYs) 2001 and 2005,[8] the remaining hospitals continued to be paid using modified CMS DRGs. In June 2004, the remaining hospitals were notified that Maryland would expand the use of APR DRGs throughout its all payer charge-per-case system beginning in July 2005. Hospitals in Maryland improved coding and documentation in response to the adoption of APR DRGs. As a result of this improved documentation and coding, reported CMI increased at a greater rate than real CMI. Given the similarity between coding incentives using the APR DRGs in Maryland and the MS–DRGs that are being proposed for Medicare, we analyzed Maryland data to develop an adjustment for improved documentation and coding.

For the Maryland analysis, we assume that, in SFY 2005, those hospitals not already being paid under the APR DRG system began acting as if the transition to the new DRG logic had already taken place. This assumption is supported by the following facts: (a) Maryland hospitals were reporting to the Health Services and Cost Review Commission (HSCRC), Maryland's governing body of its all-payer ratesetting system using the APR DRG GROUPER in 2005; (b) hospitals were provided training in coding under the APR DRG GROUPER; (c) hospitals had access to reports based on APR DRG logic; and (d) hospitals were given large amounts of feedback as to their performance under the GROUPER by the HSCRC relative to peer hospitals.

The incentives for Maryland hospitals are to code as completely and accurately as possible because, beginning in July 2005, all Maryland hospitals were paid using APR DRGs. SFY 2005 was an

[4] ''Has DRG Creep Crept Up? Decomposing the Case Mix Index Change Between 1987 and 1988''; Carter, Newhouse, Relles; R–4098–HCFA/ProPAC (1991).

[5] Medicare Payment Advisory Commission: Report to the Congress, March 2006 (p. 52).

[6] Medicare Payment Advisory Commission: Report to Congress on Physician-Owned Specialty Hospitals, March 2005, p. 42.

[7] Carter, Paddock: Preliminary Analyses of Changes in Coding and Case Mix Under the Inpatient Rehabilitation Facility Prospective Payment System, RAND, 2004.

[8] Maryland uses a July 1 to June 30 State fiscal year. Prior to FY 2003, Maryland had a 6-month lag in the data used to calculate the hospital base case-mix index and case-mix change. Maryland used 12 months data ending December even though the hospitals' rate year was July 1 to June 30. In FY 2003, Maryland moved to what it calls ''Real Time Case-Mix'' and started using 12 months data ending June 30 to calculate case-mix index and case-mix change for a rate year beginning July 1.

important year in Maryland, as it marked the beginning of the 2-year period of transition after which a hospital's revenues were reduced if coding was not as complete as a peer hospital. Under the current CMS DRGs, each secondary diagnosis code is recognized as either a CC or non-CC. Hospitals in Maryland and nationally for Medicare only needed to code one secondary diagnosis as a CC when paid using CMS DRGs for the patient to be assigned to a higher-weighted DRG split based on the presence or absence of a CC. Under the APR DRGs, each secondary diagnosis is designated as minor, moderate, major, or extreme. Under the MS–DRGs, each secondary diagnosis is designated as a non-CC, CC, or MCC. Hospitals in Maryland have incentives under the APR DRGs to code until a case is assigned to the highest of the four severity levels within a base DRG. Under the MS–DRGs, hospitals will have incentives to code until a case is assigned to one of up to three severity levels within a base DRG. Although the APR DRGs and the MS–DRGs may be different, we believe that hospitals have the same incentive under both systems to code as completely as possible. For this reason, we believe that the Maryland experience is a reasonable basis for projecting changes in coding practices for the wider national hospital population for the first 2 years of the MS–DRGs.

We believe the analysis presented below provides a reasonable analysis of the potential growth in CMI due to improved documentation and coding. In addition to the similarity between coding incentives under the proposed MS–DRGs and the APR DRGs, we note that Maryland is an all-payer State; therefore, hospitals are paid by all third party payers—not just the State's Medicaid program—using the APR DRGs. Coding has been very important for each hospital's overall revenue for many years, and the incentives are uniform across all third party payers. The transition to APR DRGs was known well in advance of the actual date and, as stated above, hospitals were provided training in coding under the APR DRGs. It is reasonable to expect that hospitals' experience with improved documentation and coding will occur over a period of at least 2 years. Thus, the experience in Maryland may be similar to expectations for case-mix growth for the nation as a whole. Finally, in reviewing the results from Maryland, we note that three large teaching hospitals began using APR DRGs prior to SFY 2005. These facilities generally treat a wider variety of patients with higher acuity that gives them a greater potential for increasing coding under the APR DRG system than other hospitals throughout Maryland. Because these hospitals were paid using the APR DRGs earlier than other Maryland hospitals, we believe data for these hospitals need to be analyzed from an earlier time period. However, based on the consultations with the HSCRC, we believe there were special issues with one of these hospitals that may have made its case-mix growth during the early years of the transition to the APR DRGs atypical of the other teaching hospitals.[9] Therefore, we did not separately analyze the data for this hospital from the earlier time period and, as stated below, included its data with the rest of the Maryland hospitals.

As part of its contract with CMS, 3M Health Information Systems reviewed the Maryland data in the context of our proposed changes to adopt MS–DRGs. 3M grouped Medicare cases in Maryland through both the CMS DRGs Version 24.0 and the proposed MS–DRGs for FY 2008. At our request, 3M deleted two of the three early transition hospitals from the data. It compared the results of the observed growth in case-mix from these data to the same process applied to Medicare data, excluding Maryland hospitals.

The MedPAR data file for Federal fiscal year (FFY) 2006 (October 2005 through September 2006) was used to create relative weights for both CMS DRG Version 24.0 and the MS–DRGs. The MedPAR data file contained 12,794,280 records. In constructing the weights, the following edits were used:

- Cases with zero covered charges or length of stay were excluded.
- Cases with length of stay greater than 2 years were excluded.
- Only hospitals contained in the impact file for the FY 2007 IPPS final rule were included.

The latter criterion excluded providers reimbursed outside of the IPPS, including Maryland hospitals, from the weight calculation. 3M employed standardized charge-based relative weights developed in accordance with the CMS methodology. Cost-based weights were not used and no adjustment to the charge weights was made for application of CMS transfer and postacute care transfer payment policy.

3M further grouped 2 years of MedPAR data from FY 2004 and FY 2005, using CMS DRG Version 24.0 and the MS–DRGs for hospitals nationally. Using 2 years of MedPAR data with one version of each DRG system further required 3M to make adjustments to the data to reflect revisions to ICD–9–CM codes that are made each year. MedPAR data for Maryland IPPS acute care providers within the IPPS data set were similarly assigned to the MS–DRGs and CMS DRGs for FYs 2004 through 2006.

Each Maryland record, exclusive of the two early transition teaching hospitals for the 3 observed years (SFY 2004 to SFY 2006), was assigned to a proposed MS–DRG based on the ICD–9–CM codes the hospital submitted. The same results were obtained from data at the national level using the MS–DRGs. Further, we obtained data from the HSCRC showing the weighted average increase in case-mix for calendar years 2001 to 2003 for the two large academic medical centers that began an early transition to the APR DRGs. In addition, we also obtained case-mix increases under the CMS DRGs for FYs 2004 through 2006. The Medicare Actuary examined the data below:

[9] The HSCRC informed us that it began using APR DRGs for this hospital to calculate the CMI and case-mix change to set the hospital's charge per case target (CPC) that is used in Maryland's all-payer ratesetting system for payment. However the HSCRC also compared the reasonableness of hospital rates and costs for this hospital relative to peer institutions using modified CMS DRGs to calculate CMI and case-mix change. This use of dual systems to calculate CMI and case-mix change made it difficult for the hospital to code aggressively in the first few years of using APR DRGs.

TABLE R.—MARYLAND AND NATIONAL DATA USED FOR CASE-MIX ADJUSTMENT ANALYSIS

	FY 2004 to 2005 (percent)	FY 2005 to 2006 (percent)	FY 2004 to 2006 (percent)
Rest of Maryland MS–DRG CMI Δ	2.30	2.57	4.93
			CY 2000 to FY 2003
Early Transition Hospitals	4.4	6.7	11.4
National MS–DRG CMI Δ	0.47	2.65	3.13
National CMS DRG CMI Δ	−0.04	1.20	1.16
Blend of MS–DRG & CMS DRG Δ using 0.47 Percent for 2005 and 1.2 Percent for 2006			1.68
Difference between Maryland Early Transition Hospitals and National Data			9.58
Difference between Rest of Maryland and National Data			3.20
Medicare Actuary Estimate (75%/25%) Δ between Early Transition and Rest of Maryland			4.8

The data above show that case-mix for hospitals increased by 4.93 percent from SFYs 2004 to 2006, during which Maryland adopted the APR DRGs for most hospitals. Case-mix for the two large teaching hospitals that were paid using the APR DRGs earlier than other hospitals in the State increased by 11.4 percent from SFYs 2001 to 2003. The weighted average increase in Maryland from these two categories of hospitals is 5.58 percent. Case-mix using the MS–DRGs would have increased 0.47 percent in FY 2005 and 2.65 percent in FY 2006. Nationally, Medicare case-mix using the CMS DRGs decreased by 0.04 percent in FY 2005 and increased by 1.2 percent in FY 2006. The Actuary calculated a Medicare case-mix increase nationally over 2 years using a blend of these data from the MS–DRGs for FY 2005 and national Medicare data for FY 2006 from the CMS DRGs. The Actuary did not use either the −0.04 percent for the CMS DRGs or the 2.65 percent for the MS–DRGs to create this blended case-mix because these figures appeared atypical to national trends. Therefore, the Actuary dropped one atypically high and low number from each of the 2 years of data and calculated an average increase of 1.68 percent from FY 2004 to FY 2006. These data demonstrate that the measure of average CMI for Medicare cases is growing more rapidly within Maryland than nationally. Case-mix for the Maryland teaching hospitals and the rest of Maryland increased 9.58 percent and 3.20 percent more, respectively, than the national average over 2 years, suggesting that improved documentation and coding lead to perceived, but not real, changes in case-mix.

The Actuary noted that the case-mix increase in Maryland for two large teaching hospitals over a 2-year period was much higher in the early years of the APR DRGs than other Maryland hospitals (11.4 percent compared to 4.93 percent for the rest of Maryland). Further, teaching hospitals generally treat cases with higher acuity than other hospitals and have more opportunity to improve coding and documentation to increase case-mix than other hospitals. Teaching hospitals also represent a higher proportion of national Medicare data than they do of the data in Maryland. The two early transition teaching hospitals in Maryland account for approximately 10 percent of the Medicare discharges in Maryland. Nationally, teaching hospitals account for approximately 50 percent of Medicare discharges. Therefore, the Actuary believes that the teaching hospitals should be given a higher weight in the national data than they represent in Maryland. However, like other hospitals, teaching hospitals vary in size and patient mix and not all have the same opportunity to improve documentation and coding. Therefore, we believe the weight given to teaching hospitals should be higher than the 10 percent for the two early transition hospitals in Maryland but lower than the 50 percent of discharges that they account for in Maryland. The Actuary gave a weight of 25 percent for teaching hospitals and 75 percent for the rest of Maryland to the excess growth in case-mix over the national average and estimates that an adjustment of 4.8 percent will be necessary to maintain budget neutrality for the transition to the MS–DRGs. This analysis reflects our current estimate of the necessary adjustment needed to maintain budget neutrality for improvements in documentation and coding that lead to increases in case-mix. Consistent with the statute, we will compare the actual increase in case-mix due to documentation and coding to our projection once we have actual data to revise the Actuary's estimate and the adjustment we make to the standardized amounts.

Based on the Actuary's analysis, using the Secretary's authority under section 1886(d)(3)(A)(vi) of the Act to adjust the standardized amount to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case mix, we proposed to reduce the IPPS standardized amounts by 2.4 percent each year for FY 2008 and FY 2009. We indicated that we were considering proposing a 4.8 percent adjustment for FY 2008. However, we believed it would be appropriate to provide a transition because we would be making a significant adjustment to the standardized amounts. In the proposed rule, we expressed interest in receiving public comments on whether we should apply the proposed adjustment in a single year, over 2 years, or in different increments than ½ of the adjustment each year. Section 1886(d)(3)(A)(vi) of the Act further gives the Secretary authority to revisit adjustments to the standardized amounts for changes in coding or classification of discharges that were based on estimates in a future year. Consistent with the statute, we will compare the actual increase in case mix due to documentation and coding to our projection once we have actual data for FY 2008 and FY 2009 for the FY 2010 and FY 2011 IPPS rules. At that time, if necessary, we may make a further adjustment to the standardized amounts to account for the difference between our projection and actual data.

Comment: Many commenters opposed the documentation and coding adjustment, which they believed would reduce payments to hospitals by $24 billion over the next 5 years. The commenters did not believe this reduction is warranted. They suggested the adjustment for documentation and coding is a ''backdoor attempt'' to reduce Medicare's inpatient hospital payments. One commenter stated that the documentation and coding

adjustment would result in a total estimated reduction in payment for Pennsylvania hospitals of $67.5 million in FY 2008, and an estimated $1.6 billion over the next 5 years. The commenter stated that such reductions and attempts at backdoor budget cuts would only further erode scarce resources and challenge hospitals in their ability to care for patients. The commenter stated that until MS–DRGs are fully implemented, and CMS can document and demonstrate that any increase in case-mix results from changes in coding practices rather than real changes in patient severity, there should be no documentation and coding adjustment.

Response: We stress that there are no savings attached to this adjustment. This adjustment is not a ''backdoor'' attempt to reduce Medicare inpatient hospital payments. Without a documentation and coding adjustment, the changes to MS–DRGs would not be budget neutral. Substantial evidence supports our conclusion that the CMI will increase as a result of adoption of MS–DRGs without corresponding growth in patient severity. We have provided evidence from studies going back over 20 years that show that hospitals respond to incentives when payment classifications are changed to improve documentation and coding to receive higher payments. Maryland provides a recent example demonstrating the validity of the finding that hospitals respond to changes in payment classification groups by changing documentation and coding practices. Furthermore, we are not aware of a situation in which a new or revised payment system provided a payment incentive to improve documentation and coding, yet hospitals did not improve documentation and coding.

Comment: Many commenters stated that the documentation and coding adjustment is based on assumptions made with little to no data or experience about how medical record documentation and coding practices will change as a result of the implementation of MS–DRGs. One commenter stated that the proposed adjustment has no basis in actual data or research pertaining to inpatient hospital coding practices. One commenter objected to the −2.4 percent adjustment for documentation and coding stating it could not understand the proposal and noted that the hospitals are utilizing the coding system that the Department of Health and Human Services has created. The commenter stated that if, in fact, the new severity DRGs were designed to better recognize the resources needed to treat the various DRG conditions, the argument can be made that CMS has been underpaying institutions for over 20 years. Other commenters objecting to the documentation and coding adjustment further indicated that hospitals have operated under the current DRG system for 23 years and hospitals are already expert in their ability to maximize coding for payment. These commenters stated that not even in the initial years of the IPPS was coding change found to be in the magnitude of CMS' proposed FY 2008 and FY 2009 cuts. The commenters stated that the proposed MS–DRGs would be a refinement of the existing system; the underlying classification of patients and ''rules of thumb'' for coding would be the same. They stated that there is no evidence that an adjustment of 4.8 percent over 2 years is warranted when studies by RAND, cited in the preamble, are looking at claims between 1986 and 1987 at the beginning of the IPPS that showed only a 0.8 percent growth in case-mix due to coding. The commenters stated that even moving from the original reasonable cost-based system to a new patient classification-based PPS did not generate the type of coding changes CMS contends will occur under the MS–DRGs.

Many commenters disagreed with the applicability of generalizing from the experience in Maryland to Medicare. One commenter indicated that MS–DRGs and APR DRGs are two completely different ways to classify patients, and generalizing from one system to the other cannot be done. The existing classification rules will change only marginally with the introduction of MS–DRGs, whereas they are very different under the APR DRG system. Differences include:

- APR DRGs consider multiple CCs in determining the placement of the patient and, ultimately, the payment. In fact, to be placed in the highest severity level, more than one high-severity secondary diagnosis is required.
- APR DRGs consider interactions among primary and secondary diagnoses. Thus, factors that increase the severity level for a case under the APR DRGs will not occur under the MS–DRGs.
- APR DRGs consider interactions among procedures and diagnoses as well. MS–DRGs do not.
- APR DRGs have four severity subclasses for each base DRG, while MS–DRGs have three tiers, and this is only for 152 base DRGs—106 base DRGs only have two tiers and 77 base DRGs are not split at all.
- Less than half the number of patient classifications in the MS–DRG system are dependent on the presence or absence of a CC—410 for MS–DRGs versus 863 for APR DRGs.

The commenters believed that all of these differences make the Maryland experience an invalid comparison. They suggested there is significantly less possibility for changes in coding to affect payment under the MS–DRGs.

Another commenter indicated that the CMS analysis is not applicable to Medicare because Maryland hospitals were not paid using a DRG system prior to APR DRG implementation. DRG data were collected for statistical purposes, but DRGs were not used for reimbursement. The commenter added that coding practices under APR DRGs are not necessarily comparable to MS–DRGs because they were not designed for reimbursement purposes. Further, the commenter found that the system logic is not always consistent with nationally recognized coding rules and guidelines, resulting in possible changes in coding practices that do not necessarily represent improved coding. The commenter stated that hospitals have little ability to change their classification and coding practices. Another commenter stated that Maryland's hospitals were paid prior to the APR DRGs under a State ratesetting system where an incentive to code accurately did not significantly affect what a hospital was paid. The commenter stated that APR DRGs are also much more complicated than MS–DRGs. The commenter stated that generalizing the Maryland experience to the rest of the nation's hospitals is an ''apples to oranges'' comparison.

One commenter also disagreed with CMS' use of the example of the IRF PPS to justify the coding adjustment. The commenter believed that the IRF experience is an inappropriate comparison. The commenter stated that coding changes seen under the IRF PPS were the result of moving from a cost-based system to a PPS, not the marginal difference of moving from the existing CMS DRGs to the refined MS–DRGs. In addition, coding under the IRF PPS is driven by the Inpatient Rehabilitation Patient Assessment Instrument (IRF–PAI). This tool provides an incentive for IRFs to code in a way that differs from the IPPS, which does not utilize a patient assessment instrument. The commenter believed that coding for the IRF–PAI differs significantly from the longstanding coding rules that inpatient PPS hospitals have followed for the following reasons:

- The IRF–PAI introduced a new data item into coding—namely, ''etiological

diagnosis.'' The definition of this new diagnosis and the applicable coding rules are significantly different than the ''principal diagnosis'' used to determine the DRG. More importantly, the Official Coding Guidelines that apply to all other diagnostic coding do not apply to the selection of the ICD–9–CM etiologic diagnoses codes.

• The Official Coding Guidelines do not consistently apply to the coding of secondary diagnoses on the IRF–PAI. Several different exceptions to the guidelines have been developed by CMS for the completion of the IRF–PAI.

• The definition of what secondary diagnoses may be appropriately reported differs under the IRF–PAI from the definition used by other inpatient coders.

• Most hospitals are already coding as carefully and accurately as possible because of other incentives in the system to do so, such as risk adjustment in various quality reporting systems. Analysis of Medicare claims from 2001 to 2005 suggests that hospitals have been coding CCs at high rates for many years. More than 70 percent of claims already include CCs, and more than 50 percent of claims have at least eight secondary diagnoses (the maximum number accepted in Medicare's DRG GROUPER). Hospitals'' assumed ability to use even more CCs under MS–DRGs is very low.

The commenter also indicated that according to an article in the magazine Healthcare Financial Management, the level of coding on claims suggests that the presence of a CC on a bill is not strongly influenced by financial gain. The proportion of surgical cases with a CC code is higher for cases where there is no CC split and, thus, no financial benefit, than on those cases where there is a CC split and a corresponding higher payment. Thus, coding is driven primarily by coding guidelines and what is in the medical record rather than by financial incentives according to this commenter. In addition, the commenter believed that many cases simply do not have additional CCs to be coded. For many claims, additional codes are simply not warranted and not supported by the medical record. Therefore, there is no opportunity for a coding change to increase payment.

The commenter analyzed the all-payer health care claims databases from California, Connecticut, Florida, and Michigan because, unlike the MedPAR files, these databases include all 25 diagnoses reported on the claims. This analysis showed that only 0.25 percent of claims had an MCC or CC appear for the first time in positions 10 through 25. The commenter believed this strongly suggests that hospitals will not be able to ''re-order'' their secondary diagnoses to appear higher on the claim so that Medicare will pay a higher rate. The commenter's coding experts note that most hospitals use software that automatically re-sorts the secondary diagnoses to ensure that those pertinent to payment are included in positions two through nine.

The commenter also examined secondary diagnosis codes and found that there were relatively few non-specific codes listed among the common secondary diagnoses of discharges without a MCC/CC. The commenter believed that this means hospitals cannot shift large numbers of discharges to MCCs or CCs based on coding a more specific code to replace a nonspecific code.

The commenter further indicated that there is no opportunity for increased payment due to a change in coding for 77 base DRGs under the MS–DRG system, as there is only one severity class and no differentiation in payment. Additionally, there are MS–DRGs that are now split between ''with MCC'' and ''without MCC'' (a combined non-CC and CC MS–DRG) that have historically contained a single CC/non-CC split. These DRGs already required secondary diagnosis coding; thus, the codes to qualify the case as an MCC already would have been present. In these cases, it is very unlikely that the medical record would justify an MCC that is not already present in the medical record. Coders must code strictly based on what the physician notes in the chart. Therefore, the commenter believed it is highly unlikely that a coder will be able to select an MCC that was not previously present in the medical record.

One commenter stated that case-mix will and should increase from adoption of the MS–DRGs. According to the comment, changes in case-mix due to improved accuracy in documentation and coding have been observed since the introduction of DRG payments in 1983. These changes have occurred in every refinement of every classification system across every care setting. The commenter stated that changes are driven primarily by the fact that documentation and numbers of diagnoses coded is inevitably incomplete due to time pressures for completion of paperwork and limitations of computer systems to identify this information. If an item is not used and/or not important, it is less well documented. Refinements in patient classification make certain paperwork more important, encouraging providers to improve their documentation and reporting accuracy. This, in turn, increases apparent case mix that depends on these codes according to this commenter. The commenter stated that coding changes that affect CMI are desirable in the long run, since they represent more accurate data and evidence-based care, payments, quality measurement, management decisions, and policy are all enhanced. This increase in accuracy is not only desired, it is necessary to truly reform health care (severity adjusted payments, quality measurement and reporting, value based-purchasing, among others), where ''bad data'' is frequently cited as an excuse to defer reform efforts. This commenter stated that it is impossible to accurately predict the total magnitude and timing of case-mix changes. Every hospital will have their own documentation and coding accuracy baseline, and their own real CMI based on accurate data for their patient mix. Each will have a different commitment to increasing their accuracy, resources to do so, and learning curve for implementation. The commenter believed that, like any prediction of the future, it will inevitably be wrong, particularly due to its complexity.

Response: Many of the commenters ascribed the term ''behavioral offset'' to our proposed rule and believed that CMS was pejoratively describing hospital motives. We note that we did not use the term ''behavioral offset'' to describe the proposed −2.4 percent adjustment to IPPS rates for FYs 2008 and 2009 for changes in documentation and coding. We regret that the term ''behavioral offset'' has been attributed to us. The proposed rule uses the phrase ''documentation and coding adjustment'' to refer to the proposed −4.8 percent (−2.4 percent each year for FYs 2008 and 2009) adjustment to the IPPS standardized amounts to maintain budget neutrality for the MS–DRGs consistent with the statute. Further, we believe it is important to address the notion in some of the public comments that CMS believes changes in how services are documented or coded that is consistent with the medical record is inappropriate or otherwise unethical. We do not believe there is anything inappropriate, unethical or otherwise wrong with hospitals taking full advantage of coding opportunities to maximize Medicare payment that is supported by documentation in the medical record. In its public comments, MedPAC recommended an adjustment for improvements in documentation and coding and also noted that hospitals' efforts to improve the specificity and

accuracy of documentation and coding are perfectly legitimate.[10]

We encourage hospitals to engage in complete and accurate coding. Section 1886(d)(3)(A)(vi) of the Act authorizes the Secretary to adjust the standardized amount so as to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix. In its public comments, MedPAC indicated that the increases in payments that result from improvements in documentation and coding are not warranted because the increase in measured case-mix does not reflect any real change in illness severity or the cost of care for the patients being treated. Therefore, offsetting adjustments to the PPS payment rates are needed to protect the Medicare program and those who support it through taxes and premiums from unwarranted increases in spending.[11]

In response to the comment that stated, ''moving from the original reasonable cost-based system to a new patient classification-based PPS did not generate the type of coding changes CMS contends will occur under the MS–DRGs,'' we believe the estimates for improvements in documentation and coding are within the range of those projected under the original IPPS. As stated above, for the implementation of the IPPS in 1983, RAND found that improved documentation and coding were found to be the primary cause in the underprojection of CMI increases, accounting for as much as 2 percent in the annual rate of CMI growth observed post-PPS.[12] This study found a 2 percent annual change in case-mix from improvements in documentation and coding during the original adoption of the IPPS, while we are forecasting a 4.8 percent *total* increase due to the MS–DRGs. MedPAC's public comments citing a study in *Health Affairs* found that the original adjustment for anticipated increases in case mix due to documentation and coding ''were substantially smaller than the actual change in case mix which increased more than 7 percent from the pre-PPS period to the first full year of the PPS system.'' [13] MedPAC further noted that CMI increases due to improvements in documentation can be expected to occur over many years. It stated that the Prospective Payment Assessment Commission (a predecessor of MedPAC) considered case-mix change in developing its annual update recommendations to the Congress and made offsetting adjustments for continuing coding improvements for 10 consecutive years from 1986 to 1995. [14] For these reasons, we disagree with the comment that our forecast of changes in case-mix from improvements in documentation and coding are not within the range of those projected when the original IPPS was implemented.

With respect to comments about the use of the APR DRG system in Maryland to forecast an adjustment for improvements in documentation and coding for Medicare, we agree that there are differences between the APR DRGs being used in Maryland and the MS–DRGs being proposed for use by Medicare. We believe that coding incentives in Maryland under the APR DRGs and nationally under the MS–DRGs are similar, not identical. The Maryland experience provides a useful example to forecast the potential increase in case mix from improvements in documentation because it is a recent and similar change to what we plan to adopt for Medicare. Although the APR DRGs and the MS DRGs may be different, we believe that hospitals have the same incentive under both systems to code as completely as possible. Moreover, as explained above, we estimated CMI growth using the MS DRG and CMS DRG GROUPERs, not APR DRG GROUPER. We used Medicare claims from Maryland hospitals for our analysis, but we grouped the claims under the CMS DRG GROUPER and proposed MS DRG GROUPER.

For these reasons, we continue to believe that the Maryland experience is a reasonable basis for projecting increased case mix in the wider national hospital population for the first 2 years of the MS–DRGs. MedPAC supported using the Maryland experience to forecast potential increases in case mix by stating: ''The case-mix reporting changes that occurred in Maryland-when that state adopted APR DRGs in its all payer rate-setting system—provide one of the few recent benchmarks for comparison outside of Medicare's historical experience.'' [15]

The reference to the IRF PPS was not intended to suggest that we used the experience with that system to forecast a potential adjustment under the IPPS. Rather, we were merely noting that the adoption of a PPS system for IRFs also produced an increase in case-mix as a result of the new incentives presented by going to a different payment system. The example suggests that there is strong evidence that hospitals—whether they are IRFs, acute care IPPS hospitals, or LTCHs—respond to coding incentives presented by their respective payment systems and will react accordingly. MedPAC's public comments also supported this point. In its public comments on the FY 2008 IPPS proposed rule, MedPAC stated that there were increases in case mix with the introduction of prospective payment systems for IRFs and LTCHs.[16]

The comments about reordering of codes and substituting specific codes for nonspecific codes suggests that hospitals are already maximizing coding opportunities and there is no further changes they can make that would result in an increase in Medicare payment. With respect to reordering of codes, the commenter argues that MCCs and CCs will already be found in the first 9 fields on the Medicare claim and the codes that are stored or processed from fields 10 to 25 cannot be moved up higher on the claim to increase payment. While this public comment suggests that there will be no opportunity to increase case mix by moving secondary diagnoses higher on a claim, another public comment provided a specific estimate of how much this practice could increase case-mix. The commenter examined data from New York State discharges and indicated that if MCC and CC codes that are currently provided beyond the original 9 diagnoses on the claim that are used by Medicare are moved to the first 9 positions, case mix would increase by 0.5 percent. This reaffirms CMS' views that hospitals focus their documentation and coding efforts to maximize reimbursement. Again, we believe these examples provide evidence from the public comments supporting the necessity for us to apply an adjustment for documentation and coding to meet the requirements of the law.

[10] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 12.

[11] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 12.

[12] Carter, Grace M. and Ginsburg, Paul: The Medicare Case Mix Index Increase, Medical Practice Changes, Aging and DRG Creep, Rand, 1985.

[13] Medicare Payment Advisory Comission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 12 citing Steinwald, B. and L. Dummit. 1989. ''Hospital Case-mix change: Sicker patient or DRG Creep?'' Health Affairs. Summer, 1989.

[14] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 11.

[15] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 12.

[16] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 11.

We believe increases in case-mix do not only have to come from moving codes higher on the claim. A hospital can merely change the order of a principal and secondary diagnosis for closely related conditions to affect payment. The selection of a principal diagnosis that was previously coded as secondary can increase hospital payment. Again, we found a public comment suggesting that reordering of principal and secondary diagnoses can increase case mix. The commenter stated some DRG groups only count a code in ''the primary position while others only count a code in a secondary position.'' The commenter is noting that many DRGs are split based on the presence or absence of an MCC or CC as a secondary diagnosis. According to the commenter, many Medicare patients have multiple conditions occasioning their admission, suggesting that reordering the principal and secondary diagnosis codes can result in an increase in case-mix.

We also disagree with the comments suggesting that hospitals do not have the opportunity to substitute a specified for an unspecified code to increase case mix. In fact, we believe these incentives will be very strong under the MS–DRGs with the reclassification of many unspecified codes as non-CCs. Again, we found statements in the public comments that support the notion that hospitals will have opportunities to substitute a specified for an unspecified condition to increase case-mix under the MS DRGs. One commenter indicated that the CC list revisions encourage coding of more detailed codes and estimates that switching from ''not otherwise specified'' codes to detailed codes could increase case mix by 0.5 percent. Another commenter states: ''The most dramatic example is ICD–9–CM code 428.0, Congestive heart failure, unspecified, which was applied to an average of 2.3 million Medicare fee-for-service cases a year during the past three years. This was the most widely used secondary diagnosis code, despite the fact that 12 more specific codes were added in FY 2003 * * * if the revised CC list were implemented before hospitals had a chance to improve their coding to accommodate the revisions, then case-mix creep and inpatient prospective payment system (IPPS) overpayments would ensue.''

We further note that many of the public comments arguing against the documentation and coding adjustment also request a year's delay in implementation of the MS–DRGs so ''hospitals may focus on understanding the impact of the revised CC list, training and educating their coders, and working with their physicians for any documentation improvements required to allow the reporting of more specific codes where applicable.'' We believe this comment provides a strong indication that, even though many public commenters themselves argue against the need for the documentation and coding adjustment, the same commenters would like a year's delay to take the very actions that they say make an adjustment unnecessary. The MS–DRGs are not making any changes to ICD–9–CM codes. While the MS–DRGs do include some consolidations of base DRGs, the major changes from the current DRGs simply involve adding severity levels to many of the new MS–DRGs. The move to MS–DRGs will not necessitate additional data elements or changes in reporting practices. Therefore, hospitals may continue to document and code as they do currently to be paid by Medicare under the MS–DRGs. The only reason hospitals would need a delay in the MS–DRGs is to have more time to understand how their revenues are affected by coding under the new DRG system. In our view, there is a clear indication in these comments that hospitals will change their documentation and coding practices and increase case mix consistent with the payment incentives that are provided by the MS–DRG system.

As further evidence that documentation and coding practices are affected by payment, we note a recent article in the Journal of AHIMA (American Health Information Management Association) which discusses methods for improving clinical documentation in order to increase reimbursement. The article describes a program at a hospital utilizing clinical documentation specialists that work on the hospital treatment floors to encourage improvements in clinical documentation. The article states that one year after implementing the program, the hospital gained an additional $1.5 million in reimbursement. In the second year, the hospital gained $900,000. The article reports a similar program at another hospital where the ''the academic hospital was overly conservative in its coding practices and ''leaving money on the table.' '' [17] These examples provide strong support for concluding that there were opportunities under the current CMS DRGs to improve coding and increase payment. With incentives changing under the MS–DRGs, we believe there will be additional opportunities to improve documentation and coding. We believe this article supports our contention that hospital coders and physicians will respond to incentives available under MS–DRGs by improving documentation and coding to increase case-mix.

Comment: One commenter stated that the ICD–9–CM Official Guidelines for Coding and Reporting and the American Hospital Association's Coding Clinic for ICD 9–CM provide official industry guidance on complete, accurate ICD–9–CM coding, without regard to the impact of code assignment on reimbursement. AHIMA's Standards of Ethical Coding stipulate that ''coding professionals are expected to support the importance of accurate, complete, and consistent coding practices for the production of quality healthcare data.'' The commenter believed that all diagnoses and procedures should be coded and reported in accordance with the official coding rules and guidelines and does not advocate the practice of only coding enough diagnoses and procedures for correct DRG assignment. The commenter stated that increased attention to the quality of coding and documentation as a result of the role coding plays in DRG assignment has led to much-improved coding practices since the adoption of the IPPS in 1983. The commenter further noted that hospitals code more completely so CMS has more complete data to make DRG modifications that would recognize the resource-intensiveness of a diagnosis or procedure.

Response: We believe the commenter's assertion supports our point that improvements in documentation and coding occurred as a result of the payment incentives provided by the IPPS. That is, the commenter is saying that the adoption of the original IPPS in 1983 led hospitals to improve documentation and coding practices because ''of the role coding plays in DRG assignment.'' The commenter believed that MS–DRGs will not lead to changes in documentation and coding practices and cites—among other sources—AHIMA's Standards of Ethical Coding. AHIMA is a professional association representing more than 51,000 health information professionals who work throughout the healthcare industry whose work is closely engaged with the diagnosis and procedure classification systems that serve to create the DRGs. The article cited above from the July–August issue of the Journal of AHIMA provided documented examples of how hospitals can change coding practices to maximize payments. Thus, there is an

[17] Dimick, Chris ''Clinical Documentation Specialists,'' Journal of AHIMA, July–August 2007, pages 44–50.

assertion in this comment that official coding rules and guidelines require all diagnoses and procedures to be reported on the claim minimizing opportunities for changes in documentation and coding to increase case mix. However, AHIMA's own professional journal provides strong evidence of opportunities that exist for improvements in coding to increase payment. As we stated previously and suggested by the article in the Journal of AHIMA, we believe that payment incentives lead hospital staff to carefully examine documentation and coding practices, work with physicians to improve the precision of clinical documentation in order to make subsequent changes in coding.

Comment: A number of commenters requested that CMS not make the documentation and coding adjustment until hospitals have had experience with the MS–DRGs. Once the MS–DRGs are fully implemented, the commenters indicated that CMS can investigate whether payments have increased due to coding rather than the severity of patients and determine if an adjustment is necessary. Several commenters stated that CMS is not required to make a prospective adjustment to IPPS rates to account for improvements in documentation and coding and should not do so without an understanding of whether there will even be coding changes in the first few years of the refined system. Another commenter stated that CMS should retrospectively determine the national rate reduction to offset increases in case-mix from improvements in documentation and coding even though the reduction would be made to future rates and would not account for potential increases in payment that would occur until the adjustment is made. The commenter indicated that section 1886(d)(3)(A)(vi) of the Act authorizes just such an adjustment and it is the only way to ensure that the level of the reduction is accurate. All of these commenters argued that CMS can always correct for additional payments made as a result of coding changes in a later year when there is sufficient evidence and an understanding of the magnitude.

One commenter suggested that CMS defer (but not eliminate) adjustments for improvements in documentation and coding. This commenter suggested that CMS make the adjustment at a later time when there is actual data suggesting how much improvements in documentation have increased case mix but that we consider a ''stop loss'' if initial coding changes appear to far exceed the current 4.8 percent estimate. The commenter indicated that CMS should encourage facilities to improve their documentation and coding accuracy sooner (that is, prior to adjusting for documentation and coding), and not do any MCC/CC consolidations until after coding improvements have occurred (that is, have 3 severity levels for all DRGs).

Another commenter noted that RAND's evaluation of alternative severity DRG systems included an assessment of how coding behaviors are expected to vary under each system. However, RAND did not evaluate the MS–DRGs and further noted that it was not able to empirically assess the relative risk the alternative severity-adjusted systems pose for case mix increases attributable to coding improvement without having the opportunity to observe actual changes in coding behavior when a DRG system is used for payment. The commenter did not believe any payment adjustment to account for case mix increases, which are attributable to coding improvements, should be made until CMS has conducted appropriate research to determine the extent to which improvements in coding becomes an issue under the proposed MS–DRG system. While the design of the MS–DRG system may encourage an increased level of coding specificity, the commenter stated that it is unknown what effect, if any, this might have on the CMI.

Response: RAND did not repeat the analysis of the potential for documentation and coding improvements to increase case mix using the MS–DRGs because it only worked with FY 2005 data to evaluate them. The RAND report refers readers to the analysis CMS did of the likely impact of documentation and coding improvements on case mix using the MS–DRGs.[18]

With respect to delaying making any adjustments for documentation and coding, the commenters are correct that section 1886(d)(3)(A)(vi) of the Act gives the Secretary authority to revisit adjustments to the standardized amounts for changes in coding or classification of discharges that were based on estimates in a future year. We also note that section 1886(d)(4)(C) of the Act requires that ''changes in classifications or weighting factors'' not increase or decrease aggregate inpatient hospital payments. We believe that Congress has expressed its clear preference that all changes to DRG reclassifications be budget neutral. Substantial evidence indicates that, unless we make an adjustment to account for improvements in documentation and coding, aggregate payments under the IPPS will increase when we adopt MS–DRGs as a result of these improvements in documentation and coding. Further, as discussed above, the independent Office of the Actuary validated the −1.2 percent adjustment to the standardized amount to ensure that improvements in documentation and coding do not increase case-mix and IPPS payments.

In addition, by revisiting the adjustment at a later date when we have actual data, we can ensure that the standardized amounts are permanently set at the level they otherwise would have been had the increase in case mix due to improvements in documentation and coding been known. That is, any overestimate or underestimate of the adjustment for improvements in documentation would not be permanently embedded in the IPPS standardized amount for subsequent years. While any differences between projected and actual data could result in higher or lower payments to hospitals for the intervening years, MedPAC believes that CMS should provide an adjustment that lies somewhere in the middle of its own estimate of 2.0 percent and CMS' estimate of 4.8 percent. In its comments, MedPAC recommended that CMS should adopt an adjustment for improvements in documentation and coding between 1.6 and 1.8 percent per year that would ''put both Medicare and the hospital industry at some risk that the actual value will turn out to be higher or lower than the adjustment that is applied.'' [19]

Comment: Several commenters agreed with RAND's assertion that the magnitude of coding improvement is likely to vary across hospitals, depending on how strong their current coding practices are and the resources they are able to devote to improving them. One commenter stated that the hospitals that already use the more specific codes and those with a low proportion of cases in split DRGs would receive fewer, if any, overpayments because their case mix indices would not increase as much, or at all. The commenter stated that New York hospitals, in particular, would have less opportunity for coding improvement than other hospitals because the union of the Medicare CC list and the New

[18] Wynn, Barbara O., Beckett, Megan, et al., ''Evaluation of Severity Adjusted DRG System: Draft Interim Report,'' RAND HEALTH, August, 2007, Addendum, page 27.

[19] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 13.

York State CC list has 279 more codes than the Medicare CC list alone. Thus, moving from the union of the CC list to the revised CC list would add only 1,298 codes, 279 fewer codes than in the rest of the country. Furthermore, New York hospitals are well-practiced in using specific codes because the New York State AP–DRG grouper differentiates between CCs and major CCs, as the MS–DRG grouper would do. This commenter and others that cited the RAND study agree that CMS' practice of making an across-the-board adjustment to PPS payments to address case mix increases attributable to coding improvements raises an equity issue that CMS needs to consider. The adjustment to the standardized amount for documentation and coding for hospitals that have already improved coding would result in significant payment losses according to the commenter rather than offsetting higher case mix indices. The commenter stated that these changes are not uniform, creating unintended distributional impacts. The commenter stated that the process to make adjustments for documentation and coding is an across the board adjustment to the standardized amount, while actual changes will vary widely. This will create unintended distributional impacts across patient types, providers, and states that will in turn, according to the commenter, create push-back in providers, states, Congress, and potentially the courts.

One of these commenters acknowledged that CMS may not have the option to recoup overpayments on a hospital-specific basis, as is done in New York. The commenter suspected that the proposed documentation and coding adjustment is too high because hospitals in other states—particularly New York—have more experience with secondary diagnosis coding than the Maryland hospitals had before their change to APR DRGs. Therefore, hospitals in other states probably have less opportunity to generate documentation and coding improvements that increase case mix.

Response: We agree that completeness of hospital coding practices may well vary across hospitals. Although we recognize this variability, we believe there will be potential for coding improvements to increase case mix for all hospitals. For instance, as noted above, a hospital can change the order of a principal and secondary diagnosis for closely related conditions to affect payment. The selection of a principal diagnosis that was previously coded as secondary can increase hospital payment. This type of potential coding change to increase case mix could be available to all hospitals irrespective of whether or not they maximized coding in the past. As noted above, a commenter examined data from New York State discharges and indicated that if MCC and CC codes that are currently provided beyond the original 9 diagnoses on the claim that are used by Medicare are moved to the first 9 positions, case mix would increase by 0.5 percent. Thus, this comment indicates that there will be at least some opportunity to increase case mix through improvements in documentation and coding in States like New York that have used sophisticated DRG systems in the past for payment. Similarly, there are public comments suggesting hospitals can select a specified condition in place of an unspecified one to increase payment under the MS–DRGs but that this change in documentation and coding practice will not be applicable in areas of the country where a DRG system is in use that distinguishes between MCCs and CCs. As noted above, congestive heart failure, unspecified appears on an average of 2.3 million cases per year from FY 2004 to FY 2006 or on over 20 percent of the Medicare claims. In our view, billing of an unspecified code on this magnitude of claims suggests potential improvements in coding from substituting a specified for an unspecified code are widespread. While improvements in documentation and coding that increase case mix may be variable, section 1886(d)(3)(A)(vi) of the Act only allows us to apply the adjustments that are a result of changes in the coding or classification of discharges that do not reflect real changes in case mix to the standardized amounts.

Comment: Several commenters indicated that there should be a transition to the MS–DRGs. A number of commenters supported a 4-year transition period for implementing the MS–DRGs. The commenters stated that such a transition would allow hospitals the opportunity to educate their employees and physicians to assure proper, accurate coding, along with allocation of required resources through their budgetary process. The commenters recommended that FY 2008 be used to prepare for and test the MS–DRGs. In FY 2009 through 2011, the DRG weights would be computed as a blend of the MS–DRGs and the current DRGs. These commenters believed a 1-year delay would provide hospitals adequate time to implement and test the new system and adjust operations and staffing for predicted revenues. They also suggested that the 1-year delay would provide CMS adequate time to finalize data and a CC list, introduce and test software for case classification and payment, and train its fiscal agents. It would also allow vendors and State agencies time to incorporate such changes into their respective software and information systems. Other commenters were concerned that CMS would implement the MS–DRGs in FY 2008 and then, as a result of the final RAND report, move to another new system for FY 2009. These commenters urged CMS to delay the implementation of the MS–DRGs if there was a possibility for another completely new system in FY 2009. These commenters stated that hospitals will expend a large number of hours educating their coding staff about the MS–DRGs so that they can attempt to legitimately optimize their payment. Some commenters recommended that CMS implement the MS–DRGs effective October 1, 2007, with a 3-year phase-in approach of the relative weights.

One commenter indicated that CMS should phase in the revised CC list and MS–DRGs to reduce the amount of documentation and coding related overpayments that would be made ''in the first place.'' The commenter recommended that the MS–DRGs not be implemented in FY 2008. Instead, they recommend that the revised CC list be used with a Version 25.0 of the current CMS DRGs and allow vendors of the alternative severity systems being evaluated by RAND to incorporate this information into an updated version of their systems. The commenter stated that the updated version of the CMS DRGs using the revised CC list would produce a greatly improved DRG GROUPER. The commenter recommended a 5-year phase-in during which the old CC list/CMS–DRG weights and the new CC list/MS–DRG weights would be blended in the following proportions: 80/20 percent in FY 2008, 60/40 percent in FY 2009, 40/60 percent in FY 2010, 20/80 percent in FY 2011, and 0/100 percent in FY 2012. The commenter stated that CMS should release the MS–DRG grouper software as soon as possible and should also encourage vendors to release products as soon as possible that ensure that both old and new CCs are listed among the first eight secondary diagnoses, as these are the only ones that can be used for payment purposes. With respect to the phase-in, the commenter believed it is prudent to begin to use the new CC list/MS–DRGs in FY 2008 so that hospitals are compelled as soon as possible (1) to improve their coding, and (2) to educate

their physicians about complete documentation. However, the commenter would not want the new DRG weights to represent a majority of the blend until they can be based on the first year of corrected data. The FY 2010 weights would be based on the FY 2008 cases, so they would reflect the first year's coding corrections and would presumably be more accurate. Because it can take several years for hospitals and physicians to adjust to new documentation and coding requirements, continuing blended payments in FY 2011 would be important to minimize documentation and coding related overpayments, according to the commenter.

The commenter stated that the goal is to minimize the aggregate level of documentation and coding related overpayments so that hospitals not generating increases in case mix are not unfairly penalized by an across-the-board reduction. If overpayments could be recouped on a hospital-specific basis, the commenter stated that an attenuated phase-in would not be necessary. The commenter stated that they realized that their recommended phase in would be cumbersome because each case would have to be grouped twice to determine the DRG assignment under the CMS DRG and MS–DRG GROUPERS. However, the commenter believed this is the better policy option since the alternative for good-coding hospitals and those with relatively few patients in split DRGs would be to effectively eliminate the IPPS update for 2 years.

Response: We received many comments in support of the MS–DRGs, particularly because they are so structurally similar to the current DRGs, and therefore, we believe that a full year's delay is unwarranted. While the MS–DRGs include some consolidations of base DRGs, the major changes from the current DRGs simply involve adding severity levels to many of the new MS–DRGs. The move to MS–DRGs will not necessitate additional data elements or changes in reporting practices. Providers will be submitting the same clinical information on their claims. In our view, the issues in the comments concerning the need to examine the new system in detail do not justify delaying the move to this new system. We have provided detailed information in both the proposed and final rule as well as on our Web site on the formation of the MS–DRGs. We believe the significant benefits of the new system outweigh concerns by the provider community that they have not had time to analyze the details of the new system. We are confident that once they start working with the new system, they will find it simple to understand and far better at identifying and paying for more costly and severely ill patients. Accordingly, we do not believe that extensive preparation for implementation of the MS DRGs is necessary, and therefore, we are not delaying adoption of the MS–DRGs until FY 2009.

MedPAC also carefully evaluated the options of implementing MS–DRGs in FY 2008 versus deferring the implementation until FY 2009 and agrees with our assessment that there is not sufficient cause to delay the proposed adoption of MS–DRGs beyond FY 2008. While MedPAC agreed that MS–DRGs should be implemented in FY 2008, it also stated that the transition should coincide with the transition to cost-based weights—that is, implement the MS–DRGs over a 2-year period beginning in FY 2008.[20] We agree with MedPAC that the MS–DRGs should be implemented over a 2-year transition period that coincides with the phase-in of cost-based weights. Therefore, we will implement MS–DRGs beginning in FY 2008 over a 2-year transition period where the DRG relative weights will be a blend of 50 percent each of the CMS DRG and MS DRG weights. We have provided more detail in section II.D.2. of the preamble of this final rule with comment period about the DRG relative weight calculations over this 2-year transition period.

There appears to be a suggestion in many of the public comments both here and above that delaying implementation of MS–DRGs will allow the improvements in documentation and coding to occur before they have any financial impact on the Medicare program because hospitals would know and be encouraged to code using the incentives provided under the MS–DRGs, while Medicare would continue to be using the current CMS DRGs for payment. As discussed, one comment suggested that we could lessen the need for the documentation and coding adjustment by minimizing the financial impact of improvements in documentation and coding through a long transition period (5 years). We believe hospitals will not improve documentation and coding consistent with the incentives provided under the MS–DRGs unless they have a financial incentive to do so. As indicated in one public comment, ''Documentation and numbers of diagnosis codes is inevitably incomplete due to time pressures for completion of 'paperwork' and limitation of computer systems to capture this information. If an item is not used and/or not important, it is less well documented.''

If there is a delay in MS–DRGs, the coding incentives that would come with its adoption would not be present and, therefore, likely would not occur. While we appreciate the suggestion for adopting a long transition period to provide an incentive to improve coding but minimize its financial impact on Medicare, such an idea may well just extend the period of time that documentation and coding improvements occur while delaying the improvements in recognition of severity of illness that would result from adopting MS DRGs. Again, we do not believe that either delaying or adopting MS–DRGs over a long period of time will reduce the need to apply a documentation and coding adjustment of the magnitude we estimated. We believe that adopting either of the ideas would only result in us needing to delay or extend the period of time over which the documentation and coding adjustment is applied.

Comment: MedPAC indicated that case-mix might increase more or less than the 4.8 percent we estimated from Maryland's experience. MedPAC recommended an adjustment between 1.6 and 1.8 percent a year for 2 years. This adjustment is based on a comparison between the MS–DRGs in Maryland and nationally (2.0 percent over 2 years) increased:

- To reflect their view that many hospitals do not respond quickly to improve reporting after major changes in the DRG definitions; and
- The estimated change in case-mix for hospitals in the rest of the nation may reflect some improvements in documentation and coding in response to changes in the DRG definitions that were adopted in 2006 (such as the refinements to the cardiac care DRGs among others).

MedPAC recommended that we apply an adjustment that is somewhere in the middle between their estimate of 2.0 and the CMS figure of 4.8 percent. According to MedPAC, a middle point in the range of 1.6 to 1.8 percent per year would put both Medicare and the hospital industry at some risk that the actual value will turn out to be higher or lower than the adjustment that is applied. If the actual increase due to improvements in case-mix reporting turns out to be higher, the Medicare program will have paid more than it should have. If the actual increase is lower, the hospitals will have been paid less than they should have. MedPAC noted that we have already stated a willingness to correct for any difference

[20] Medicare Payment Advisory Commission: Letter to Acting Administrator Leslie Norwalk, June 11, 2007, page 10.

between our forecast and the actual increase in case mix due to improved coding when data become available in 2009 when we prepare the proposed rule for fiscal year 2010. MedPAC further suggested that CMS plan on taking coding adjustments for longer than two years. CMS may want to adopt a series of adjustments that takes somewhat higher adjustments in the first few years of the MS–DRG changes, on the assumption that history has shown that previous coding adjustments have underestimated the impact of the changes.

Response: We proposed to adjust the IPPS standardized amounts by −2.4 percent each year for FYs 2008 and 2009 for improvements in documentation and coding that will increase case-mix. As we are adopting the MS–DRGs over a 2-year transition period, we do not believe that the incentives to improve documentation and coding will be as strong in the first year as we previously estimated. Further, as suggested above by the evidence when the IPPS was first implemented, MedPAC, and other public comments, it can take several years for hospitals and physicians to adjust their documentation and coding practices in response to payment incentives. For these reasons, we believe the documentation and coding adjustment should be applied over a period of 3 rather than 2 years. We do not agree with MedPAC that a larger adjustment ''should be taken in the first few years of the MS–DRGs on the assumption that history has shown that previous coding adjustments have underestimated the impact of changes.'' Rather, as stated above, we believe that the coding incentives during the first year of MS–DRGs will be lessened because we are adopting them over a 2-year transition period. Therefore, we believe a smaller adjustment should be applied in the initial year. We continue to believe that our analysis justifies a −4.8 percent adjustment for improvements in documentation and coding at this time. Therefore, we are applying an adjustment of −1.2 percent in this final rule with comment period to the IPPS standardized amounts for FY 2008 and based on current projections will apply adjustments of −1.8 percent each year to the IPPS standardized amounts for FYs 2009 and 2010.

Consistent with the statute, we will compare the actual increase in case-mix due to documentation and coding to our projection once we have actual data to revise the Actuary's estimate and the adjustment we make to the standardized amounts. With these adjustments occurring over 3 rather than 2 years, we will have information in 2009 as we prepare the IPPS rule for FY 2010 to reevaluate how the actual increase in case mix compares to our estimate. We may also have partial year information in 2008 to inform any proposal for FY 2009. Therefore, we will consider revising the planned adjustments for FY 2009 and FY 2010 if information in the Medicare billing data suggests that our projections are either too high or low compared to actual experience.

Based on the Actuary's analysis, using the Secretary's authority under section 1886(d)(3)(A)(vi) of the Act to adjust the standardized amount to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix, we are reducing the IPPS standardized amount by −1.2 percent for FY 2008. Section 1886(d)(3)(A)(vi) of the Act further gives the Secretary authority to revisit adjustments to the standardized amounts for changes in coding or classification of discharges that were based on estimates in a future year. Consistent with the statute, we will compare the actual increase in case-mix due to documentation and coding to our projection once we have actual data for FY 2008. At that time, if necessary, we may make a further adjustment to the standardized amounts to account for the difference between our projection and actual data.

7. Effect of the MS–DRGs on the Outlier Threshold

To qualify for outlier payments, a case must have costs greater than Medicare's payment rate for the case plus a ''fixed loss'' or cost threshold. The statute requires that the Secretary set the cost threshold so that outlier payments for any year are projected to be not less than 5 percent or more than 6 percent of total operating DRG payments plus outlier payments. The Secretary is required by statute to reduce the average standardized amount by a factor to account for the estimated proportion of total DRG payments made to outlier cases. Historically, the Secretary has set the cost threshold so that 5.1 percent of estimated IPPS payments are paid as outliers. The FY 2007 cost outlier threshold is $24,485. Therefore, for any given case, a hospital's charge adjusted to cost by its hospital-specific CCR must exceed Medicare's DRG payment by $24,485 for the case to receive cost outlier payments.

Adoption of the MS–DRGs will have an effect on calculation of the outlier threshold. For the proposed rule and this final rule with comment period, we analyzed how the outlier threshold would be affected by adopting the MS–DRGs. Using FY 2005 MedPAR data, we have simulated the effect of the MS–DRGs on the outlier threshold. By increasing the number of DRGs from 538 to 745 to better recognize severity of illness, the MS–DRGs would be providing increased payment that better recognizes complexity and severity of illness for cases that are currently paid as outliers. That is, many cases that are high-cost outlier cases under the current CMS DRG system would be paid using an MCC DRG under the MS–DRGs and could potentially be paid as nonoutlier cases. For this reason, we expected the FY 2008 outlier threshold to decline from its FY 2007 level of $24,485. We proposed an FY 2008 outlier threshold of $23,015. In this final rule with comment period, we are establishing an FY 2008 outlier threshold of $22,650. In section II.A.4. of the Addendum to this final rule with comment period, we provide a more detailed explanation of how we determined the final FY 2008 cost outlier threshold. We address any comments received on the FY 2008 proposed outlier threshold in section II.A.4. of the Addendum to this final rule with comment period.

8. Effect of the MS–DRGs on the Postacute Care Transfer Policy

Existing regulations at § 412.4(a) define discharges under the IPPS as situations in which a patient is formally released from an acute care hospital or dies in the hospital. Section 412.4(b) defines transfers from one acute care hospital to another. Section 412.4(c) establishes the conditions under which we consider a discharge to be a transfer for purposes of our postacute care transfer policy. In transfer situations, each transferring hospital is paid a per diem rate for each day of the stay, not to exceed the full DRG payment that would have been made if the patient had been discharged without being transferred.

The per diem rate paid to a transferring hospital is calculated by dividing the full DRG payment by the geometric mean length of stay for the DRG. Based on an analysis that showed that the first day of hospitalization is the most expensive (60 FR 45804), our policy provides for payment that is double the per diem amount for the first day (§ 412.4(f)(1)). Transfer cases are also eligible for outlier payments. The outlier threshold for transfer cases is equal to the fixed-loss outlier threshold for nontransfer cases, divided by the geometric mean length of stay for the DRG, multiplied by the length of stay for the case, plus one day. The purpose of the IPPS postacute care transfer payment policy is to avoid providing an incentive for a hospital to transfer

patients to another hospital early in the patients' stay in order to minimize costs while still receiving the full DRG payment. The transfer policy adjusts the payments to approximate the reduced costs of transfer cases.

Beginning with the FY 2006 IPPS, the regulations at § 412.4 specified that, effective October 1, 2005, we make a DRG subject to the postacute care transfer policy if, based on Version 23.0 of the DRG Definitions Manual (FY 2006), using data from the March 2005 update of FY 2004 MedPAR file, the DRG meets the following criteria:

- The DRG had a geometric mean length of stay of at least 3 days;
- The DRG had at least 2,050 postacute care transfer cases; and
- At least 5.5 percent of the cases in the DRG were discharged to postacute care prior to the geometric mean length of stay for the DRG.

In addition, if the DRG was one of a paired set of DRGs based on the presence or absence of a CC or major cardiovascular condition (MCV), both paired DRGs would be included if either one met the three criteria above.

If a DRG met the above criteria based on the Version 23.0 DRG Definitions Manual and FY 2004 MedPAR data, we made the DRG subject to the postacute care transfer policy. We noted in the FY 2006 final rule that we would not revise the list of DRGs subject to the postacute care transfer policy annually unless we make a change to a specific CMS DRG. We established this policy to promote certainty and stability in the postacute care transfer payment policy. Annual reviews of the list of CMS DRGs subject to the policy would likely lead to great volatility in the payment methodology with certain DRGs qualifying for the policy in one year, deleted the next year, only to be reinstated the following year. However, we noted that, over time, as treatment practices change, it was possible that some CMS DRGs that qualified for the policy will no longer be discharged with great frequency to postacute care. Similarly, we explained that there may be other CMS DRGs that at that time had a low rate of discharges to postacute care, but which might have very high rates in the future.

The regulations at § 412.4 further specify that if a DRG did not exist in Version 23.0 of the DRG Definitions Manual or a DRG included in Version 23.0 of the DRG Definitions Manual is revised, the DRG will be a qualifying DRG if it meets the following criteria based on the version of the DRG Definitions Manual in use when the new or revised DRG first became effective, using the most recent complete year of MedPAR data:

- The total number of discharges to postacute care in the DRG must equal or exceed the 55th percentile for all DRGs; and
- The proportion of short-stay discharges to postacute care to total discharges in the DRG exceeds the 55th percentile for all DRGs. A short-stay discharge is a discharge before the geometric mean length of stay for the DRG.

A DRG also is a qualifying DRG if it is paired with another DRG based on the presence or absence of a CC or MCV that meets either of the above two criteria.

The MS–DRGs that we proposed to adopt (and are finalizing in this final rule with comment period) for FY 2008 are a significant revision to the current CMS DRG system. Because the new MS–DRGs are not reflected in Version 23.0 of the DRG Definitions Manual, consistent with § 412.4, we proposed to recalculate the 55th percentile thresholds in order to determine which MS–DRGs would be subject to the postacute care transfer policy. Further, under the MS–DRGs, the subdivisions within the base DRGs will be different than those under the current CMS DRGs. Unlike the current CMS DRGs, the MS–DRGs are not divided based on the presence or absence of a CC or MCV. Rather, the MS–DRGs have up to three subdivisions based on: (1) The presence of a MCC; (2) the presence of a CC; or (3) the absence of either an MCC or CC. Consistent with our existing policy under which both DRGs in a CC/non-CC pair are qualifying DRGs if one of the pair qualifies, we proposed that each MS–DRG that shared a base MS–DRG would be a qualifying DRG if one of the MS–DRGs that shared the base DRG qualified. We proposed to revise § 412.4(d)(3)(ii) to codify this policy.

Similarly, we believe that the changes to adopt MS–DRGs also necessitate a revision to one of the criteria used in § 412.4(f)(5) of the regulations to determine whether a DRG meets the criteria for payment under the ''special payment methodology.'' Under the special payment methodology, a case subject to the special payment methodology that is transferred early to a postacute care setting will be paid 50 percent of the total IPPS payment plus the average per diem for the first day of the stay. Fifty percent of the per diem amount will be paid for each subsequent day of the stay, up to the full MS–DRG payment amount. A CMS DRG is currently subject to the special payment methodology if it meets the criteria of § 412.4(f)(5). Section 412.4(f)(5)(iv) specifies that if a DRG meets the criteria specified under § 412.4(f)(5)(i) through (f)(5)(iii), any DRG that is paired with it based on the presence or absence of a CC or MCV is also subject to the special payment methodology. Given that this criterion would no longer be applicable under the MS–DRGs, we proposed to add a new § 412.4(f)(6) that includes a DRG in the special payment methodology if it is part of a CC/non-CC or MCV/non-MCV pair. We proposed to update this criterion so that it conforms to the proposed changes to adopt MS–DRGs for FY 2008. The revision would make an MS–DRG subject to the special payment methodology if it shares a base MS–DRG with an MS–DRG that meets the criteria for receiving the special payment methodology.

Comment: One commenter urged CMS to ''suspend application of the postacute care transfer policy for one year, until sufficient data is available, and then apply the criteria anew to the MS–DRGs.'' As an alternative to ceasing the application of the postacute care transfer policy for one year, the commenter recommended that CMS limit the application of the postacute care transfer policy as much as possible until better data are available and not to increase the average length of stay for less complicated DRGs over their current levels.

Response: Under both the CMS DRGs and MS–DRGs, there were two criteria for making a DRG subject to the postacute care transfer policy. These criteria are:

- The total number of discharges to postacute care in the DRG must equal or exceed the 55th percentile for all DRGs; and
- The proportion of short-stay discharges to postacute care to total discharges in the DRG must equal or exceed the 55th percentile for all DRGs.

While these criteria are identical under the CMS DRGs and the MS–DRGs, we needed to recalculate the 55th percentile thresholds in order to determine which MS–DRGs would be subject to the postacute care transfer policy to conform the existing policy to the new DRG system. Further, we also needed to make a conforming change to our policy that a DRG is subject to the postacute care transfer policy if it is one of a paired set of DRGs based on the presence or absence of a CC or MCV where one of the DRGs in the set meets the numerical criteria specified above. As the MS–DRGs have subdivisions based on MCC, CCs and non-CCs rather than MCVs, CCs and non-CCs, we needed to amend the regulatory text to reflect the nomenclature of the MS–DRG system. Therefore, our policy for making a DRG subject to the postacute care transfer policy under the MS–DRGs is unchanged other than to make it

conform to the new DRG system. As our policy is unchanged, we do not believe that either suspending or limiting application of the postacute care transfer policy under the MS–DRGs is warranted.

Comment: One commenter opposed CMS' ''proposal to significantly expand the list of the DRGs subject to the postacute care transfer policy.'' The commenter, a hospital, noted that ''manual processes'' would have to take place in order to identify patients meeting the home health criteria. Specifically, the commenter stated that, ''hospitals [would] either have to contact patients to determine if they have received home health services within 3 days after discharge or wait for the fiscal intermediary to let the hospital know that a patient received home care that was not planned at the time of discharge which requires coders to review and correct the disposition and for the Business Office to resubmit the claim.''

Response: We note that we did not propose to change or expand the postacute care transfer policy provision in this year's proposed rule. Rather, we applied existing post-acute transfer policy to the new MS–DRG system. Thus, the criteria that would have made a CMS–DRG subject to the postacute care transfer policy last year were the same as those applied to the MS–DRGs for FY 2008. We note that in FY 2007, 190 CMS DRGs of 538 CMS DRGs were subject to the postacute care transfer policy, or about 35 percent. For FY 2008, 273 out of 745 MS–DRGs are subject to the postacute care transfer policy or about 36 percent. Therefore, the proportion of postacute care transfer MS–DRGs subject to the policy is very similar to what it was last year under the CMS DRGs. Thus, we disagree there has been a ''significant expansion'' of DRGs subject to the postacute care transfer policy. Rather, we are simply conforming the existing postacute care transfer policy to the new MS–DRGs.

In response to the commenter's concern about it being administratively burdensome to identify patients who received home health care services subsequent to discharge from the acute care hospital, we note that, under section 1886(d)(5)(J)(ii)(III) of the Act, the term ''qualified discharge'' includes a discharge from an IPPS hospital upon which the patient is provided home health services from a home health agency if such services relate to the condition or diagnosis for which the patient received hospital inpatient services. The proposed rule did not make any change to application of the postacute care transfer policy in this circumstance. We note that, in most instances, patients are discharged from the acute hospital with a written plan of care for the provision of home health services, so hospitals would usually know if a patient was going to receive home health care services at the time of discharge. Additionally, we do not expect that the administrative burden of identifying patients discharged to home for the provision of home health services within 3 days will be any greater under the MS–DRG system than it was under the CMS DRG system because the proportion of DRGs subject to the postacute care transfer policy is very similar under both systems.

Comment: One commenter stated that it is unreasonable to categorize all three MS–DRGs in the same base DRG as subject to the postacute care transfer policy if only one of the three meets the criteria. The commenter suggested that, for base MS–DRGs where there are three base-DRGs, two of the three base-DRGs should meet the postacute care transfer criteria (on their own) for all of them to be subject to the postacute care transfer policy and that if only one meets the criteria, none should be subject to the postacute care transfer policy.

Response: Under the CMS DRG system, some DRGs were paired with others (with CC or without CC). Under that system, if one DRG qualified for the postacute care transfer policy, we included its paired DRG so as not to create an incentive for hospitals not to include any code that would identify a complicating or comorbid condition. The same logic applies under the MS–DRG system: If one DRG in a set meets the postacute care transfer criteria, we believe that it is appropriate to include the paired or grouped DRGs so as not to create any coding incentives to bypass the postacute care transfer payment. Therefore, we disagree with the commenter that it is ''unreasonable'' to include a group of MS–DRGs where only one MS–DRG in the group meets the postacute care transfer criteria on its own. We also note that we apply the same logic to the special-pay MS–DRGs. That is, if an MS–DRG qualifies to receive the special payment methodology, any other MS–DRGs that share the same base MS–DRG also qualify to receive the special payment methodology.

In this final rule with comment period, we are adopting the proposed postacute care transfer policy conforming changes as final.

In addition, § 412.4(f)(3) states that the postacute care transfer policy does not apply to CMS DRG 385 for newborns who die or are transferred. We proposed to make a conforming change to this paragraph to reflect that this CMS DRG would become MS–DRG 789 (Neonates, Died or Transferred to Another Acute Care Facility) under our proposed DRG changes for FY 2008. We did not receive any comments on this proposal and, therefore, are finalizing this conforming change as proposed.

These revisions do not constitute a change to the application of the postacute care transfer policy. Therefore, any savings attributed to the postacute care transfer policy will be unchanged as a result of adopting the MS–DRGs. Consistent with section 1886(d)(4)(C)(iii) of the Act, aggregate payments from adoption of the MS–DRGs cannot be greater or less than those that would have been made had we not made any DRG changes.

We also proposed and are adopting as final technical changes to §§ 412.4(f)(5)(i) and (f)(5)(iv) to correct a cross-reference and a typographical error, respectively.

E. Refinement of the Relative Weight Calculation

In the FY 2007 IPPS final rule (71 FR 47882), effective for FY 2007, we began to implement significant revisions to Medicare's inpatient hospital rates by basing the relative weights on hospitals' estimated costs rather than on charges. This reform was one of several measured steps to improve the accuracy of Medicare's payment for inpatient stays that include using costs rather than charges to set the relative weights and making refinements to the current CMS–DRGs so they better account for the severity of the patient's condition. Prior to FY 2007, we used hospital charges as a proxy for hospital resource use in setting the relative weights. Both MedPAC and CMS have found that the limitations of charges as a measure of resource use include the fact that hospitals cross-subsidize departmental services in many different ways that bear little relation to cost, frequently applying a lower charge markup to routine and special care services than to ancillary services. In MedPAC's 2005 Report to the Congress on Physician-Owned Specialty Hospitals, MedPAC found that hospitals charge much more than their costs for some types of services (such as operating room time, imaging services and supplies) than others (such as room and board and routine nursing care).[21] Our analysis of the MedPAC report in the FY 2007 IPPS

[21] Medicare Payment Advisory Commission:*Report to the Congress: Physician-Owned Specialty Hospitals,* March 2005, p. 26.

proposed rule (71 FR 24006) produced consistent findings.

In the FY 2007 IPPS proposed rule, we proposed to implement cost-based weights incorporating aspects of a methodology recommended by MedPAC, which we called the hospital-specific relative value cost center (HSRVcc) methodology. MedPAC indicated that an HSRVcc methodology would reduce the effect of cost differences among hospitals that may be present in the national relative weights due to differences in case mix adjusted costs. After studying Medicare cost report data, we proposed to establish 10 national cost center categories from which to compute 10 national CCRs based upon broad hospital accounting definitions. We made several important changes to the HSRVcc methodology that MedPAC recommended using in its March 2005 Report to the Congress on Physician-Owned Specialty Hospitals. We refer readers to the FY 2007 IPPS proposed rule (71 FR 24007 through 24011) for an explanation and our reasons for the modification to MedPAC's methodology. In its public comments on the FY 2007 IPPS proposed rule, MedPAC generally agreed with the adaptations we made to its methodology. MedPAC further recommended that we expand the number of distinct hospital department CCRs being used from 10 to 13, which we subsequently adopted in the FY 2007 IPPS final rule.

We did not finalize the HSRVcc methodology for FY 2007 because of concerns raised in the public comments on the FY 2007 IPPS proposed rule (71 FR 47882 through 47898). Rather, we adopted a cost-based weighting methodology without the hospital-specific relative weight feature. In response to a comment from MedPAC, we also expanded the number of distinct hospital departments with CCRs from 10 to 13. We indicated our intent to study whether to adopt the HSRVcc methodology after we had the opportunity to further consider some of the issues raised in the public comments. In the interim, we adopted a cost-based weighting methodology over a 3-year transition period, substantially mitigating the redistributive payment impacts illustrated in the proposed rule, while we engaged a contractor to assist us with evaluating the HSRVcc methodology.

Some commenters raised concerns about potential bias in cost-based weights due to ''charge compression,'' which is the practice of applying a lower percentage markup to higher cost services and a higher percentage markup to lower cost services. These commenters were concerned that our proposed weighting methodology may undervalue high cost items and overvalue low cost items if a single CCR is applied to items of widely varying costs in the same cost center. The commenters suggested that the HSRVcc methodology would exacerbate the effect of charge compression on the final relative weights. One of the commenters suggested an analytic technique of using regression analysis to identify adjustments that could be made to the CCRs to better account for charge compression. We indicated our interest in researching whether a rigorous model should allow an adjustment for charge compression to the extent that it exists. We engaged a contractor, RTI International (RTI), to study several issues with respect to the cost-based weights, including charge compression, and to review the statistical model provided to us by the commenter for adjusting the weights to account for it. We discuss RTI's findings in detail below.

Commenters also suggested that the cost report data used in the cost methodology are outdated, not consistent across hospitals, and do not account for the costs of newer technologies such as medical devices. However, the relationship between costs and charges (not costs alone) is the important variable in setting the relative weights under this new system. Older cost reports also do not include the hospital's higher charges for these same medical devices. Therefore, it cannot be known whether the CCR for the more recent technologies will differ from those we are using to set the relative weights. The use of national average cost center CCRs rather than hospital-specific CCRs may mitigate potential inconsistencies in hospital cost reporting. Nevertheless, in the FY 2007 IPPS final rule, we agreed that it was important to review how hospitals report costs and charges on the cost reports and on the Medicare claims and asked RTI to further study this issue as well.

In summary, we proposed to adopt HSRVcc relative weights for FY 2007 using national average CCRs for 10 hospital departments. Based on public comments concerned about charge compression and the accuracy of cost reporting, we decided not to finalize the HSRVcc methodology, but adopted cost-based weights without the hospital specific feature. In response to comments from MedPAC, we expanded the number of hospital cost centers used in calculating the national CCRs from 10 to 13. Finally, we decided to implement the cost-based weighting methodology gradually, by blending the cost-based and charge-based weights over a 3-year transition period beginning with FY 2007, while we further studied many of the issues raised in the public comments. We refer readers to the FY 2007 IPPS final rule (71 FR 47882) for more details on our final policy for calculating the cost-based DRG relative weights.

1. Summary of RTI's Report on Charge Compression

In August 2006, we awarded a contract to RTI to study the effects of charge compression in calculating DRG relative weights. The purpose of the study was to develop more accurate estimates of the costs of Medicare inpatient hospital stays that can be used in calculating the relative weights per DRG. RTI was asked to assess the potential for bias in relative weights due to CCR differences within the 13 CCR groups used in calculating the cost-based DRG relative weights and to develop an analysis plan that explored alternative methods of estimating costs with the objective of better aligning the charges and costs used in those calculations. RTI was asked to consider methods of reducing the variation in CCRs across services within cost centers by:

- Modifying existing cost centers and/or creating new centers.
- Using statistical methods, such as the regression adjustment for charge compression. Some commenters on the FY 2007 IPPS proposed rule suggested that we use a regression adjustment to account for charge compression.

As part of its contract, RTI convened a Technical Expert Panel composed of individuals representing academic institutions, hospital associations, medical device manufacturers, and MedPAC. The members of the panel met on October 27, 2006, to evaluate RTI's analytic plan, to identify other areas that are likely to be affected by compression or aggregation problems, and to propose suggestions for adjustments for charge compression. We posted RTI's draft interim report on the CMS Web site in March 2007. For more information, interested individuals can view RTI's report at the following Web site: *http://www.cms.hhs.gov/Reports/Reports/itemdetail.asp?itemID=CMS1197292.* The report may also be viewed on RAND's Web site at *http://www.rand.org/pubs/online/health.*

As the first step in its analysis, RTI compared the reported Medicare program charge amounts from the cost reports to the total Medicare charges summed across all claims filed by providers. Using cost and charge data

from the most recent available Medicare cost reports and inpatient claims from IPPS hospitals, RTI was charged with performing an analysis to determine how well the MedPAR charges matched the cost report charges used to compute CCRs. The accuracy of the DRG cost estimates is directly affected by this match because MedPAR charges are multiplied by CCRs to estimate cost. RTI found consistent matching of charges from the Medicare cost report to charges grouped in the MedPAR claims for some cost centers but there appeared to be problems with others. For example, RTI found that the data between the cost report and the claims matched well for total discharges, days, covered charges, nursing unit charges, pharmacy, and laboratory. However, there appeared to be inconsistent reporting between the cost reports and the claims data for charges in several ancillary departments (medical supplies, operating room, cardiology, and radiology). For example, the data suggested that hospitals often include costs and charges for devices and other medical supplies within the Medicare cost report cost centers for Operating Room, Radiology or Cardiology, while other hospitals include them in the Medical Supplies cost center.

RTI found that some charge mismatching results from the way in which charges are grouped in the MedPAR file. Examples include the intermediate care nursing charges being grouped with intensive care nursing charges and electroencephalography (EEG) charges being grouped with laboratory charges. RTI suggested that reclassifying intermediate care charges from the intensive care unit to the routine cost center could address the former problem.

As the second step in its analysis, RTI reviewed the existing cost centers that are combined into the 13 groups used in calculating the national average CCRs. RTI identified CCRs with potential aggregation problems and considered whether separating the charge groups could result in more accurate cost conversion at the DRG level. The analysis led RTI to calculate separate CCRs for Emergency Room and Blood and Blood Administration, both of which had been included in ''Other Services'' in FY 2007.

During this second step, RTI noted that a variation of charge compression is also present in inpatient nursing services because most patients are charged a single type of accommodation rate per day that is linked to the type of nursing unit (routine, intermediate, or intensive), but not to the hours of nursing services given to individual patients. Unlike the situation with charge compression in ancillary service areas, there are virtually no detailed charge codes that can distinguish patient nursing care use. Therefore, any potential bias cannot be empirically evaluated or adjustments made without additional data.

Next, RTI examined individual revenue codes within the cost centers and used regression analysis to determine whether certain revenue codes in the same cost center had significantly different markup rates. Those revenue codes include devices, prosthetics, implants within the Medical Supplies cost center, IV Solutions within the Drugs cost center, CT scanning and MRI within the Radiology cost center, Cardiac Catheterization within the Cardiology cost center, and Intermediate Care Units within the Routine Nursing Care cost center. Devices, prosthetics, and implants within the Medical Supplies cost center have a lower markup and, as a result, a higher CCR than the remainder of the medical supplies group according to RTI's analysis. Within the Drugs CCR, IV Solutions have a much higher markup and much lower CCR than the other drugs included in the category. Within the Radiology CCR, CT scanning and MRI have higher markups and lower CCRs than the remaining radiology services. RTI's results for Cardiac Catheterization and Intermediate Care Units were ambiguous due to data problems.

RTI's analysis also determined the impact of the disaggregated CCRs on the relative weights. Differences in CCRs alone do not necessarily alter the DRG relative weights. The impact on the relative weights is the result of the interaction of CCR differences and DRG differences in the proportions of the services with different CCRs. In FY 2007, we calculated relative weights using CCRs for 13 hospital departments. The RTI analysis suggests expanding the number of distinct hospital department CCRs from 13 to 19. Of the additional six CCRs, two would result from separating the Emergency Department and Blood (Products and Administration) from the residual ''Other Services'' category. Four additional CCRs would result from applying a regression method similar to a method suggested in last year's public comments to three existing categories: supplies, radiology, and drugs. This method, as adapted by RTI, used detailed coding of charges to disaggregate hospital cost centers and derive separate, predicted alternative CCRs for the disaggregated services. RTI's analysis suggests splitting Medical Supplies into one CCR for Devices, Implants, and Prosthetics and one CCR for Other Supplies; splitting Radiology into one CCR for MRIs, one CCR for CT scans, and one CCR for Other Radiology; and splitting Drugs into one CCR for IV Solutions and one CCR for Other Drugs.

RTI's draft report provides the potential impacts of adopting these changes to the CCRs. We note that RTI's analysis was based on Version 24.0 of the CMS DRGs. Because the proposed MS–DRGs were under development for the FY 2008 IPPS proposed rule, they were unavailable to RTI for their analysis. The results of RTI's analysis may be different if applied to the MS–DRGs. However, it seems reasonable to believe that the impact of RTI's suggestions will be consistent using Version 24.0 of the CMS DRGs and the MS–DRGs, as both systems generally use the same base DRGs while applying different subdivisions to recognize severity of illness. Of all the adjusted CCRs, the largest impact on weights came from accounting for charge compression in medical supplies for devices and implants. The impact on weights from accounting for CCR differences among drugs was modest. The impact of splitting MRI and CT scanning from the radiology CCR was greater than the impact of modifying the Drugs CCRs, but less than the impact of splitting the Medical supplies group. Separating Emergency Department and Blood Products and Administration from the ''Other Services'' category would raise the CCR for other services in the group.

RTI found that disaggregating cost centers may have a mitigating effect on the impact of transitioning from charge-based weights to cost-based weights. That is, the changes being suggested by RTI will generally offset (fully or more than fully in some cases or in part in other cases) the impacts of fully implemented cost-based weights that we are adopting over the FY 2007–FY 2009 transition period. Thus, RTI's analysis suggests that expanding the number of distinct hospital department CCRs used to calculate cost-based weights from 13 to 19 will generally increase the relative weights for surgical DRGs and decrease them for the medical DRGs compared to the fully implemented cost-based weights to which we began transitioning in FY 2007.

2. RTI Recommendations

In its report, RTI provides recommendations for the short term, medium term, and long term, to mitigate aggregation bias in the calculation of relative weights. We summarize RTI's

recommendations below and respond to each of them.

a. Short-Term Recommendations

Most of RTI's short-term recommendations have already been described above. The most immediate changes that RTI recommends implementing include expanding from 13 distinct hospital department CCRs to 19 by:

- Disaggregating ''Emergency Room'' and ''Blood and Blood Products'' from the ''Other Services'' cost center;
- Establishing regression-based estimates as a temporary or permanent method for disaggregating the Medical Supplies, Drugs, and Radiology cost centers; and
- Reclassifying intermediate care charges from the intensive care unit cost center to the routine cost center.

We believe these recommendations have significant potential to address issues of charge compression and potential mismatches between how costs and charges are reported in the cost reports and on the Medicare claims.

RTI's recommendations show significant promise in the short term for addressing issues raised in the public comments on the cost-based weights in the FY 2007 IPPS proposed rule. However, in the time available for the development of the proposed rule, we were unable to investigate how RTI's recommended changes may interact with other potential changes to the DRGs and to the method of calculating the DRG relative weights. As we noted above, RTI's analysis was done on the Version 24.0 of the CMS DRGs and not the MS–DRGs we proposed for FY 2008. For the proposed rule and this final rule with comment period, we were not able to examine the combined impacts of the MS–DRGs and RTI's recommendations. In addition, we believe it is also important to consider that, in the FY 2007 IPPS final rule (71 FR 47897), we anticipated undertaking further analysis of the HSRVcc methodology over the next year in conjunction with the research we were to do on charge compression. Analysis of the HSRVcc methodology will be part of the second phase of the RAND study of alternative DRG systems to be completed by September 1, 2007, that has not been completed in time for this final rule with comment period. As a result, we have also been unable to consider the effects of the HSRVcc methodology together with the MS–DRGs and RTI's recommendations. Finally, we note that in order to complete the analysis in time for the proposed rule or this final rule with comment period, RTI's study used only hospital inpatient claims. However, hospital ancillary departments typically include both inpatient and outpatient services within the same department and only a single CCR covering both inpatient and outpatient services can be calculated from Medicare cost reports. Although we believe that applying the regression method used by RTI to only inpatient services is unlikely to have had much impact for the adjustments recommended by RTI, the preferred approach would be to apply the regression method to the combined inpatient and outpatient services. The latter approach would ensure that any potential CCR adjustments in the IPPS would be consistent with potential CCR adjustments in the OPPS. We hope to expand their analysis to incorporate outpatient services during the coming year.

Although we did not propose to adopt RTI's recommendations for FY 2008, we solicited public comments on expanding from 13 CCRs to 19 CCRs. Again, we noted that RTI's analysis suggests significant improvements that could result in the cost-based weights from adopting its recommendations to adjust for charge compression. Therefore, we also expressed interest in public comments on whether we should proceed to adopt the RTI recommended changes for FY 2008 in the absence of a detailed analysis of how the relative weights would change if we were to address charge compression while simultaneously adopting an HSRVcc methodology together with the MS–DRGs. Given the change in the impacts that were illustrated in last year's FY 2007 IPPS final rule (71 FR 47915–47916), going from a hospital-specific to a nonhospital-specific cost-weighting methodology, we believe that sequentially adjusting for charge compression and later adopting an HSRVcc methodology could create the potential for instability in IPPS payments over the next 2 years (that is, payments for surgical DRGs would increase and payment for medical DRGs would decrease if we were to adopt the RTI recommended changes for FY 2008, but could potentially reverse direction if we were to adopt an HSRVcc methodology for FY 2009). Again, we solicited public comments on all of these issues before making a final decision as to whether to proceed with the RTI's short-term recommendations in the final rule for FY 2008.

Comment: Many commenters commented on whether we should proceed in adopting the recommendations made by RTI in its January 2007 report, particularly concerning changes in cost reporting practices and the additional, regression-based CCRs. Several commenters focused on problems highlighted by RTI with the inconsistent and varying methods in which hospitals group their charges in MedPAR and report costs and charges on the Medicare cost report, which can result in distortions in the DRG weights. Some commenters asserted that mismatching is not caused by the failure of hospitals to prepare their cost reports correctly, as appeared to be suggested by the RTI study. Other commenters noted that RTI recommends the incorporation of edits to reject cost reports or require more intensive review by auditors to resolve the lack of uniformity in cost reporting. However, the commenters believed that such edits or audits will not solve the mismatch problem because hospitals' reporting is consistent with the cost reporting instructions. The commenters described that, currently, cost report instructions included with the CMS Form-339 allow for three methods of reporting Medicare charges. The method selected by each hospital is specific to its information systems and based on the method that most accurately aligns Medicare program charges on Cost Report Worksheet D–4 (inpatient) and/or Worksheet D, Part IV (outpatient) with the overall cost and charges reported on Worksheets A and C. Many hospitals elect to allocate some or all of the Medicare program charges from the Medicare Provider Statistical and Reimbursement (PS&R) data to various lines in the cost report based on hospital-specific financial system needs. Under this scenario, total hospital CCRs are aligned with the hospital's program charges, but would not match the charge groupings used in MedPAR.

Instead of increased edits or cost report rejections, the commenters believed that hospitals must be educated to report costs and charges, particularly for supplies, in a way that is consistent with how MedPAR groups charges. The commenters are launching such an educational campaign, which would encourage consistent reporting that they believe would, in turn, produce consistent groupings of departments within the 13 cost center groups that are currently used to create the cost-based weights, or any future expansion of the categories that may occur. The commenters stated that their educational efforts will take time and CMS should recognize that some hospitals will be in a better position to adopt certain cost report changes more rapidly because the changes may be more expensive and time-consuming for some hospitals to adopt relative to

others. The commenters requested that CMS communicate with its fiscal intermediaries/MAC that such action is appropriate and encouraged for improvements in Medicare's cost-based weights. The commenters were concerned that, without direction from CMS, the fiscal intermediaries/MAC may not allow hospitals to change how they report costs.

Although one commenter supported the education of hospitals in better cost reporting, this commenter opposed mandating hospitals to make these cost reporting changes. One commenter stated that ''it is important to note that charge compression results from hospitals' markup practices,'' and that the problem would be eliminated if hospitals would use a single markup for all items and services included within all revenue centers. Another commenter asserted that hospitals are not consistent in their cost reporting and the first step should be to issue cost report instructions. The next step would be to allocate audit resources to the fiscal intermediary/MAC in order to determine whether these instructions are properly implemented because reporting of costs and charges does have an indirect effect on payments to hospitals. Another commenter stated that CMS needs to place more emphasis and audit resources toward ensuring that hospitals properly complete their cost reports. However, while another commenter supported scrutiny and auditing for extreme CCRs, the commenter also appreciated that CMS has limited audit resources. One commenter stated that adjustments to revenue codes reported on the standard UB–04 claims forms may also be appropriate to better match charges on claims forms with the charges (and costs) reported on the Medicare cost report. Other commenters stated that the costing of the weights should be done at the UB revenue code level. Given the variety of ways in which hospitals report their costs and charges, it is impossible to make assumptions related to revenue codes across all hospitals without the assistance of the PS&R crosswalk, which is submitted with the filed cost report as an attachment to the CMS–339 form. The commenters noted that if CMS is going to continue a transition to cost-based weights, hospitals will need time to align their mapping of cost centers into departments or cost categories for purposes of cost reporting and claims reporting. The accurate costing of claims would be in line with the original MedPAC recommendations.

In light of the cost reporting and MedPAR mismatch problems, the commenters did not believe that a temporary, regression-based adjustment that does not fix the underlying concerns with cost reporting is appropriate. The commenters are concerned that, for the sake of expediency, the use of estimates (a regression analysis approach), as opposed to efforts to collect accurate data at the appropriate cost center level, would be insufficient. In addition, the commenters expressed doubt that a regression model can be easily validated, as the DRG weights are modified on an annual basis. One commenter argued that CMS did not include details of the regression-based adjustment in the proposed rule and, consequently, the commenter could not assess the impact of implementing the adjustment. The commenter agreed with CMS' assessment that RTI's adjustments might change if they are implemented jointly with MS–DRGs, and if estimated using both inpatient and outpatient costs and charges. This commenter, along with others, believed that, at the very least, implementation of the regression-based CCRs should be delayed, and once short-term educational efforts and CMS' long-term cost report evaluation are underway, it would be more appropriate to have an informed discussion on which cost report changes are needed to alleviate the issue of charge compression.

Response: In the FY 2008 IPPS proposed rule (72 FR 24715), we stated that because we did not have sufficient time to investigate how RTI's recommended changes might interact with other possible changes to the DRGs and the DRG relative weights, and because RTI's regression method was only applied to inpatient services and not also outpatient services, we decided not to propose implementing RTI's recommendations for FY 2008. However, we also stated that, despite these concerns, we believe RTI's recommendations have the potential to significantly address the issues of charge compression and potential mismatches between how costs and charges are reported in the cost reports and on the Medicare claims. Therefore, we solicited comments on whether we should expand the 13 CCRs to 19 CCRs for FY 2008.

We have carefully considered all comments, ranging from those urging us to adopt all 19 CCRs in FY 2008, to those believing that the regression-based CCRs should be delayed for at least a year, if used at all. Because of concerns that we and some commenters continue to have about premature adoption of the regression-based CCRs without the benefit of knowing how they will interact with other DRG changes, and the arguments in the comments summarized above concerning cost and claims reporting, we have decided to finalize our proposal to not implement the four regression-based CCRs for medical supplies and devices, IV drugs, and radiology (MRI and CT scans) for FY 2008. However, as we explain in more detail in response to comments below, we are adopting the two cost report-based CCRs for ''Emergency Room'' and ''Blood and Blood Products'' for a total of 15 national average CCRs for FY 2008. We believe these changes to the relative weight methodology do not have the disadvantages that are of concern to the commenters. That is, recognizing these additional departments will allow us to use information that is already being reported by hospitals in their cost reports and adopt some of the changes being recommended by RTI without going to a regression-based model at this time.

Many of the concerns in the comments summarized above related to how hospitals' report costs and charges on the cost report and how hospitals include charges on their bills for inpatient services or the way the charges are grouped in the MedPAR. RTI indicated that more precise cost reporting is the best solution to address the issue of charge compression in the long term. Many commenters believed that rather than rely on increased edits and audits to resolve the lack of uniformity in cost reporting, hospitals must be educated to report costs and charges in a manner that is consistent with the way in which MedPAR groups charge, and the commenters were launching an educational campaign accordingly. We agree with the educational initiative of these commenters. Participation in these educational initiatives by hospitals is voluntary. Hospitals are not required to change how they report costs and charges if their current cost reporting practices are consistent with rules and regulations and applicable instructions. However, to the extent allowed under current regulations and cost report instructions, we encourage hospitals to report costs and charges consistently with how the data are used to determine relative weights. We believe achieving this goal is of mutual benefit to both Medicare and hospitals.

The commenters also suggested that CMS should inform the fiscal intermediary/MAC that hospitals may be changing their cost reporting and allocation methodologies in response to the educational initiative, that such action is encouraged, and that more

audit resources should be allocated to fiscal intermediaries/MAC to ensure that any new cost reporting instructions are being implemented properly. First, we intend to notify the fiscal intermediaries/MAC of this cost reporting educational initiative subsequent to the issuance of this final rule with comment period, and provide both fiscal intermediaries/MAC and hospitals with guidance on how to address requests for changes in cost reporting practices from hospitals. Second, each hospital that wishes to change its cost reporting practices must follow the directives at § 413.53(a)(1) of our regulations and PRM–1, section 2203, regarding matching the charges to the costs reported in each cost center. We recommend that the hospital also disclose the changes made in a cover letter with the submission of the cost report.

Commenters submitted suggestions about how MedPAR could be modified to further distinguish categories of charges. As we stated in the proposed rule, we will consider suggestions for adding additional revenue codes to MedPAR in conjunction with other competing priorities for our information systems. We cannot create additional revenue codes. Requests for new revenue codes on hospital bills have to be made to and approved by the National Uniform Billing Committee (NUBC).

Comment: Some commenters were uncertain whether RTI's recommendations to expand certain cost categories through regression analysis is the appropriate solution to address the issue of charge compression and potential inconsistencies in how hospitals report costs and charges. The commenters supported the expansion of categories to include CCRs based on cost centers that already exist on the cost report, such as emergency department and blood products, and possibly others after further examination. Another commenter stated that creating a CCR for blood and blood products will reflect more accurately the cost of blood and will help ensure future IPPS updates will account more adequately for these products. Although one commenter understood that CMS has not been able to analyze the effect of implementing the regression adjustments with the proposed MS–DRGs, the commenter believed that CMS should adopt RTI's adjustment to the CCRs for drugs and IV solutions for FY 2008, and subsequently analyze and report on the effects of this adjustment on MS–DRGs. Another commenter noted that while the RTI regression estimates provide a practical short-term approach to address charge compression for drugs, supplies, and radiology revenue cost centers, this method does not identify all of the charge compression that occurs at each hospital in these revenue centers, nor does it address charge compression that may be occurring in other revenue centers such as cardiology, or the routine and intensive care revenue cost centers where nursing costs per day are currently treated as if they were uniform across patient categories.

Another commenter also asked that CMS remember that the primary use of the cost report is to determine a hospital's costs of treating Medicare patients. The commenter noted that the cost report is still used for cost-based payment for many hospitals, such as CAHs, SCHs, and MDHs, and many State Medicaid plans and other payers also rely on data from the cost report to determine payment rates. Because of these uses, the commenters asked CMS to proceed cautiously with changing the cost report to avoid unintended consequences for hospitals where the cost report determines a significant portion of current payment. The commenter offered its services in reviewing and discussing cost report changes that Medicare may propose. Another commenter recommended that CMS work with hospital finance experts so the most appropriate and accurate instructions are issued, with very specific instructions as to where services are to be classified on the cost report and that subcategories should be eliminated.

Another commenter did not support RTI's recommendations for revising the cost reports to reduce cost and charge misalignment and to create new cost centers because of ''the enormous amount of work hospitals would have to perform'' to change internal operations and data collection to accommodate the revisions. The commenter expressed concern that this would lead to ''rising inefficiency and administrative costs.'' This commenter, and others, believed that ''clear, detailed instructions from CMS'' would be needed to differentiate between a ''device,'' ''implant,'' or ''IV solution,'' and other ''new nomenclature that distinguishes and separates tens of thousands of items and drugs, for instance, implantable spinal screws, bandages and bone cement, into specific cost centers'' would be necessary.

Response: As we noted in the proposed rule and in response to comments above, we believe that RTI's regression-based CCRs may be a promising means for addressing charge compression in the short term. However, because we do not yet know how the additional regression-based CCRs would interact with the MS–DRGs or with the HSRV methodology, and the significant concerns raised by a number of commenters about adopting regression-based CCRs, we are not adopting the adjustments to address charge compression in the FY 2008 IPPS final rule. We note RTI's long-term recommendations suggest addressing charge compression through adding new cost centers to the cost report and undertaking additional activities such as improvements in how hospitals report costs and charges. Thus, we believe that RTI and many of the public comments conclude that ultimately improved and more precise cost reporting is the best way to minimize charge compression. While we are not adopting the regression-based adjustments to address charge compression, we believe that the FY 2008 IPPS final rule relative weights should take advantage of additional information that is already reported on the cost report. Because the cost report currently allows for the creation of specific CCRs for Emergency Room and Blood and Blood Products, and some commenters expressed explicit support for expanding the number of CCRs based on cost centers that already exist on the cost report, we have decided to separate Emergency Room costs and charges and Blood and Blood Products costs and charges from the current ''Other Services'' CCR for the purposes of calculating the cost-based portion of the FY 2008 relative weights. That is, in accordance with RTI's short-term recommendation, for FY 2008, we are adding two additional CCRs to the current list of 13 CCRs, for a total of 15 CCRs. We are using line 61 on Worksheets C, Part I and D–4 to create the Emergency Room CCR and lines 46 and 47 on Worksheets C, Part I and D–4 to create a CCR for Blood and Blood Products. We are modifying the table listing the 15 cost center groupings in section II.H. of the preamble of this final rule with comment period accordingly.

With respect to the commenters that asked CMS to remember that the primary use of the cost report is to determine a hospital's costs of treating Medicare patients, we intend to proceed cautiously as the commenters suggest. To the extent that the cost report changes that we make improve consistency and accuracy of cost reporting, these benefits will extend to providers whose payments are based on reasonable costs (CAHs) or otherwise use the cost report to determine hospital-specific rates (SCHs and MDHs). As we stated above, we intend to work with finance and cost report experts in the hospital community if we

decide to modify the cost report or its instructions to address issues with the DRG relative weights. We also understand that hospitals may be concerned about the resources that may be required to adapt to potential cost report changes. Any changes that would be made to the Medicare cost report would be done under the Paperwork Reduction Act and, by law, could not be undertaken without considering the burden that would be imposed on all hospitals.

Comment: Some commenters supported making adjustments to address charge compression. These commenters noted that charge compression was first identified in 2000 and MedPAC and other researchers have also recognized this issue. The commenters recommended implementation of a regression-based adjustment in the FY 2007 final rule and stated that this methodology has been evaluated and validated through RTI's study. Many commenters believe that RTI's results provide ample evidence of charge compression that justifies the implementation of their recommendations for the FY 2008 final rule. Furthermore, commenters stated that RTI's regression-based adjustment is appropriate and can be implemented immediately without any administrative burdens to the hospital. Several commenters emphasized that CMS should make it a priority to apply the regression methodology to the Medical supplies CCR. These commenters noted that in the proposed rule, CMS stated: ''of all the adjusted CCRs, the largest impact on weights came from accounting for charge compression in medical supplies for devices and implants,'' which demonstrates that a regression approach should be applied at least to disaggregate the medical supplies category into one CCR for ''Devices and Implants'' and a separate CCR for ''Other Supplies.''

One commenter disagreed with the reasons CMS expressed in the proposed rule for delaying implementation of RTI's recommendations, and found them to be ''rather insubstantial.'' The commenter did not believe that the combined impact of RTI's recommendations and the proposed MS–DRGs need to be studied before CMS could proceed with implementing the regression-based CCRs. The commenter noted that the relative independence of RTI's recommendations from the proposed MS–DRG changes was confirmed by a study commissioned by AdvaMed. The commenter also stated that the fact that RTI's analysis only included inpatient claims is relatively insignificant. The commenter believed that if further adjustments need to be made to incorporate outpatient claims into the regression estimate next year, they can be done with a fairly minor impact. This commenter, and others, urged CMS to implement a regression that uses both inpatient and outpatient claims when making an adjustment for charge compression for the CY 2008 OPPS, and use the same regression in subsequent years for both the IPPS and OPPS.

Another commenter stated that, although it understood that CMS wishes to understand the various interactions of regression-based CCRs with other aspects of the IPPS, the effect of charge compression is ''demonstrable and measurable'' and should be implemented in FY 2008 for the ''sake of payment accuracy.'' Another commenter stated that CMS' concern about the interaction between addressing charge compression and other proposed changes appeared ''disingenuous, as CMS is proposing so many changes that the interaction of the various components cannot be estimated.'' The commenter also questioned CMS' hesitation to make changes to the cost report to accommodate RTI's recommendation due to limited information system resources, time constraints, and inconvenience. The commenter asserted that ''hospitals find the defense of scarce resources, compressed implementation lead times and cost justification vis-a-vis outcomes an interesting option for CMS given the fact that it is manifestly unavailable to hospitals who have similar issues.''

Response: We disagree with the notion of the commenter that found us to be ''disingenuous'' because the ''interaction of various components [of the IPPS] cannot be estimated.'' We refer the commenter to the payment impact section of the IPPS proposed rule (72 FR 25119) and this final rule with comment period as well as the FY 2007 IPPS proposed rule (71 FR 24025) where we simulate the interaction of a number of different payment reforms including the adoption of cost-based weights, severity DRGs, and other changes. We note that for some categories of hospitals, the impact of adopting MS–DRGs is significant. The RTI work suggests that further changes to the relative weights will also be significant and potentially result in additional redistributions of Medicare payment. In our view, the ''interactions of various components'' can be determined and before we adopt potential policy options in a final rule, the public should be fully informed on the potential impacts. As we discussed in the FY 2008 proposed rule, we have concerns about implementing regression-based CCRs in the final rule without specifically proposing them because of concerns about how these changes would interact with the transition to MS–DRGs, the calculation of cost-based relative weights, and possibly the HSRV method.

Despite the commenters' support for the regression-based CCRs, we are still concerned about the accuracy of using regression-based estimates to determine relative weights rather than the Medicare cost report. Many public commenters, including several national hospital associations, shared these same concerns. However, we believe that more specific CCRs will improve payment accuracy for several DRGs. Therefore, as we stated above, we are implementing RTI's recommendation to expand the current 13 CCRs to 15 CCRs without the use of a regression-based adjustment.

In the proposed rule, we indicated there was insufficient time to assess how RTI's recommendations may interact with other potential changes to the DRGs and to the method of calculating the DRG relative weights. We noted that RTI's study examined charge compression within Version 24.0 of the CMS DRGs, and we could not examine their interactive effects with the MS–DRGs and be able to timely publish the FY 2008 proposed rule. For this reason, we requested public comment on whether to adopt these changes in the final rule without having fully analyzed them for the proposed rule. While there was strong support for adopting the regression-based charge adjustments in these comments, many other commenters believed that we should provide the public with modeled payment impacts and an opportunity to comment before implementing regression-based CCRs.

We are also continuing to consider whether to adopt an HSRV payment methodology for FY 2009. We anticipate undertaking further analysis of the HSRV methodology and would like to incorporate RTI's recommendations into that analysis. Although its evaluation of alternative severity DRG systems is complete, we are currently working with RAND to study the HSRV methodology. Furthermore, we continue to believe that adjusting for charge compression and later adopting the HSRV methodology could create payment instability over the next 2 years and it would be preferable to consider simultaneously adopting these changes.

Finally, if we were to adopt adjustments for charge compression, the preferred approach would be to apply

the regression method to the combined inpatient and outpatient services. The RTI report discussed the notion that separating services that are generally delivered in outpatient settings might improve the accuracy of CCRs for inpatient services, and these areas include therapeutic radiology, nuclear medicine, chemotherapy, electroconvulsive therapy and outpatient surgery. RTI noted that while these charges are not significant under the IPPS, aggregation bias may be present in these outpatient services which would affect the overall department CCR. Therefore, we will consider expanding our analysis to include outpatient services.

Comment: One commenter urged CMS to separately distinguish intermediate (step-down) level nursing care costs. Another commenter argued that it is illogical that nursing costs are reflected in the relative weights only through flat room and board charges, given that nursing care is a variable, rather than a fixed cost. The commenter asserted that, as a result, a significant amount of money is being misallocated across hospitals for required nursing care. The commenter urged CMS to give serious consideration to the RTI report's recommendation to establish study groups and research options for improving patient-level charging within nursing units, as the outcomes could improve precision in relative resource weights without adding substantial administrative costs to either Medicare or to hospitals. Specifically, the commenter strongly supported the creation of a separate direct and indirect cost center at each hospital and the inclusion of these data in the annual Medicare cost report, the reporting and collection of nursing intensity data, and adjustment of the Medicare payment for severity of illness by modifying the proposed APR DRG severity adjustment formula to incorporate nursing intensity and cost within each diagnosis and severity category. The commenter also mentioned the New York State Medicaid model, which was the first prospective payment system to recognize and reimburse for relative nursing resource consumption levels among DRGs through the use of Nursing Intensity Weights (NIWs). The NIWs, which were developed by an expert panel, have been reevaluated and updated periodically to maintain consistency with changes in the DRG definitions. The commenter recommended that, because this program has been successfully implemented in a large state for a number of years, a Medicare demonstration project based on this model should be launched.

Response: The commenters' raise interesting concerns related to nursing costs that are variable but are reflected in the DRG weights only as fixed costs through flat room and board charges. There are currently no detailed charge codes that can be used to distinguish the intensity in nursing services provided by type of patient. In its report, RTI noted ''because intensity of nursing is likely correlated with DRG assignment, this could be a significant source of bias in DRG weights.'' Particularly because nursing comprises such a significant portion of hospital costs and charges, we agree that this issue should be further studied. We are interested in knowing whether the public has any ideas for how the relative weight methodology can systematically recognize and reimburse for differences in nursing resource consumption provided across hospital inpatients. We will consider whether we should study the possibility of using NIWs to recognize nursing intensity in the DRG relative weights.

Comment: Commenters supported adopting the regression CCRs to alleviate charge compression, but some commenters were concerned that the application of this adjustment methodology to capital intensive radiology services is premature and requires additional analysis. The commenters noted that the RTI report found that within the Radiology CCR, CT scanning and MRI have higher markups and lower CCRs than the remaining radiology services. Implementing RTI's recommendation to apply a regression method to split Radiology into one CCR each for MRIs, CT scans and Other Radiology could potentially result in lower CCRs for the CT and MRI categories. One commenter cited an analysis conducted by Direct Research, LLC, that found that the majority of hospitals do not allocate the capital costs of MRI and CT scan machines to the radiology cost center. Rather, the capital costs could be allocated more broadly across hospital services on a square footage basis. However, the commenter noted that RTI's analysis for radiology services assumes a detailed capital allocation for these services that results in differential CCRs found in MRIs and CT scans, which the commenter suggested is actually not found in the data. Therefore, the commenters requested that the regression-based CCRs for radiology not be adopted at this time.

Response: We appreciate the comment on the limitations of the regression-based CCR on radiology. This is another example of how changes to cost reporting can potentially improve the accuracy of CCRs for radiology and other departments. In our view, the commenter raises another issue that requires additional analysis before we adopt regression-based adjustments to address charge compression.

Comment: One comment addressed our proposal to move cost report line 54 for EEG out of the Cardiology cost center group into the Laboratory cost center group. The commenter noted that where providers elect to report EEG separately on line 54, this seems appropriate. However, some providers combine EEG with EKG on line 53 (usually because the EEG services are purchased as outside services and not a separate cost center for the hospital). In those instances, moving only the EEG costs would be impossible. The commenter noted that CMS did not indicate what portion of providers separately report EEG services on line 54, but the commenter was concerned that there will be continued mismatching under either grouping. The commenter encouraged CMS to consider expanding the MedPAR database to include separate fields for all revenue codes so that detailed analyses and accurate matching of costs and charges can be performed. The commenter also concurred with CMS' recommendation to move radioisotope costs to the radiology services grouping and out of ''other services.''

Response: We responded earlier that suggestions for adding additional revenue codes to MedPAR will be considered in conjunction with other competing priorities for our information systems. In the FY 2008 proposed rule, we decided to move the costs for cases involving EEG from the Cardiology cost center group to the Laboratory Cost center group to maintain consistency with their corresponding EEG MedPAR claims, which are categorized under Laboratory charges. Although the commenter indicated that hospitals may be combining EEG costs with EKG costs on line 53 instead of reporting it as a separate cost on line 54, we believe the MedPAR is clear in categorizing EEG claims under revenue codes 0740 and 0749, and therefore, costs for EEG should be reported on line 54 of the cost report as well. For this reason, we are finalizing our proposal to move the costs for cases involving EEG from the Cardiology cost center group to the Laboratory Cost center for purposes of calculating the DRG relative weights. As described in the FY 2008 IPPS proposed rule, we will also calculate the DRG relative weights for FY 2008 by moving radioisotype costs from the Other

Services CCR to the Radiology Services CCR.

Comment: One commenter was concerned that hospitals do not have consistent charging and billing practices on an inpatient and outpatient basis for the administration of medications by injection and/or infusion at the bedside.

Response: We did not propose any changes on this issue. However, we will consider this issue as we research potential improvements that can be made to how hospitals report costs and charges.

Comment: One commenter stated that it believed it is important for CMS to explicitly recognize the ''limitations'' of the cost-based weighting methodology and its applicability to non-Medicare patients because this is a ''major precedent setting change for the entire hospital field.'' The commenter stated that in studies that it conducted, it found that the use of departmental CCRs presents a bias in that the higher unit costs of services provided to children that are labor intensive in terms of nursing and respiratory therapy are not reflected in the department-wide CCRs. The commenter requested that, at a minimum, CMS recognize in the final rule that there are cost issues in the Medicare CCR methodology that have implications for non-Medicare patient populations.

Response: The cost-based relative weights were developed solely using Medicare data. We do not have non-Medicare data that can be used to set DRG relative weights. For this reason, we are concerned that non-Medicare payers may be using our payment systems and rates without making refinements to address the needs of their own populations. As stated earlier, we encourage non-Medicare payers to adapt the MS–DRGs and the relative weight methodology to better serve their needs.

Among its other short-term recommendations, RTI also suggested that we incorporate edits to reject or require more intensive review of cost reports from hospitals with extreme CCRs. This action would reduce the number of hospitals with excluded data in the national CCR computations, and would also improve the accuracy of all departmental CCRs within problem cost reports by forcing hospitals to review and correct the assignment of costs and charges before the cost report is filed. Although we do not have a substantive disagreement with the recommendation, we generally focus our audit resources on areas in which cost report information directly affects payments to individual providers.

RTI further suggested revising cost report instructions to reduce cost and charge mismatching and program charge misalignment in its short-term recommendations. Although RTI suggests such an action could be immediately effective for correcting the reporting of costs and charges for medical supply items that are now distributed across multiple cost centers, we note that changes to improve cost reporting now will not become part of the relative weights for several years because of lags between the submission of hospital reports and our ability to use them in setting the relative weights. Currently, we expect there will continue to be a 3-year lag between a hospital's cost report fiscal year and the year it is used to set the relative weights. Thus, even if it were possible to issue instructions immediately beginning for FY 2008, revised reporting would not affect the relative weights until at least FY 2011. Nevertheless, we agree with this recommendation, and in the proposed rule, we welcomed public input on potential changes to cost reporting instructions to improve consistency between how charges are reported on cost reports and in the Medicare claims. We indicated that we would consider these changes to the cost reporting instructions as we consider further changes to the cost report below.

In the summary of the comments above, we stated that some commenters believed that RTI's recommendation to incoporate edits to reject cost reports or require more intensive audits will not solve the mismatch problem because hospitals' reporting is consistent with cost reporting instructions. The commenters instead recommended that hospitals be educated to report costs and charges in a manner that is consistent with how MedPAR groups charges. However, other commenters supported more intensive auditiing of cost reports. In response to these comments, we stated above that we agree with the initiative to educate hospitals to improve cost reporting and that we intend to inform the fiscal intermediaries/MAC of this educational initiative. We also stated that we intend to provide the fiscal intermediaries/MAC of this educational initiative. We also stated that we intend to provide fiscal intermediaries/MAC and hospitals with guidance on how to address requests for changes in cost reporting practices from hospitals.

Comment: Some commenters supported the use of the Standard Analytic File (SAF) to calculate CCRs, as used by RTI in its study, as the SAF provides more detailed charge data on supplies, drugs and radiology services, which would improve the payment accuracy for those revenue centers with significant charges.

Response: We appreciate the comment on the use of the SAF to calculate national CCRs. The RTI study used the SAF to extract detailed charge information for selected revenue codes with potential aggregation bias and used this information in the creation of the synthetic CCRs. However, because we are not expanding the CCRs using regression adjustments for FY 2008, it is not necessary to use the SAF to compute the relative weights in this final rule with comment period. Rather, we are using the FY 2006 MedPAR file and FY 2005 hospital cost reports to calculate the national CCRs.

Comment: Many commenters noted that, while the proposed rule seems to suggest that methods of addressing charge compression should be considered together with implementation of an HSRV methodology, these two issues (charge compression and HSRV) need not and should not be linked. The commenters reiterated their opposition to implementation of the HSRV methodology, as previously expressed in comments on the FY 2007 proposed rule, arguing that the method is flawed and may even introduce more bias into the relative weight calculations. Another commenter (who also opposed implementation of the HSRV methodology) stated that should the HSRV method be implemented, many DRG weights could move in one direction if the charge compression adjustments were implemented in FY 2008, and then move in the other direction if the HSRV method were to be implemented in FY 2009. This commenter requested that CMS delay both changes for at least one year, and implement the HSRV method and the regression-based CCRs only after issuing a formal proposal with a thorough analysis that is made available to the public for review and comment. One commenter stated that the RTI revisions should be reviewed in combination with the severity-based system recommended by RAND and should not be adopted in FY 2008. The commenter stated that CMS and the provider community should evaluate these recommendations and implement them together in FY 2009. One commenter stated that the combined use of hospital-specific charges and a national CCR will result in a distortion of the DRG weights and a shifting of Medicare payments among hospitals, *not* based on resource utilization, but rather on a mathematical calculation. This commenter recommended that CMS review the impact of using hospital-specific

charges and costs to determine whether the national CCR has created inaccurate DRG weights.

MedPAC commented that adopting cost-based HSRV weights would result in substantial additional improvements in payment accuracy. MedPAC believed that the HSRV methodology removes all of the differences in the level of costs across hospitals, and is preferable to CMS' current method used for standardization, which is incomplete and introduces avoidable errors into the computation of payment weights. Two other commenters supported the adoption of the HSRV methodology and strongly opposed the current methodology and believed it is flawed for the following reasons: (1) The proposed formula derives a national average charge based on all hospitals being weighted equally, which disadvantages hospitals located in historically ''low charge'' States, and results in small, rural hospitals carrying the same weight as large, urban hospitals; (2) The data being used are outdated and do not reflect the cost of new technology; (3) Costs in excess of 25 percent are omitted by CMS from ''high cost'' hospitals in the cost base, while leaving in all of the charges from those same ''high cost'' hospitals and assigning a relative value on reduced costs. Since the costs are being excluded, but not the charges, there is a corresponding mismatching of revenues and costs; (4) The data contain only audited data, and hospitals that have not been audited would not be included in the data.

These two commenters stated that CMS should test the sensitivity of weights using various methodological assumptions and share the resulting data with the public. The commenters requested that CMS should ''strive'' to create a system that improves payments and does not include the ''obvious flaws'' listed above.

Response: Many commenters expressed their concerns and opposition to the HSRV methodology last year. As we explained in response to those comments in the FY 2007 IPPS final rule, we decided not to adopt the HSRV methodology to standardize charges for FY 2007 but stated that we would undertake further analysis of the method. As we indicated in the FY 2008 IPPS proposed rule, we engaged RAND as the contractor to study alternative DRG systems. The second phase of the RAND study will include evaluating the HSRV methodology; the evaluation report will not be available until after the issuance of this final rule with comment period. Therefore, we will consider those results as we plan changes as part of the FY 2009 IPPS rulemaking process. We intend to carefully analyze how the relative weights would change if we were to adopt regression-based CCRs to address charge compression while simultaneously adopting an HSRV methodology using fully phased-in MS–DRGs. Although many commenters do not believe that the HSRV methodology and addressing charge compression should be linked, we believe, as did one commenter, that sequentially adjusting for charge compression and later adopting the HSRV methodology could create instability in IPPS payments over the next 2 years. Accordingly, we intend to include a detailed description and discussion of RAND's and any other analyses that we may undertake on these issues in the FY 2009 IPPS proposed rule.

In response to the commenters who supported adopting the HSRV methodology and believed it superior to the method used by CMS currently, in the FY 2007 IPPS final rule (71 FR 47883), we stated that there are certain administrative difficulties with adjusting charges to costs using hospital-specific CCRs. Therefore, at least until we have the opportunity to analyze the results of RAND's analysis, we are utilizing national average CCRs to determine cost. We also do not believe that the use of hospital-specific charges together with national average CCRs redistributes Medicare payments among hospitals merely based on a mathematical calculation, as one commenter indicated. On the contrary, a system that improves payment accuracy and moderates the influence of individual hospital reporting practices on a national payment system is not one which haphazardly redistributes payments. We note that, in a report issued in July 2006, the GAO found that CMS's system of national CCRs shows promise to improve payment accuracy because it reduces the impact that individual hospital-reporting practices has on the DRG relative weights (GAO–06–880, ''CMS's Proposed Approach to Set Hospital Inpatient Payments Appears Promising''). With respect to the commenters' concerns regarding inappropriate ''equal weighting'' of hospitals, under CMS' current methodology for computing national CCRs, these concerns were addressed in last year's IPPS final rule. The national CCRs are the sum of all costs divided by the sum of all charges. Thus, all hospitals are not weighted equally. Larger hospitals will have more weight than smaller hospitals in the final CCR calculation.

In response to the commenters' concerns that the data are outdated and do not reflect the costs of new technology, there is an inevitable lag between the availability of information from hospital claims or cost reports and the time it can be used to determine relative weights. We always use the most recent data available to set relative weights. Furthermore, as we noted in the FY 2007 IPPS final rule, CMS' current method of using national average CCRs eliminates the need to match claims (for FY 2008, the 2006 MedPAR) to the time period of the CCRs (for FY 2008, FY 2005 HCRIS), which would be necessary under an HSRV method that uses hospital-specific CCRs. Thus, we can use claims data from one year later under our cost-based weighting methodology. We also note that add-on payments made for the latest advancements in medical technologies may not be included in the 2-year-old hospital claims data that are used to set the relative weights.

Regarding the comments stating that CMS mismatches revenues and costs by omitting excessive costs from ''high cost'' hospitals in the cost base, while leaving in the charges from those same ''high cost'' hospitals, we note that this is not actually the case. If a hospital's costs are dropped from the national average CCR calculations, the hospital's charges are also dropped from the national average CCR calculations. Lastly, the commenters' assertion that the cost report data used for CCRs include only audited data is incorrect. If the commenters are referring to the cost report data that CMS uses to calculate the national average CCRs, we note that in accessing data for IPPS hospitals from HCRIS, we select all IPPS hospitals, and do not only select hospitals whose cost reports are audited.

Comment: MedPAC submited comments on the method we use to calculate the national CCRs for the cost-based relative weights. The methodology to calculate the national CCRs is described in section II.H. of the preamble of this final rule with comment period. MedPAC suggested that we standardize the Medicare charges and costs used to calculate the national CCRs from the Medicare cost reports to adjust for differences in local wage levels, IME, and DSH. The standardization would be consistent with the use of national standardized charges by revenue center also used in the calculation of cost-based relative weights from the MedPAR.

Response: While we did not propose any changes to the cost-based relative weights methodology, we appreciate the comment on maintaining consistency

among our data sources. Although we currently standardize charges from the MedPAR file when calculating relative weights, we do not standardize costs and charges from hospital cost reports, as MedPAC recommended. We may consider this recommendation as we continue to refine our methodology for calculating relative weights. However, we note that there would be no need to standarize costs and charges from hospital cost reports under an HSRV methodology.

b. Medium-Term Recommendations

RTI recommended that we expand the MedPAR file to include separate fields that disaggregate several existing charge departments. For compatibility with prior years' data, the new fields should partition the existing ones rather than recombine charges. RTI recommended including additional fields in the MedPAR file for the hospital departments that it statistically disaggregated in its report, as well as intermediate care, observation beds, other special nursing codes, therapeutic radiation and EEG, and possibly others. As with some of RTI's earlier recommendations with respect to cost reports, we will examine this suggestion in conjunction with other competing priorities CMS has been given for our information systems. We have limited information systems resources, and we will need to consider whether the time constraints we have to develop the IPPS final rule, in conjunction with the inconvenience of using the SAF and accounting for charge compression through regression, will justify the infrastructure cost to our information systems of incorporating these variables into the MedPAR.

Finally, RTI's medium-term recommendations include encouraging providers to use existing standard cost centers, particularly those for Blood and Blood Administration and for Therapeutic Radiology, in the current Medicare cost report. We believe this is closely related to the recommendation for improved cost reporting instructions. Therefore, we will consider this recommendation as part of any further effort we may undertake to revise cost reporting instructions or change the cost report.

Comment: Some commenters supported expanding the MedPAR file to include separate fields to disaggregate additional cost centers. One commenter supported this recommendation and suggested that the assignment of revenue codes and charges to revenue centers in MedPAR should be reviewed and changed to better reflect hospital accounting practices as reflected on the Medicare cost report.

Response: We will consider suggestions for modifying MedPAR in conjunction with other competing priorities we have for our information systems. Further, while we support the efforts of the national hospital associations to streamline hospital's reporting practices, we note that CMS does not instruct hospitals in the appropriate revenue codes to use because hospitals have discretion as to where and how they allocate charges based on their own financial system needs.

c. Long-Term Recommendations

RTI's long-term recommendations include adding new cost centers to the Medicare cost report and/or undertaking the following activities:

- Add ''Devices, Implants and Prosthetics'' under the line for ''Medical Supplies Charged to Patients.'' Consider also adding a similar line for IV Solutions as a subscripted line under the line for ''Drugs Charged to Patients.''
- Add CT Scanning and MRI as subscripted lines under the line for ''Radiology-Diagnostic.'' About one-third of hospitals that offer CT Scanning and/or MRI services are already reporting these services on nonstandard line numbers. More consistent reporting for both cost centers would eliminate the need for statistical estimation on the radiology CCRs.
- In consultation with hospital industry representatives, determine the best way to separate cardiology cost centers and add a new standard cost center for cardiac catheterization and/or for all other cardiac diagnostic laboratory services. About 20 percent of hospitals already include a nonstandard line on their cost reports for catheterization. Creating a new standard cost center could improve consistency in reporting and substantially improve the program charge mismatching that now occurs.
- In consultation with hospital industry representatives, consider establishing a new cost center to capture intermediate care units as distinct from routine or intensive care.
- Establish expert study groups or other research vehicles to study options for improving patient-level charging within nursing units. Nursing accounts for one-fourth of IPPS charges and 41 percent of the computed costs from our claims analysis file. Historically, nursing charges and costs have been assigned to patients without relying on individual measures of service use. Consideration should be given to finding ways to improve precision in nursing cost finding that will improve relative resource weights without adding substantial administrative costs to either the Medicare program or to hospitals.

We agree with RTI that attention should be paid to these issues as we consider changes to the Medicare cost report. The cost report has not been revised in nearly 10 years. During this time, there have been significant changes to the Medicare statute and regulations that have affected the Medicare payment policies. Necessary incremental changes have been made to the Medicare cost report over the years to accommodate the Medicare wage index, disproportionate share payments, indirect and direct graduate medical education payments, reporting of uncompensated care costs, among others. The adoption of cost-based weights for the IPPS beginning in FY 2007 has brought further attention to the importance of the Medicare cost report and how hospitals report costs and charges. We recently began doing a comprehensive review of the Medicare cost report and plan to make updates that will consider its many uses. As we update the cost report, we will give strong consideration to RTI's recommendations and potential long-term improvements that could be made to the IPPS cost-based relative weighting methodology.

Comment: Several commenters made recommendations for how the relative weights would be calculated under a 3-year transition from the current DRGs to the new MS–DRGs. Some commenters suggested three options as follows:

(1) Use two GROUPERs (CMS DRGs and MS–DRGs) and then blend the weights for each individual case.

(2) Blending current DRG weights with MS–DRG weights: To calculate a blended cost-based weight, CMS could first calculate cost-based weights using the current DRGs. CMS could then calculate cost-based weights using the MS–DRGs. The blended weight for each MS–DRG would be based on the weighted average relative weights (based on the current DRGs from which cases group into the new MS–DRGs) and the MS–DRG weight. Under this approach, CMS would continue to calculate cost-based weights for the current DRGs during the first 2 years of the transition period. This approach recognizes that a case has different relative weights in the new system versus the current DRG system.

(3) Blending MS–DRG base and severity level weights: CMS would blend the actual MS–DRG weight with the weight of the base MS–DRG. The base MS–DRG weight is determined by

using expected case mix volume among severity levels. For example, if an MS–DRG was subdivided into two subgroups: with the non-CC DRG accounting for 90 percent of the cases and the other 10 percent in the CC DRG, these ratios would be used to blend the base and the DRG-specific weight. Under this approach, CMS would not have to calculate weights using two different DRG systems. On the other hand, this approach does not use the current system when calculating the blended rates.

The commenters noted that while option 1 would provide the most accurate blended weights, it is the most burdensome to implement because it would require use of two GROUPERs, whereas under options 2 and 3, CMS would only use the blended relative weights, allowing hospitals and Medicare contractors to use only one grouping software.

MedPAC suggested that CMS adopt a 2-year transition period for MS–DRGs to coincide with the remainder of the current transition period for implementing cost-based weights, so as to ''balance the payment impacts of implementing severity refinements and cost-based weights.'' MedPAC suggested that a 2-year transition might work as follows: CMS could group cases using the MS–DRG grouper beginning in FY 2008, but then use a blended weight for each category. The blended weight for an MS–DRG would reflect partly the weight that would have been assigned under an MS–DRG system with fully implemented cost-based weights. The weight for each MS–DRG in FY 2008 would be a blend of two parts:

- 50 percent of the average DRG weight that would have been attached to cases in the MS–DRG from the 2006 MedPAR file under a policy of ⅓ charge-based weights and ⅔ cost-based weights. These DRG weights are the ones that would have applied to the same cases under the FY 2008 policy if CMS simply continued the transition to cost-based weights without changing the DRG definitions.
- 50 percent of the CMS refined weights for the MS–DRG for FY 2008. In FY 2009, cases would be grouped in the MS–DRGs and the weight for each MS–DRG would be a 100 percent cost-based weight.

Response: We have carefully considered each comment in determining whether there should be a transition period for the relative weights computed using MS–DRGs, the length of the transition and how to compute weights during the transition. We also considered how to accommodate a transition to MS–DRG relative weights with the continuing transition to cost-based weights. Although we received strong general support for adopting the MS–DRGs, we do believe that some transition is warranted to mitigate the magnitude of potential changes in payment to hospitals that could occur in one year. Furthermore, we agree with MedPAC that a two-year transition period that coincides with the remainder of the transition period for implementing cost-based weights is appropriate. By having these changes occur simultaneously over the same transition period, we can avoid having large changes in payment that would occur with sequential implementation. Further, we can also accomplish all of the payment reforms according to the same schedule. Accordingly, we are implementing a 2-year transition to MS–DRGs. For FY 2008, the first year of the transition, 50 percent of the relative weight for each MS–DRG will be based on the CMS DRG relative weight and 50 percent will be based on the MS–DRG relative weight. In FY 2009, the relative weights will be based entirely on the MS–DRG relative weight. The blended relative weights for FY 2008 are computed as follows:

First, using the Version 24.0 GROUPER, relative weights are calculated based on 100 percent costs and 100 percent charges, respectively (see section II.H. of the preamble of this final rule with comment period for a description of the cost- and charge-based calculations). Then these weights are blended using two-thirds of the cost-based weights and one-third charge-based weights to establish the CMS DRG portion of the transition weights.

Second, using the Version 25.0 GROUPER, relative weights are calculated based on 100 percent costs and 100 percent charges, respectively (see section II.H. of the preamble of this final rule with comment period for a description of how we compute cost-based and charge-based weights). These weights are then blended using two-thirds of the cost-based weights and one-third charge-based weights to establish the MS–DRG portion of the transition weights.

Under the transition blend we are adopting in this final rule with comment period, we group cases to MS–DRGs (using the Version 25.0 GROUPER), but the payment weight for each DRG is a 50/50 blend of the MS–DRG weight and the CMS DRG weight. Thus, we had to determine a blended weight for each DRG. Using the claims in the FY 2006 MedPAR database that we used to compute cost-based weights under the Version 24.0 GROUPER, we grouped each case to a CMS DRG (using the Version 24.0 GROUPER) and an MS–DRG (using the Version 25.0 GROUPER). Commonly, a set of cases that grouped to a single MS–DRG grouped to two or more CMS DRGs. Therefore, we determined an average CMS DRG weight for all cases that grouped to each MS–DRG. Specifically, we summed the CMS DRG weights of all the cases that grouped to each MS–DRG and then divided that number by the transfer-adjusted case count. To establish the final blended weight for each DRG, we added 50 percent of the MS–DRG weight to 50 percent of the average CMS DRG weight for that MS–DRG. These final blended relative weights are listed in Table 5 of this final rule with comment period.

Comment: Some commenters expressed concern about the continued transition from charge-based weights to cost-based weights, in light of RTI's recommendations to alleviate charge compression on the relative weights and the proposal to introduce MS–DRGs. For FY 2008, we proposed that the relative weights would be based on one-third charges and two-third costs. Some commenters suggested that this transition should be delayed until the public comments associated with cost reporting and charge compression can be addressed. We have also received comments expressing concern on the potential fluctuations in hospital payment if we were to implement both RTI's recommendations on charge compression along with the MS–DRG system. In both cases, commenters suggested delaying the transition from charge-based to cost-based weights by maintaining the relative weights at two-third charges and one-third costs. MedPAC also expressed concern about continuing the transition to cost-based weights. However, unlike the commenter above, MedPAC suggested that CMS discontinue the transition period to cost-based weights and implement 100 percent cost-based weights in FY 2008. MedPAC's recommendation to discontinue the transition to cost-based weights presumed full introduction of the MS–DRGs in FY 2008. The commenters believed the payment fluctuations that will occur with full implementation of MS–DRGs can be mitigated by fully adopting cost weights. However, as suggested above, MedPAC also suggested as an alternative adopting MS–DRG weights according to the same schedule as the cost-based weights.

Response: We appreciate the commenters' expressing concerns about the continued transition to cost-based relative weights and the potential changes in payment from the

application of this methodology. In the FY 2007 IPPS final rule, we discussed our rationale for implementing cost-based weights over a 3-year transition period. We stated that the 3-year transition would mitigate the annual payment effects from the changes to the relative weights while we further study whether to make adjustments to account for charge compression. We believe that the cost-based methodology reduces bias in the relative weights and makes Medicare's payments more accurate for both medical and surgical DRGs. Therefore, any delays in the transition would not further our goal of payment accuracy. We believe that current efforts to improve cost reporting and our decision not to implement regression-based CCRs will alleviate concerns about additional fluctuations in hospital payments from further changes to the relative weight methodology. Furthermore, we believe that, for some types of hospitals (such as rural hospitals), the payment changes from MS–DRGs are the opposite of those that will occur from the transition to cost-based weights. For this reason, we believe a 2-year transition of the MS–DRG system that coincides with the remaining two years of the transition to cost-based weights will reduce the magnitude of annual payment changes and achieve our long-term goal of improvements in payment accuracy. Therefore, we are continuing with the 3-year transition to cost-based weights. For FY 2008, the DRG relative weights will be a blend of 33 percent of charge-based weights and 67 percent of cost-based weights. For the first year of the MS–DRG transition, the relative weights will be a blend of 50 percent of the CMS–DRG weight and 50 percent of the MS–DRG weight.

F. Hospital-Acquired Conditions, Including Infections

1. General

Medicare's IPPS encourages hospitals to treat patients efficiently. Hospitals receive the same DRG payment for stays that vary in length. In many cases, complications acquired in the hospital do not generate higher payments than the hospital would otherwise receive for other cases in the same DRG. To this extent, the IPPS does encourage hospitals to manage their patients well and to avoid complications, when possible. However, complications, such as infections, acquired in the hospital can lead to higher Medicare payments in two ways. First, the treatment of complications can increase the cost of hospital stays enough to generate outlier payments. However, the outlier payment methodology requires that hospitals experience large losses on outlier cases (for example, in FY 2007, the fixed-loss amount was $24,485 before a case qualified for outlier payments, and the hospital then only received 80 percent of its estimated costs above the fixed-loss cost threshold). Second, under the MS–DRGs we are adopting in this final rule with comment period, there are 258 sets of DRGs that are split into 2 or 3 subgroups based on the presence or absence of a major CC (MCC) or CC. If a condition acquired during the beneficiary's hospital stay is one of the conditions on the MCC or CC list, the result may be a higher payment to the hospital under the MS–DRGs. (We refer readers to section II.D. of this final rule with comment period for a detailed discussion of DRG reforms.)

2. Legislative Requirement

Section 5001(c) of Pub. L. 109–171 requires the Secretary to select, by October 1, 2007, at least two conditions that are (a) high cost or high volume or both, (b) result in the assignment of a case to a DRG that has a higher payment when present as a secondary diagnosis, and (c) could reasonably have been prevented through the application of evidence-based guidelines. For discharges occurring on or after October 1, 2008, hospitals will not receive additional payment for cases in which one of the selected conditions was not present on admission. That is, the case will be paid as though the secondary diagnosis was not present. Section 5001(c) provides that we can revise the list of conditions from time to time, as long as the list contains at least two conditions. Section 5001(c) also requires hospitals to submit the secondary diagnoses that are present at admission when reporting payment information for discharges on or after October 1, 2007.

3. Public Input

In the FY 2007 IPPS proposed rule (71 FR 24100), we sought input from the public regarding conditions with evidence-based guidelines that should be selected in order to implement section 5001(c) of Pub. L. 109–171. The comments that we received were summarized in the FY 2007 IPPS final rule (71 FR 48051 through 48053). In the FY 2008 IPPS proposed rule (72 FR 24716), we again sought formal public comment on conditions that we proposed to select under section 5001(c). As discussed below, in this final rule with comment period, we first summarize the comments we received on the FY 2007 IPPS proposed rule. We then explain our detailed proposals included in the FY 2008 proposed rule, followed by a summary of the public comments on each condition proposed and our responses to those public comments.

In summary, the majority of the comments that we received in response on the FY 2007 IPPS proposed rule addressed conceptual issues concerning the selection, measurement, and prevention of hospital-acquired infections. Many commenters encouraged CMS to engage in a collaborative discussion with relevant experts in designing, evaluating, and implementing this section. The commenters urged CMS to include individuals with expertise in infection control and prevention, as well as representatives from the provider community, in the discussions.

Many commenters supported the statutory requirement for hospitals to submit information regarding secondary diagnoses present on admission beginning in FY 2008, and suggested that it would better enable CMS and health care providers to more accurately differentiate between comorbidities and hospital-acquired complications. MedPAC, in particular, noted that this requirement was recommended in its March 2005 Report to Congress and indicated that this information is important to Medicare's value-based purchasing efforts. Other commenters cautioned us about potential problems with relying on secondary diagnosis codes to identify hospital-acquired complications, and indicated that secondary diagnosis codes may be an inaccurate method for identifying true hospital-acquired complications.

A number of commenters expressed concerns about the data coding requirement for this payment change and asked for detailed guidance from CMS to help them identify and document hospital-acquired complications. Other commenters expressed concern that not all hospital-acquired infections are preventable and noted that sicker and more complex patients are at greater risk for hospital-acquired infections and complications. Commenters suggested that CMS include standardized infection-prevention process measures, in addition to outcome measures of hospital-acquired infections.

Some commenters proposed that CMS expand the scope of the payment changes beyond the statutory minimum of two conditions. They noted that the death, injury, and cost of hospital-acquired infections are too high to limit this provision to only two conditions. Commenters also recommended that CMS annually select additional hospital

acquired complications for the payment change. Conversely, a number of commenters proposed that CMS initially begin with limited demonstrations to test CMS' methodology before nationwide implementation. One commenter recommended that CMS include appropriate consumer protections to prevent providers from billing patients for the nonreimbursed costs of the hospital-acquired complications and to prevent hospitals from selectively avoiding patients perceived at risk of complications.

In addition to the broad conceptual suggestions, some commenters recommended specific conditions for possible inclusion in the payment changes, which we discussed in detail in the preamble of the proposed rule and in section II.D.4. of this final rule with comment period. We also discuss throughout section II.D. of the preamble of this final rule with comment period other comments that we have considered in developing hospital-acquired conditions that would be subject to reporting.

As it is not addressed elsewhere, we are responding here to the comment about hospitals billing patients for costs of hospital-acquired complications that are not counted as MCCs and CCs. Section 5001(c) does not make the additional cost of a hospital acquired complication a noncovered cost. The additional costs that a hospital would incur as a result of a hospital-acquired complication remains a covered Medicare cost that is included in the hospital's IPPS payment. Medicare's payment to the hospital is for all inpatient hospital services provided during the stay. The hospital cannot bill the beneficiary for any charges associated with the hospital-acquired complication. With respect to the concern about a hospital avoiding patients that are at high risk of complications, we note that the policy is selecting only those conditions that are ''reasonably preventable.'' Thus, we are only selecting those conditions where, if hospital personnel are engaging in good medical practice, the additional costs of the hospital-acquired condition will, in most cases, be avoided and the risk of selectively avoiding patients at high risk of complications will be minimized. We further note that Medicare's high cost outlier policy is unaffected by section 5001(c). The hospital's total charges for all inpatient services provided during the stay will continue to be used to determine whether the case qualifies for an outlier payment. Thus, there will continue to be limitations on a hospital's financial risk of treating high cost cases even if, despite the hospital maintaining good medical practice to avoid complications, a reasonably preventable condition occurs after admission. Finally, as stated further below, we are continuing to work to identify exclusions for situations where the policy should not apply for the selected condition.

4. Collaborative Effort

CMS worked with public health and infectious disease experts from the Centers for Disease Control and Prevention (CDC) to identify a list of hospital-acquired conditions, including infections, as required by section 5001(c) of Pub. L. 109–171. As previously stated, the selected conditions must meet the following three criteria: (a) high cost or high volume or both; (b) result in the assignment of the case to a DRG that has a higher payment when present as a secondary diagnosis; and (c) could reasonably have been prevented through the application of evidence-based guidelines. CMS and CDC staff also collaborated on developing a process for hospitals to submit a Present on Admission (POA) indicator with each secondary condition. The statute requires the Secretary to begin collecting this information as of October 1, 2007. The POA indicator is required in order for us to determine which of the selected conditions developed during a hospital stay. The current electronic format used by hospitals to obtain this information (ASC X12N 837, Version 4010) does not provide a field to obtain the POA information. We issued instructions requiring acute care IPPS hospitals to submit the POA indicator for all diagnosis codes, effective October 1, 2007, through Change Request No. 5499, with a release date of May 11, 2007. The instructions specify how hospitals under the IPPS submit this information in segment K3 in the 2300 loop, data element K301 on the ASC X12N 837, Version 4010 claim. Specific instructions on how to select the correct POA indicator for a diagnosis code are included in the ICD–9–CM Official Guidelines for Coding and Reporting. These guidelines can be found at the following Web site: *http://www.cdc.gov/nchs/datawh/ftpserv/ftpicd9/ftpicd9.htm.*

CMS and CDC staff also received input from a number of groups and organizations on hospital-acquired conditions, including infections. Many of these groups and organizations recommended the selection of conditions mentioned in the FY 2007 IPPS final rule, including the following because of the high cost or high volume (frequency) of the condition, or both, and because in some cases preventable guidelines already exist:

- Surgical site infections. The groups and organizations stated that there were evidence-based measures to prevent the occurrence of these infections which are currently measured and reported as part of the Surgical Care Improvement Program (SCIP).
- Ventilator-associated pneumonias. The groups and organizations indicated that these conditions are currently measured and reported through SCIP. However, other organizations counseled against selecting these conditions because they believed it was difficult to obtain good definitions and that it was not always clear which ones are hospital acquired.
- Catheter associated bloodstream infections.
- Pressure ulcers.
- Hospital falls. The injury prevention groups included this condition among a group referred to as ''serious preventable events,'' also commonly referred to as ''never events'' or ''serious reportable events.'' A serious preventable event is defined as a condition which should not occur during an inpatient stay.
- Bloodstream infections/septicemia. Some commenters suggested that we focus on one specific organism, such as staph aureus septicemia.
- Pneumonia. Some commenters recommended the inclusion of a broader group of pneumonia patients, instead of restricting cases to ventilator-associated pneumonias. Some commenters mentioned that while prevention guidelines exist for pneumonia, it is not clear how effective these guidelines may be in preventing pneumonia.
- Vascular catheter associated infections. Commenters indicated that there are CDC guidelines for these infections. Other commenters stated that while this condition certainly deserves focused attention by health care providers, there is not a unique ICD 9 CM code that identifies vascular catheter-associated infections. Therefore, these commenters suggested that there would be difficulty separately identifying these conditions.
- Clostridium difficile-associated disease (CDAD). Several commenters identified this condition as a significant public health issue. Other commenters indicated that, while prevalence of this condition is emerging as a public health problem, there is not currently a strategy for reasonably preventing these infections.
- Methicillin-resistant staphylococcus aureus (MRSA). Several commenters indicated that MRSA has

become a very common bacteria occurring both in and outside the hospital environment. However, other organizations stated that the code for MRSA (V09.0, Infection with microorganism resistant to penicillins Methicillin-resistant staphylococcus aureus) is not currently classified as a CC. Therefore, the commenters stated that MRSA does not lead to a higher reimbursement when the code is reported.

• Serious preventable events. As stated earlier, some commenters representing injury prevention groups suggested including a broader group of conditions than hospital falls which should not be expected to occur during a hospital admission. They noted that these conditions are referred to as ''serious preventable events,'' and include events such as the following: (a) leaving an object in during surgery; (b) operating on the wrong body part or patient, or performing the wrong surgery; (c) air embolism as a result of surgery; and (d) providing incompatible blood or blood products. Other commenters indicated serious preventable events are so rare that they should not be selected as a hospital condition that cannot result in a case being assigned to a higher paying DRG.

5. Criteria for Selection of the Hospital-Acquired Conditions

CMS and CDC staff greatly appreciate the many comments and suggestions offered by organizations and groups that were interested in providing input into the selection of the initial hospital-acquired conditions.

CMS and CDC staff evaluated each recommended condition under the three criteria established by section 1886(d)(4)(D)(iv) of the Act. In order to meet the higher payment criterion, the condition selected must have an ICD–9–CM diagnosis code that clearly identifies the condition and is classified as a CC, or as an MCC (as proposed for the MS DRGs in the proposed rule). Some conditions recommended for inclusion among the initial hospital-acquired conditions did not have codes that clearly identified the conditions. Because there has not been national reporting of a POA indicator for each diagnosis, there are no Medicare data to determine the incidence of the reported secondary diagnoses occurring after admission. To the extent possible, we used information from the CDC on the incidence of these conditions. CDC's data reflect the incidence of hospital-acquired conditions in 2002. We also examined FY 2006 Medicare data on the frequency that these conditions were reported as secondary diagnoses. We developed the following criteria to assist in our analysis of the conditions. The conditions described were those recommended for inclusion in the initial hospital-acquired infection provision.

• Coding—Under section 1886(d)(4)(D)(ii)(I) of the Act, a discharge is subject to the payment adjustment if ''the discharge includes a condition identified by a diagnosis code'' selected by the Secretary under section 1886(d)(4)(D)(iv) of the Act. We only selected conditions that have (or could have) a unique ICD–9–CM code that clearly describes the condition. Some conditions recommended by the commenters would require the use of two or more ICD-9-CM codes to clearly identify the conditions. Although we did not exclude these conditions from further consideration, the need to utilize multiple ICD-9-CM codes to identify them may present operational issues. For instance, the complexities associated with selecting septicemia as a hospital-acquired condition subject to section 5001(c) of the DRA may present operational issues in identifying whether or not the condition was present upon admission. The vast number of clinical scenarios that we would have to account for could complicate implementation of the provision.

• Burden (High Cost/High Volume)—Under section 1886(d)(4)(D)(iv)(I) of the Act, we must select cases that have conditions that are high cost or high volume, or both.

• Prevention guidelines—Under section 1886(d)(4)(D)(iv)(II) of the Act, we must select codes that describe conditions that could reasonably have been prevented through application of evidence-based guidelines. We evaluated whether there is information available for hospitals to follow to prevent the condition from occurring.

• MCC or CC—Under section 1886(d)(4)(D)(iv)(III) of the Act, we must select codes that result in assignment of the case to a DRG that has a higher payment when the code is present as a secondary diagnosis. The condition must be an MCC or a CC that would, in the absence of this provision, result in assignment to a higher paying DRG.

• Considerations—We evaluated each condition above according to how it meets the statutory criteria in light of the potential difficulties that we would face if the condition were selected.

6. Selection of Hospital-Acquired Conditions

We discuss below our analysis of each of the conditions that were raised as possible candidates for selection under section 5001(c) of Pub. L. 109–171 according to the criteria described above in section II.D.5. of the preamble of this final rule with comment period. We also discuss any considerations, which would include any administrative issues surrounding the selection of a proposed condition. For example, the condition may only be able to be identified by multiple codes, thereby requiring the development of special GROUPER logic to also exclude similar or related ICD–9–CM codes from being classified as a CC. Similarly, a condition acquired during a hospital stay may arise from another condition that the patient had prior to admission, making it difficult to determine whether the condition was reasonably preventable. Following a discussion of each condition, we provide a summary that describes how each condition was considered for the proposed rule, whether we are selecting it to be subject to the provision in this FY 2008 IPPS final rule or if it will continue to be considered for the future. In the proposed rule, we presented 13 conditions. The summary discussion and table reflect changes to the order of the conditions. The summary presents the conditions that best meet the statutory criteria and which conditions we are selecting to be subject to the payment adjustment for hospital-acquired conditions beginning in FY 2009. In the proposed rule, we encouraged comments on these conditions. We asked commenters to recommend how many and which conditions should be selected in the FY 2008 IPPS final rule along with justifications for these selections. We also encouraged additional comments on clinical, coding, and prevention issues that may affect the conditions selected. While, in this final rule with comment period, we present these 13 conditions in the order they were proposed, we have re-ranked these conditions based on how well they meet the statutory criteria according to compelling public health reasons in addition to public comment and internal analysis.

We received approximately 127 timely public comments on this section from hospitals and health care systems, provider associations, consumer groups, purchasers, medical device manufacturers, pharmaceutical companies, information technology companies, and health care research organizations.

Comment: Some commenters urged CMS to use discretion in selecting hospital-acquired conditions that will be subject to the statutory provision and suggested that CMS limit the number of conditions selected. A large majority of

commenters strongly supported the inclusion of three of the serious preventable events (object left in surgery, air embolism and blood incompatibility) and generally commented that the remaining conditions are not always preventable or may not have unique codes established.

A number of commenters both supported and opposed the conditions other than the three serious preventable events mentioned above. The commenters were generally optimistic about considering proposed conditions for the future upon resolution of suggested issues. A few commenters proposed that CMS initially begin with limited demonstrations to test CMS' methodology before nationwide implementation. These commenters specifically mentioned the Michigan Hospital Association Keystone Center.

The commenters who suggested not including conditions other than the three serious preventable events mentioned above noted that sicker and more complex patients are at greater risk for hospital-acquired infections and complications. In particular, the commenters believed some of the conditions proposed are a biological inevitability at a certain predictable rate regardless of safe practice. In addition, the commenters expressed concern about the difficulty of distinguishing between hospital-acquired and community-acquired infections. The commenters also believed that CMS should use incentives to allow hospitals to adopt innovative infection prevention technologies and provide necessary treatments for infections. Finally, a few commenters submitted additional conditions that were not included in the 13 conditions we considered in the proposed rule.

Response: In general, we discuss our responses to each of these comments below in the context of the specific conditions they reference. With respect to the general comment that we should only select the three serious preventable events, we believe there is a significant public health interest in selecting more than just these conditions. According to the commenters, many of the other conditions we considered are not always preventable and, therefore, should not be selected. The statute indicates that the provision should apply to conditions that ''could reasonably have been prevented through the application of evidence-based guidelines.'' Therefore, for this reason, we are selecting other conditions in addition to the serious preventable events to be subject to this provision in this final rule with comment period. We discuss the application of the statutory criteria to each of the conditions we considered below and why we believe the condition is ''reasonably preventable.''

(a) Catheter-Associated Urinary Tract Infections

Coding—ICD–9–CM code 996.64 (Infection and inflammatory reaction due to indwelling urinary catheter) clearly identifies this condition. The hospital would also report the code for the specific type of urinary infection. For instance, when a patient develops a catheter associated urinary tract infection during the inpatient stay, the hospital would report code 996.64 and 599.0 (Urinary tract infection, site not specified) to clearly identify the condition. There are also a number of other more specific urinary tract infection codes that could also be coded with code 996.64. These codes are classified as CCs. If we were to select catheter-associated urinary tract infections, we would implement the decision by not counting code 996.64 and any of the urinary tract infection codes listed below when both codes are present and the condition was acquired after admission. If only code 966.64 were coded on the claim as a secondary diagnosis, we would not count it as a CC.

Burden (High Cost/High Volume)—CDC reports that there are 561,667 catheter-associated urinary tract infections per year. For FY 2006, there were 11,780 reported cases of Medicare patients who had a catheter associated urinary tract infection as a secondary diagnosis. The cases had average charges of $40,347 for the entire hospital stay. According to a study in the *American Journal of Medicine,* catheter-associated urinary tract infection is the most common nosocomial infection, accounting for more than 1 million cases in hospitals and nursing homes nationwide.[22] Approximately 11.3 million women in the United States had at least one presumed acute community-acquired urinary tract infection resulting in antimicrobial therapy in 1995, with direct costs estimated at $659 million and indirect costs totaling $936 million. Nosocomial urinary tract infection necessitates one extra hospital day per patient, or nearly 1 million extra hospital days per year. It is estimated that each episode of symptomatic urinary tract infection adds $676 to a hospital bill. In total, according to the study, the estimated annual cost of nosocomial urinary tract infection in the United States ranges between $424 and $451 million.

Prevention guidelines—There are widely recognized guidelines for the prevention of catheter-associated urinary tract infections. Guidelines can be found at the following Web site: *http://www.cdc.gov/ncidod/dhqp/gl_catheter_assoc.html.*

CC—Codes 996.64 and 599.0 are classified as CCs in the CMS DRGs as well as in the MS–DRGs.

Considerations—The primary prevention intervention would be not using catheters or removing catheters as soon as possible, both of which are worthy goals because once catheters are in place for 3 to 4 days, most clinicians and infectious disease/infection control experts do not believe urinary tract infections are preventable. While there may be some concern about the selection of catheter associated urinary tract infections, it is an important public health goal to encourage practices that will reduce urinary tract infections. Approximately 40 percent of Medicare beneficiaries have a urinary catheter during hospitalization based on Medicare Patient Safety Monitoring System (MPSMS) data.

As stated above in the Coding section, this condition is clearly identified through ICD–9–CM code 996.64. Code 996.64 is classified as a CC. The hospital would also report the code for the specific type of urinary infection. For instance, when a patient develops a catheter associated urinary tract infection during the inpatient stay, the hospital would report codes 996.64 and 599.0 or another more specific code that clearly identifies the condition. These codes are classified as CCs under the CMS DRGs as well as the MS–DRGs. To select catheter-associated urinary tract infections as one of the hospital-acquired conditions that would not be counted as a CC, we would not classify code 996.64 as a CC if the condition occurred after admission. Furthermore, we would also not classify any of the codes listed below as CCs if present on the claim with code 996.64 because these additional codes identify the same condition. The following codes represent specific types of urinary infections. We did not include codes for conditions that could be considered chronic urinary infections, such as code 590.00 (Chronic pyelonephritis, without lesion or renal medullary necrosis). Chronic conditions may indicate that the condition was not acquired during the current stay. We would not count code 996.64 or any of the following codes representing acute urinary

[22] Foxman, B.: ''Epidemiology of urinary tract infections: incidence, morbidity, and economic costs,'' *The American Journal of Medicine,* 113 Suppl 1A, pp. 5s–13s, 2002.

infections if they developed after admission and were coded together on the same claim.

- 112.2 (Candidiasis of other urogenital sites)
- 590.10 (Acute pyelonephritis, without lesion of renal medullary necrosis)
- 590.11 (Acute pyelonephritis, with lesion of renal medullary necrosis)
- 590.2 (Renal and perinephric abscess)
- 590.3 (Pyeloureteritis cystica)
- 590.80 (Pyelonephritis, unspecified)
- 590.81 (Pyelitis or pyelonephritis in diseases classified elsewhere)
- 590.9 (Infection of kidney, unspecified)
- 595.0 (Acute cystitis)
- 595.3 (Trigonitis)
- 595.4 (Cystitis in diseases classified elsewhere)
- 595.81 (Cystitis cystica)
- 595.89 (Other specified type of cystitis, other)
- 595.9 (Cystitis, unspecified)
- 597.0 (Urethral abscess)
- 597.80 (Urethritis, unspecified)
- 599.0 (Urinary tract infection, site not specified)

We believe the condition of catheter-associated urinary tract infection meets all of our criteria for selection as one of the initial hospital-acquired conditions. We can easily identify the cases with ICD–9–CM codes. The condition is a CC under both the CMS DRGs and the MS–DRGs. The condition meets our burden criterion with its high cost and high frequency. There are prevention guidelines on which the medical community agrees to avoid catheter-associated urinary tract infections. We believe this condition best meets the criteria discussed. Therefore, we proposed the selection of catheter-associated urinary tract infections as one of the initial hospital-acquired conditions.

We encouraged comments on both the selection of this condition and the related conditions that we proposed to exclude from being counted as CCs.

Comment: Most commenters suggested that a large number of physicians believe urinary tract infections may not be preventable after several days of catheter placement. A few commenters submitted the following statement from the proposed rule (72 FR 24719): ''once catheters are in place for 3–4 days, most clinicians and infection control experts do not believe UTIs are preventable.'' The commenters also noted the potential difficulty in identifying this condition at admission.

Still other commenters believed this condition is difficult to code because the ICD–9–CM codes do not distinguish between catheter-associated inflammation and infection. The commenters asked CMS to consider a new code for ''inflammatory reaction from indwelling catheter'' distinct from ''catheter associated urinary tract infection.''

In addition, the commenters noted that prevention guidelines are still being debated. The commenters referenced the prevention guideline published in 1981 and posted on the Web site at: *http://www.cdc.gov/ncidod/dhqp/gl_catheter_assoc.html.*

A few commenters also recommended exceptions for this condition, including patients with immunosuppression, patients who have a catheter placed for therapeutic installation of antimicrobial/chemotherapy agent, patients with sustained urinary tract trauma, and patients in need of permanent use of a catheter.

Commenters stated that Medicare reimbursement does not cover the increased cost of antibiotic-coated catheters which have been shown to reduce the incidence of catheter infections. These same commenters asked CMS to change Medicare payment policy to encourage the application of proven existing technology.

Commenters provided two potential examples of unintended consequences if this condition is to be implemented. First, the commenters believed that physicians and hospitals will increase urinalysis testing to identify urinary tract infections prior to admission. Second, the commenters suggested that physicians and hospitals will use more antibiotics to ''clean'' the urine of bacteria upon admission.

Response: CMS seeks to reduce the incidence of preventable catheter associated urinary tract infections by reducing unnecessary and inappropriate use of indwelling urinary catheters in hospitalized Medicare patients. There is widespread evidence that catheters may lead to an increased risk of infection if they are in place for several days. In addition, there are prevention guidelines to assist physicians in determining how long a urinary catheter should be left in place that can prevent catheter-associated urinary tract infections. Therefore, we believe that catheter-associated urinary tract infections are reasonably preventable by following well-established prevention guidelines, and we are selecting this condition.

Concerning the request for the creation of a new code for ''inflammatory reaction from indwelling catheter,'' we recommend the commenter contact the CDC. The CDC is responsible for maintaining the diagnosis part of the ICD–9–CM codes. We encourage commenters to send specific requests for new or revised ICD–9–CM diagnosis codes to Donna Pickett, CDC, at 3311 Toledo Road, Room 2402, Hyattsville, MD 20782, or via e-mail to *dfp4@cdc.gov.* Additional information on requesting a new ICD–9–CM diagnosis code may be obtained from the Web site at: *http://www.cdc.gov/nchs/icd9.htm.*

The commenters are correct that prevention guidelines for avoiding catheter-associated urinary tract infections are scheduled to be updated by CDC's Healthcare Infection Control Practices Committee (HICPAC). The National Quality Forum (NQF) is currently working to update hospital-acquired infection definitions. The effort currently underway will update prevention guidelines that have been in place since 1981. We believe the ongoing effort to update prevention guidelines for avoiding catheter-associated urinary tract infections provides further evidence that this condition is a strong candidate to be selected because of how well it meets the statutory criteria.

We appreciate the many comments urging CMS to consider implementing exceptions for catheter-associated urinary tract infections when it is a hospital-acquired condition but is not preventable. We will carefully consider these suggestions as we plan for the implementation of this new requirement in FY 2009.

With respect to the comment about encouraging the use antibiotic-coated catheters, we continue to work in cooperation with device companies and other associations to ensure that Medicare beneficiaries receive the most current therapeutic modalities. We annually update Medicare inpatient hospital payment rates to reflect hospital resource use for the latest medical technology and other innovations in how care is delivered.

We do not agree there will be significant unintended consequences of selecting catheter-associated urinary tract infections. As stated earlier, we believe this condition is generally avoidable if medical professionals carefully follow longstanding prevention guidelines. We believe hospitals, physicians, and others that treat Medicare patients will focus on taking medically appropriate steps to determine the length of time a catheter is in place. We do not believe it is inappropriate to perform a urinalysis upon admission to the hospital if clinically indicated. We would not

consider doing so an unintended consequence.

We appreciate all the public comments on this condition, and have considered all of these points of view. We believe this condition meets the criteria of the DRA:

- There are unique codes that identify catheter-associated urinary tract infections that are currently considered to be a CC under the MS–DRGs;
- Prevention guidelines currently exist and will be updated prior to the October 1, 2008 implementation date of this provision; and
- As shown above, catheter-associated urinary tract infections are high cost/high volume conditions.

Therefore, in this final rule with comment period, we are selecting the condition of catheter-associated urinary tract infections to be subject to the provision beginning October 1, 2008.

(b) Pressure Ulcers

Coding—Pressure ulcers are also referred to as decubitus ulcers. The following codes clearly identify pressure ulcers.

- 707.00 (Decubitus ulcer, unspecified site)
- 707.01 (Decubitus ulcer, elbow)
- 707.02 (Decubitus ulcer, upper back)
- 707.03 (Decubitus ulcer, lower back)
- 707.04 (Decubitus ulcer, hip)
- 707.05 (Decubitus ulcer, buttock)
- 707.06 (Decubitus ulcer, ankle)
- 707.07 (Decubitus ulcer, heel)
- 707.09 (Decubitus ulcer, other site)

Burden (High Cost/High Volume)—This condition is both high-cost and high volume. For FY 2006, there were 322,946 reported cases of Medicare patients who had a pressure ulcer as a secondary diagnosis. These cases had average charges for the hospital stay of $40,381.

Prevention guidelines—Prevention guidelines can be found at the following Web sites: *http://www.npuap.org/positn1.html* and *http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.4409.*

CC—Decubitus ulcer codes are classified as CCs under the CMS DRGs. Codes 707.00, 707.01, and 707.09 are CCs under the MS–DRGs. Codes 707.02 through 707.07 are considered MCCs under the MS–DRGs. As discussed earlier, MCCs result in even larger payments than CCs.

Considerations—Pressure ulcers are an important hospital acquired complication. Prevention guidelines exist (non-CDC) and can be implemented by hospitals. Clinicians may state that some pressure ulcers present on admission cannot be identified (skin is not yet broken (Stage I) but damage to tissue is already done and skin will eventually break down). However, by selecting this condition, we would provide hospitals the incentive to perform careful examination of the skin of patients on admission to identify decubitus ulcers. If the condition is present on admission, the provision will not apply. In the proposed rule, we proposed to include pressure ulcers as one of our initial hospital-acquired conditions. This condition can be clearly identified through ICD–9–CM codes. These codes are classified as a CC under the CMS DRGs and as a CC or MCC under the MS–DRGs. Pressure ulcers meet the burden criteria because they are both high cost and high frequency cases. There are clear prevention guidelines. While there is some question as to whether all cases with developing pressure ulcers can be identified on admission, we believe the selection of this condition will result in a closer examination of the patient's skin on admission and better quality of care. We welcomed comments on the proposed inclusion of this condition.

Comment: A majority of commenters supported the intent of selecting the condition of pressure ulcers, but had concerns about how the provision would be implemented in practice. A large majority of commenters believed hospitals will more carefully examine the skin of patients if this condition is selected. However, many commenters cited difficulty in detecting stage 1 pressure ulcers on admission, particularly in certain patient populations.

The commenters cited the Guidance to Surveyors for Long-Term Care Facilities (CMS Manual System Pub. 100–07, State Operations Provider Certification issued November 2004, page 5), noting CMS'' previous acknowledgment that some pressure ulcers are ''unavoidable.'' The commenters cited evidence of an increased risk of pressure ulcer reoccurrence after a patient has had at least one stage IV ulcer.

The commenters expressed concern about how this condition will be coded upon admission. The commenters also suggested that present-on-admission coding of pressure ulcers will rely solely on physicians' notes and diagnoses, according to Medicare coding rules. The commenters were concerned that the current ICD–9–CM codes for pressure ulcers are not precise enough to delineate differences in wound depth, which is an important factor for determining the severity of an ulcer.

The commenters recommended that CMS supplement ICD–9–CM codes for pressure ulcers with severity adjustments for complications and comorbidities that are present on admission. Because patients with pressure ulcers often have other complicating conditions, the commenters stated that it is unlikely that pressure ulcers would potentially be the only secondary diagnosis that would change the DRG assignment from one without a CC to one with a CC. Lastly, the commenters noted that accurate identification of a pressure ulcer requires the education and expertise of a trained physician.

The commenters suggested that CMS should exclude patients enrolled in the Medicare hospice benefit and patients with certain diagnoses that make them more highly prone to pressure ulcers such as hemiplegia, quadriplegia, wasting syndrome, with advanced AIDS and/or protein malnutrition associated with a variety of serious end stage illnesses.

Response: We appreciate the overwhelming public support for the intent of selecting this condition, provided we can address the concerns raised in the public comments. We acknowledge the commenters' concern that CMS previously stated some pressure ulcers are ''unavoidable.'' However, we believe improved screening to identify pressure ulcers upon admission for inpatient care will increase the quality of care. By screening patients entering the hospital for pressure ulcers, the ulcers will be discovered earlier and improve treatment of this preventable condition. We agree that the POA coding of pressure ulcers will rely on the attending physician, who has primary responsibility for documenting and diagnosing a patient's clinical conditions. Pressure ulcers that are identified through screening upon admission that are documented properly will continue to be assigned to a higher paying DRG.

With respect to the comment about patients with pressure ulcers having other complications and comorbidities, we note that many of the new MS–DRGs are subdivided into two or more severity levels. We will continue to evaluate the need for additional severity levels within base MS–DRGs. On the specific issue of the MS–DRGs that include pressure ulcers, we note that these MS–DRGs are already divided into three severity levels as follows:

- MS–DRG 573 (Skin Graft &/or Debridement for Skin Ulcer or Cellulitis with MCC)

• MS–DRG 574 (Skin Graft &/or Debridement for Skin Ulcer or Cellulitis with CC)

• MS–DRG 575 (Skin Graft &/or Debridement for Skin Ulcer or Cellulitis without CC/MCC)

We are aware that many patients with pressure ulcers may also have other comorbid and complicating conditions that will continue to assign the patient to a higher paying DRG. We do not believe this fact should preclude physicians and hospitals from screening patients for pressure ulcers upon admission. As we indicated in the proposed rule (72 FR 24726), we believe only a minority of cases will have one of the selected conditions as the only CC or MCC present on the claim. However, we believe it will continue to lead to improvements in the quality of care. We believe the selection of this condition will lead the physician and hospital to perform a proper skin exam upon admission, leading to earlier identification and treatment of pressure ulcers.

With respect to the comment that accurate identification of a pressure ulcer requires the education and expertise of a trained physician, we agree. Hospitals should be using properly educated and trained physicians to identify and treat pressure ulcers (as well as all other medical conditions).

We appreciate all the public comment on this condition, and have considered all of these points of view. We believe the condition of pressure ulcers meets the criteria of the DRA:

• There are unique codes that identify pressure ulcers that are currently considered to be a CC or an MCC under the MS–DRGs;

• Prevention guidelines to avoid pressure ulcers currently exist; and

• As shown above, pressure ulcers are high-cost/high-volume conditions.

Therefore, in this final rule with comment period, we are selecting the condition of pressure ulcers to be subject to the payment adjustment for hospital acquired conditions beginning October 1, 2008. We referred the matter concerning the need for additional, detailed ICD–9–CM codes to the CDC. We believe further specificity in the ICD–9–CM codes will aid in distinguishing early from late stage pressure ulcers prior to the implementation date of this provision on October 1, 2008.

Serious Preventable Events

Serious preventable events are events that should not occur in health care. The injury prevention community has developed information on serious preventable events. CMS reviewed the list of serious preventable events and identified those events for which there was an ICD–9–CM code that would assist in identifying them. We identified four types of serious preventable events to include in our evaluation. These include leaving an object in a patient; performing the wrong surgery (surgery on the wrong body part, wrong patient, or the wrong surgery); air embolism following surgery; and providing incompatible blood or blood products. Three of these serious preventable events have unique ICD–9–CM codes to identify them. There is not a clear and unique code for surgery performed on the wrong body part, wrong patient, or the wrong surgery. Each of these events is discussed separately.

(c) Serious Preventable Event—Object Left in during Surgery

Coding Retention of a foreign object in a patient after surgery is identified through ICD–9–CM code 998.4 (Foreign body accidentally left during a procedure).

Burden (High Cost/High Volume)—For FY 2006, there were 764 cases reported of Medicare patients who had an object left in during surgery reported as a secondary diagnosis. The average charges for the hospital stay were $61,962. This is a rare event. Therefore, it is not high volume. However, an individual case will likely have high costs, given that the patient will need additional surgery to remove the foreign body. Potential adverse events stemming from the foreign body could further raise costs for an individual case.

Prevention guidelines—There are widely accepted and clear guidelines for the prevention of this event. This event should not occur. Prevention guidelines for avoiding leaving objects in during surgery are located at the following Web site: *http://www.qualityindicators.ahrq.gov/psi_download.htm.*

CC—This code is a CC under the CMS DRGs as well as under the MS DRGs.

Considerations—There are no significant considerations for this condition. There is a unique ICD–9–CM code and wide agreement on the prevention guidelines. We proposed to include this condition as one of our initial hospital-acquired conditions. The cases can be clearly identified through an ICD–9–CM code. This code is a CC under both the CMS DRGs and the MS–DRGs. There are clear prevention guidelines. While the cases may not meet the high frequency criterion, they do meet the high-cost criterion. Individual cases can be high cost. In the proposed rule, we welcomed comments on including this condition as one of our initial hospital-acquired conditions.

Comment: A large majority of commenters supported CMS' efforts to identify the condition of ''object left in surgery'' as one that should not occur in the hospital setting. The commenters supported selecting this condition in this year's IPPS rule.

The commenters applauded CMS for identifying a hospital acquired condition that has discrete ICD–9–CM codes and known methods of prevention. In addition, a few commenters noted that prevention guidelines for this condition are fully identified and endorsed by the NQF. MedPAC also complimented CMS for its efforts to identify ''object left in surgery'' and stated that CMS should not allow a case to be classified as a CC/MCC if this ''never event'' occurs during a patient's stay.

The commenters urged CMS to make exceptions for objects deliberately left in place in surgery as opposed to accidental retained foreign objects. The commenters noted that a patient may return to the hospital months or years after an object was left in during surgery, and it is necessary to have POA codes to identify patients that return to a different hospital to have the object removed. All of the commenters recognized that this event can cause great harm to patients.

Response: We believe exceptions for this condition are not necessary. The code that identifies this event, 998.4 (Foreign body accidentally left during a procedure) specifically states that the object was accidentally left in during the surgery. This code would not be assigned if a device or implant was deliberately implanted into a patient. In addition, as stated earlier, we recognize the important role of the attending physician in designating whether or not the serious preventable event occurred during the current admission. We agree with the commenters that a patient may return to the hospital months or years after the surgery to have the foreign object removed. In this circumstance, the hospital would code the condition as present on admission and the provision would not apply. By documenting the event early, the correct POA code can be applied. We agree with the commenters that this serious preventable event should be selected as a hospital-acquired condition in this final rule with comment period. Therefore, we are including this condition in the list of those to be implemented in FY 2009.

(d) Serious Preventable Event—Air Embolism

Coding—An air embolism is identified through ICD–9–CM code 999.1 (Complications of medical care, NOS, air embolism).

Burden (High Cost/High Volume)—This event is rare. For FY 2006, there were 45 reported cases of air embolism for Medicare patients. The average charges for the hospital stay were $66,007.

Prevention guidelines—there are clear prevention guidelines for air embolisms. This event should not occur. Serious preventable event guidelines can be found at the following Web site: *http://www.qualityindicators.ahrq.gov/psi_download.htm.*

CC—This code is a CC under the CMS DRGs and is an MCC under the MS–DRGs.

Considerations—There are no significant considerations for this condition. There is a unique ICD–9–CM code and wide agreement on the prevention guidelines. In addition, as stated earlier, the condition is a CC under the CMS DRGs and an MCC under the MS–DRGs. While the condition is rare, it does meet the cost burden criterion because individual cases can be expensive. Therefore, air embolism is a high-cost condition because average charges per case are high. In the proposed rule, we welcomed comments on the proposal to include this condition.

Comment: A large number of commenters supported CMS' efforts to select this condition as one that should not occur in the hospital setting. The commenters considered this an appropriate condition to include for the final rule. The commenters applauded CMS for identifying a hospital acquired condition that has discrete ICD–9–CM codes and known methods of prevention.

In addition, the commenters noted that prevention guidelines for this condition are fully identified and endorsed by the NQF. MedPAC also complimented CMS for its efforts to identify ''air embolism'' and stated that CMS should not allow a case to be classified as a CC/MCC if this ''never event'' occurs during a patient's stay.

The commenters urged CMS to make exceptions for situations when air embolism is technically unavoidable because of a special surgical procedure. All of the commenters recognized that this event can cause great harm to patients.

Response: We appreciate the support for the selection of this condition. We also welcome specific recommendations that would clearly define an appropriate exception to this condition, including any appropriate ICD–9–CM diagnosis and procedure codes which the commenter believes clearly define such an occurrence and the justification for an exception. At this point, we do not believe such an exception is necessary.

We agree with commenters that this serious preventable event should be included in the FY 2008 final rule. Therefore, we are including the condition of air embolism in the list of those to be implemented in FY 2009.

(e) Serious Preventable Event—Blood Incompatibility

Coding—Delivering ABO-incompatible blood or blood products is identified by ICM–9–CM code 999.6 (Complications of medical care, NOS, ABO incompatibility reaction).

Burden (High Cost/High Volume)—This event is rare. Therefore, it is not high volume. For FY 2006, there were 33 reported cases of blood incompatibility among Medicare patients, with average charges of $46,492 for the hospital stay. Therefore, individual cases have high costs.

Prevention guidelines—There are prevention guidelines for avoiding the delivery of incompatible blood or blood products. The event should not occur. Serious preventable event guidelines can be found at the following Web site: *http://www.qualityindicators.ahrq.gov/psi_download.htm*

CC—This code is a CC under the CMS DRGs as well as the MS–DRGs.

Considerations—There are no significant considerations for this condition. There is a unique ICD–9–CM code which is classified as a CC under the CMS DRGs as well as the MS–DRGs. There is wide agreement on the prevention guidelines. While this may not be a high-volume condition, average charges per case are high. Therefore, we believe this condition is a high-cost condition and, therefore, meets our burden criterion. We proposed to include this condition as one of our initial hospital acquired conditions.

Comment: A large number of commenters supported CMS' efforts to identify ''blood incompatibility'' as one condition that should not occur in the hospital setting. The commenters considered this an appropriate condition to include for FY 2009. The commenters applauded CMS for identifying a hospital acquired condition that has discrete ICD–9–CM codes and known methods of prevention. In addition, the commenters noted that prevention guidelines for this condition are fully identified and endorsed by the NQF. MedPAC also complimented CMS for its efforts to identify ''blood incompatibility'' and stated that CMS should not allow a case to be classified as a CC/MCC if this ''never event'' occurs during a patient's stay.

The commenters urged CMS to make exceptions for situations when blood incompatibility is technically unavoidable in emergencies when patients deliberately receive unmatched blood. All of the commenters recognized that this event can cause great harm to patients.

Response: As suggested by commenters, hospitals should not be transfusing incompatible blood. The condition meets the criteria for being selected. It is a potential hospital acquired condition that has discrete ICD–9–CM codes and known methods of prevention. Prevention guidelines for this condition are fully identified and endorsed by the NQF. We acknowledge that there may a rare emergency where a hospital does not have compatible blood available for transfusion. We welcome specific recommendations that would define circumstances where blood incompatibility is unavoidable, including any appropriate ICD–9–CM diagnosis and procedure codes, which the commenters believe clearly define such an occurrence. If providers can provide such a clinical scenario that can be identified by existing or new ICD–9–CM codes, we will consider excluding this situation from the provision. We agree with the commenters that this serious preventable event should be included in the FY 2008 final rule. Therefore, we are including the condition of blood incompatibility in the list of those to be implemented in FY 2009.

(f) Staphylococcus Aureus Bloodstream Infection/Septicemia

Coding—ICD–9–CM Code 038.11 (Staphylococcus aureus septicemia) identifies this condition. However, the codes selected to identify septicemia are somewhat complex. The following ICD–9–CM codes may also be reported to identify septicemia:

- 995.91 (Sepsis) and 995.92 (Severe sepsis). These codes are reported as secondary codes and further define cases with septicemia.
- 998.59 (Other postoperative infections). This code includes septicemia that develops postoperatively.
- 999.3 (Other infection). This code includes but is not limited to sepsis/septicemia resulting from infusion, injection, transfusion, and vaccination (ventilator-associated pneumonia is also included here).

Burden (High Cost/High Volume)—CDC reports that there are 290,000 cases of staphylococcus aureus infection annually in hospitalized patients of which approximately 25 percent are bloodstream infections or sepsis. For FY 2006, there were 29,500 cases of Medicare patients who had staphylococcus aureus infection reported as a secondary diagnosis. The average charges for the hospital stay were $82,678. Inpatient staphylococcus aureus result in an estimated 2.7 million days in excess length of stay, $9.5 billion in excess charges, and approximately 12,000 inpatient deaths per year.

Prevention guidelines—CDC guidelines are located at the following Web site: *http://www.cdc.gov/ncidod/dhqp/gl_intravascular.html.*

CC—Codes 038.11, 995.91, 998.59, and 999.3 are classified as CCs under the CMS DRGs and as MCCs under the MS–DRGs.

Considerations—Preventive health care associated bloodstream infections/septicemia that are preventable are primarily those that are related to a central venous/vascular catheter, a surgical procedure (postoperative sepsis) or those that are secondary to another preventable infection (for example, sepsis due to catheter-associated urinary tract infection). Otherwise, physicians and other public health experts may argue whether septicemia is reasonably preventable. The septicemia may not be simply a hospital acquired infection. It may simply be a progression of an infection that occurred prior to admission. Furthermore, physicians cannot always tell whether the condition was hospital-acquired. We examined whether it might be better to limit the septicemia cases to a specific organism (for example, code 038.11 (Staphylococcus aureus septicemia)). CDC staff recommended that we focus on staphylococcus aureus septicemia because this condition is a significant public health issue. As stated earlier, there is a specific code for staphylococcus aureus septicemia, code 038.11. Therefore, the cases would be easy to identify. However, as stated earlier, while this type of septicemia is identified through code 038.11, coders may also provide sepsis code 995.91 or 995.92 to more fully describe the staphylococcus aureus septicemia. Codes 995.91 and 995.92 are reported as secondary codes and further define cases with septicemia. Codes 995.91 and 995.92 are CCs under the CMS DRGs and MCCs under the MS–DRGs.

- 998.59 (Other postoperative infections). This code includes septicemia that develops postoperatively.
- 999.3 (Other infection). This code includes but is not limited to sepsis/septicemia resulting from infusion, injection, transfusion, and vaccination (ventilator-associated pneumonia is also indexed here).

To implement this condition as one of our initial ones, we would have to exclude the specific code for staphylococcus aureus septicemia, 038.11, and the additional septicemia codes, 995.91, 995.92, 998.59, and 999.3.

We acknowledge that there are additional issues involved with the selection of this condition that may involve developing an exclusion list of conditions present on admission for which we would not apply a CC exclusion to staphylococcus aureus septicemia. For example, a patient may come into the hospital with a staphylococcus aureus infection such as pneumonia. The pneumonia might develop into staphylococcus aureus septicemia during the admission. It may be appropriate to consider excluding cases such as those of patients admitted with staphylococcus aureus pneumonia that subsequently develop staphylococcus aureus septicemia from the provision. In order to exclude cases that did not have a staphylococcus aureus infection prior to admission, we would have to develop a list of specific codes that identified all types of staphylococcus aureus infections such as code 482.41 (Pneumonia due to staphylococcus aureus). We likely would not apply the new provision to cases of staphylococcus aureus septicemia if a patient were admitted with staphylococcus aureus pneumonia. However, if the patient had other types of infections, not classified as being staphylococcus aureus, and then developed staphylococcus aureus septicemia during the admission, we would apply the provision and exclude the staphylococcus aureus septicemia as a CC. We were not able to identify any other specific ICD–9–CM codes that identify specific infections as being due to staphylococcus aureus.

Other types of infections, such as urinary tract infections, would require the reporting of an additional code, 041.11 (Staphylococcus aureus), to identify the staphylococcus aureus infection. This additional coding presents administrative issues because it will not always be clear which condition code 041.11 (Staphylococcus aureus) is describing. We do not believe it would be appropriate to make code 041.11, in combination with other codes, subject to the hospital-acquired conditions provision until we better understand how to address the administrative issues that would be associated with their selection. Therefore, we would exclude staphylococcus aureus septicemia cases with code 482.41 reported as being subject to the hospital-acquired conditions provision. Stated conversely, we would allow staphylococcus aureus septicemia to count as a CC if the patient was admitted with staphylococcus aureus pneumonia.

We recognize that there may be other conditions which we should consider for this type of exclusion. We proposed to include staphylococcus aureus bloodstream infection/septicemia (code 038.11) as one of our initial hospital-acquired conditions. We also proposed to exclude codes 995.91, 998.59, and 999.3 from counting as an MCC/CC when they were reported with code 038.11. The condition can be clearly identified through ICD 9 CM codes that are classified as CC under the CMS DRGs and MCCs under the MS–DRGs. The condition meets our burden criterion by being both high cost and high volume. There are prevention guidelines which we acknowledge are subject to some debate among the medical community. We also acknowledge that we would have to exclude this condition if a patient were admitted with a staphylococcus aureus infection of a more limited location, such as pneumonia. In the proposed rule, we encouraged commenters to make suggestions on this issue and to recommend any other appropriate exclusion for staphylococcus aureus septicemia. We also encouraged comments on the appropriateness of selecting staphylococcus aureus septicemia as one of our proposed initial hospital acquired conditions.

Comment: Many commenters opposed CMS' proposed selection of this condition as part of the FY 2008 final rule. There were a minority of commenters who strongly supported the selection of this condition. These commenters noted the existence of technologies that allow the physician to determine the presence of Staphylococcus Aureus upon admission. Many more commenters stated that accurately identifying staphylococcus aureus septicemia on admission will be difficult, particularly in patients who may have a staphylococcus aureus infection in a limited location. Several commenters referenced the FY 2008 IPPS proposed rule, which stated ''physicians cannot always tell whether the condition was hospital acquired.'' Other commenters also noted that there is still debate

among physicians regarding the prevention guidelines for staphylococcus aureus septicemia. The proliferation of changes in coding guidelines presents coding problems for hospitals to accurately identify present-on-admission status according to some comments. Specifically, the commenters noted that codes to identify sepsis are very complex and have had recent changes. For instance, there is a code that currently includes septicemia that develops postoperatively, but does not clearly distinguish between intravascular and catheter-associated sources of septicemia. The commenters also suggested that additional coding may be necessary to accurately identify this condition in the many forms it often presents upon admission. Some commenters suggested that the addition of codes may create a challenge for coding staff to identify the correct code.

A large majority of commenters urged CMS to narrow the category for staphylococcus aureus septicemia to include only patients for whom it is reasonably clear that the hospital was the source of the infection and that it could have been reasonably prevented.

Response: We appreciate the plethora of comments regarding staphylococcus aureus septicemia. The commenters were very insightful and presented the challenges of selecting this condition in the FY 2008 final rule.

We agree that the recent proliferation of ICD–9–CM codes for this condition will make it difficult to code and could present an administrative burden on hospitals. In addition, we are sensitive to the difficulty of identifying when a disease has progressed to sepsis or septicemia. Given the course of progression to septicemia, it can be very difficult for a clinician to appropriately diagnose staphylococcus aureus septicemia as present on admission.

While we acknowledge the many concerns raised by the commenters, we continue to believe that hospital acquired staphylococcus aureus septicemia remains a significant public health issue. We are aware of the continued need to prevent Staphylococcus Aureus septicemia in the hospital setting. Therefore, we plan to engage in a collaborative discussion with relevant experts to identify the circumstances when staphylococcus aureus septicemia is preventable. If we can identify when staphylococcus aureus septicemia is a reasonably preventable condition and have codes to distinguish those situations, we will consider this condition for future years. We appreciate the many comments and suggestions as we consider staphylococcus aureus septicemia for selection in the future, and look forward to receiving more public input to identify only instances when this condition is preventable.

Therefore, we are not selecting this condition in this final rule with comment period. We plan to collaborate with the public on this important public health issue and continue to consider the condition for selection in the FY 2009 final rule. We encourage and welcome public comment to further evaluate this condition.

(g) Ventilator Associated Pneumonia (VAP) and Other Types of Pneumonia

Coding—Pneumonia is identified through the following codes:

- 073.0 (Ornithosis with pneumonia)
- 112.4 (Candidiasis of lung)
- 136.3 (Pneumocystosis)
- 480.0 (Pneumonia due to adenovirus)
- 480.1 (Pneumonia due to respiratory syncytial virus)
- 480.2 (Pneumonia due to parainfluenza virus)
- 480.3 (Pneumonia due to SARS-associated coronavirus)
- 480.8 (Pneumonia due to other virus not elsewhere classified)
- 480.9 (Viral pneumonia, unspecified)
- 481 (Pneumococcal pneumonia [Streptococcus pneumoniae pneumonia])
- 482.0 (Pneumonia due to Klebsiella pneumoniae)
- 482.1 (Pneumonia due to Pseudomonas)
- 482.2 (Pneumonia due to Hemophilus influenzae [H. influenzae])
- 482.30 (Pneumonia due to Streptococcus, unspecified)
- 482.31 (Pneumonia due to Streptococcus, Group A)
- 482.32 (Pneumonia due to Streptococcus, Group B)
- 482.39 (Pneumonia due to other Streptococcus)
- 482.40 (Pneumonia due to Staphylococcus, unspecified)
- 482.41 (Pneumonia due to Staphylococcus aureus)
- 482.49 (Other Staphylococcus pneumonia)
- 482.81 (Pneumonia due to Anaerobes)
- 482.82 (Pneumonia due to Escherichia coli [E. coli])
- 482.83 (Pneumonia due to other gram-negative bacteria)
- 482.84 (Pneumonia due to Legionnaires' disease)
- 482.89 (Pneumonia due to other specified bacteria)
- 482.9 (Bacterial pneumonia unspecified)
- 483.0 (Pneumonia due to Mycoplasma pneumoniae)

There is not a unique code that identifies ventilator-associated pneumonia. The creation of a code for ventilator-associated pneumonia was discussed at the September 29, 2006 meeting of the ICD–9–CM Coordination and Maintenance Committee meeting. Many issues and concerns were raised at the meeting concerning the creation of this proposed new code. It has been difficult to define ventilator-associated pneumonia. We plan to continue working closely with the CDC to develop a code that can accurately describe this condition for implementation in FY 2009. CDC will address the creation of a unique code for this condition at the September 28–29, 2007 ICD–9–CM Coordination and Maintenance Committee meeting.

While we list 27 pneumonia codes above, our clinical advisors do not believe that all of the codes mentioned could possibly be associated with ventilator-associated pneumonia. Our clinical advisors specifically question whether the following codes would ever represent cases of ventilator-associated pneumonia: 073.0, 480.0, 480.1, 480.2, 480.3, 480.8, 480.9, and 483.0. Therefore, we have a range of pneumonia codes, all of which may not represent cases that could involve ventilator-associated pneumonia. In addition, we do not have a specific code that uniquely identifies cases of ventilator-associated pneumonia.

Burden (High Cost/High Volume)—CDC reports that there are 250,205 ventilator-associated pneumonias per year. Because there is not a unique ICD–9–CM code for ventilator-associated pneumonia, there is not accurate data for FY 2006 on the number of Medicare patients who had this condition as a secondary diagnosis. However, we did examine data for FY 2006 on the number of Medicare patients who listed pneumonia as a secondary diagnosis. There were 92,586 cases with a secondary diagnosis of pneumonia, with average charges of $88,781. According to the journal *Critical Care Medicine*, patients with ventilator-associated pneumonia have statistically significantly longer intensive care lengths of stay (mean = 6.10 days) than those who do not (mean = 5.32–6.87 days). In addition, patients who develop ventilator-associated pneumonia incur, on average, greater than or equal to $10,019 in additional hospital costs compared to those who do not.[23]

[23] Safdar N.: Clinical and Economic Consequences of Ventilator-Associated Pneumonia: a Systematic Review, *Critical Care Medicine,* 2005, 33(10), pp. 2184–2193.

Therefore, we believe that this is a high-volume condition.

Prevention guidelines—Prevention guidelines are located at the following Web site: *http://www.cdc.gov/ncidod/dhqp/gl_hcpneumonia.html.* However, it is not clear how effective these guidelines are in preventing pneumonia. Ventilator-associated pneumonia may be particularly difficult to prevent.

CC—All of the pneumonia codes listed above are CCs under the CMS DRGs and under the MS–DRGs, except for the following pneumonia codes which are non-CCs: 073.0, 480.0, 480.1, 480.2, 480.3, 480.8, 480.9, 483.0. However, as mentioned earlier, there is not a unique ICD–9–CM code for ventilator-associated pneumonia. Therefore, this condition does not currently meet the statutory criteria for being selected.

Considerations—Hospital-acquired pneumonias, and specifically ventilator-associated pneumonias, are an important problem. However, based on our work with the medical community to develop specific codes for this condition, we have learned that it is difficult to define what constitutes ventilator-associated pneumonia. Although prevention guidelines exist, it is not clear how effective these are in preventing pneumonia. Clinicians cannot always tell which pneumonias are acquired in a hospital. In addition, as mentioned above, there is not a unique code that identifies ventilator-associated pneumonia. There are a number of codes that capture a range of pneumonia cases. It is not possible to specifically identify if these pneumonia cases are ventilator-associated or arose from other sources. Because we cannot identify cases with ventilator-associated pneumonia and there are questions about its preventability, we did not propose to select this condition as one of our initial hospital-acquired conditions. However, we welcomed public comments on how to create an ICD–9–CM code that identifies ventilator-associated pneumonia, and we encouraged participation in our September 28–29, 2007 ICD–9–CM Coordination and Maintenance Committee meeting where this issue will be discussed. We indicated that we would reevaluate the selection of this condition in FY 2009.

Comment: Some commenters urged CMS to select ventilator-associated pneumonia at this time. Most commenters recommended that CMS delay selecting this condition until a unique code is established.

Some commenters submitted an evidence-based peer-reviewed American Association for Respiratory Care (AARC) Clinical Practice Guideline (CPG) on strategies that should be disseminated and available to hospitals for the prevention of ventilator associated pneumonia. The CPG can be found at *http://www.rcjournal.com/cpgs/09.03.0869.html.* Concurrently, the AARC acknowledges that more research needs to be done in this area.

A majority of commenters believed this condition can be reasonably prevented through evidence-based medicine guidelines. These commenters noted that current unique codes for this condition are absent. These commenters urged CMS to consider the development of an explicit ICD–9–CM code for this ventilator-associated pneumonia and to select it at a later date.

Response: At the time of publication of this final rule with comment period, there is not a code associated with ventilator-associated pneumonia. Therefore, this condition does not currently meet the statutory criteria for being selected. However, the ICD–9–CM Coordination and Maintenance Committee will meet September 27–28, 2007, to discuss the creation of a unique ICD–9–CM code for this condition. Further information of the Committee's activities on diagnosis code issues can be found at the Web site: *http://www.cdc.gov/nchs/icd9.htm.* We believe that once this condition has a unique code, it should be further considered for selection beginning in FY 2009.

We believe that ventilator-associated pneumonia meets some of the criteria for being selected. There are guidelines for prevention of ventilator-associated pneumonia within CDC evidence based guidelines for healthcare associated pneumonia. More information can be found at: *http://www.cdc.gov/ncidod/dhqp/gl_hcpneumonia.html.* Furthermore, we are aware that the American Thoracic Society and the Infectious Disease Society of America collaborated to produce guidelines on the prevention of ventilator-associated pneumonia. As indicated above, most pneumonias are CCs. Therefore, it is reasonable to believe that ventilator-associated pneumonia will also be classified as a CC once a new code is created to identify it. At that time, we can further consider whether the condition is reasonably preventable and should be subject to this provision.

We appreciate all the public comment on this condition, and considered all of the respondents' point of view. While we acknowledge the clinical challenge of clearly identifying ventilator-associated pneumonia, we believe that once this condition has a unique ICD–9–CM code, coupled with well-known prevention guidelines that are the result of evidence-based medicine, we will give strong consideration for selecting this condition for FY 2009, and including it in the FY 2009 IPPS proposed rule.

(h) Vascular Catheter-Associated Infections

Coding—The proposed rule noted that the code used to identify vascular catheter associated infections is ICD–9–CM code 996.62 (Infection due to other vascular device, implant, and graft). This code includes infections associated with all vascular devices, implants, and grafts. It does not uniquely identify vascular catheter associated infections. Therefore, there was not a unique ICD–9–CM code for this infection at the time of the proposed rule. CDC and CMS staff requested that the ICD–9–CM Coordination and Maintenance Committee discuss the creation of a unique ICD–9–CM code for vascular catheter associated infections because the issue is important for public health. The proposal to create a new ICD–9–CM was discussed at the March 22 23, 2007 meeting of the ICD–9–CM Coordination and Maintenance Committee. A summary of this meeting can be found at: *http://www.cdc.gov/nchs/icd9.htm.* In the proposed rule, we indicated that coders would have to assign code 996.62 plus an additional code for the infection such as septicemia to identify vascular catheter-associated infections. Therefore, a list of specific infection codes would have to be developed to go along with code 996.62 if CDC did not create a code for vascular catheter-associated infections. If the vascular catheter-associated infection was hospital-acquired, the DRG logic would have to be modified so that neither the code for the vascular catheter associated infection along with the specific infection code would count as a CC. However, even if these actions were taken, we were concerned that code 996.62 is not specific to vascular catheter-associated infections.

Burden (High Cost/High Volume)—CDC reports that there are 248,678 central line associated bloodstream infections per year. It appears to be both high cost and high volume. However, we were not able to identify Medicare data on these cases because there is no existing unique ICD–9–CM code.

Prevention guidelines—CDC guidelines are located at the following Web site: *http://www.cdc.gov/ncidod/dhqp/gl_intravascular.html.*

CC—Code 996.62 is a CC under the CMS DRGs and the MS–DRGs. However, as stated earlier, this code is broader than vascular catheter associated infections. Therefore, at the time of the

proposed rule, there was not a unique ICD–9–CM code to identify the condition, and it did not meet the statutory criteria to be selected. However, the proposed rule indicated that we will be seeking to create a code(s) to identify this condition and may select it as a condition under the provision beginning in FY 2009.

Considerations—There was not yet a unique ICD–9–CM code to identify this condition at the time of the proposed rule. In the proposed rule, we indicated that if a code were created prior to October 1, 2007, we would be able to specifically identify these cases. Some patients require long-term indwelling catheters, which are more prone to infections. Ideally catheters should be changed at certain time intervals. However, circumstances might prevent such practice (for example, the patient has a bleeding diathesis). In addition, a patient may acquire an infection from another source which can colonize the catheter. As mentioned earlier, coders would also assign an additional code for the infection, such as septicemia. Therefore, a list of specific infection codes would have to be developed to go along with code 996.62. If the vascular catheter-associated infection was hospital-acquired, the DRG logic would have to be modified so that neither the code for the vascular catheter-associated infection along with the specific infection code would count as a CC. Without a specific code for infections due to a catheter, it would be difficult to identify these patients. Given the current lack of an ICD–9–CM code for this condition, we did not propose to include it as one of our initial hospital-acquired conditions. However, we believed it showed merit for inclusion in future lists of hospital acquired conditions once we had resolved the coding issues and were able to better identify the condition in the Medicare data. We indicated that we would reevaluate the selection of this condition in FY 2009.

We encouraged comments on this condition which was identified as an important public health issue by several organizations that provided recommendations on hospital-acquired conditions. We indicated that we were particularly interested in receiving comments on how we should handle additional associated infections that might develop along with the vascular catheter-associated infection.

Comment: Some commenters stated there was not a unique ICD–9–CM code for vascular catheter-associated infection. Therefore, the condition does not meet the criteria for being selected. These commenters requested that CMS consider creating an explicit code for catheter-associated infections and selecting the condition at that time. One commenter recommended that CMS examine selecting vascular-catheter associated infections and identify the condition using the CPT codes for insertion of a central venous catheter. Other commenters recommend selecting the condition and rely on the use of specific codes for the insertion of catheters to supplement the existing code 996.62 (Infection and inflammatory reaction due to other vascular device, implant, and graft). The commenters believed that this alternative approach may reduce the need to rely on a unique code for catheter associated blood stream infection (CA–BSI). Some commenters noted that it is possible to screen for bloodstream infections upon admission. Other commenters suggested that CMS exempt vascular surgery, implantable device codes, and other obvious sources of existing conditions that cause blood stream infection prior to catheter placement. Finally, the commenters suggested that CMS exclude long-term catheter insertions such as the tunneled central venous catheter using codes 365.57 through 365.66.

Response: Since the publication of the FY 2008 IPPS proposed rule, CDC has created a new code for vascular catheter-associated infection. The new code 999.31, (Infection due to central venous catheter) will become effective on October 1, 2007. It is available for public viewing along with other new codes listed on the CMS Web site at: *http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/Downloads/new_diagnosis_codes_2007.pdf.* This new code will address commenters concerns regarding coding for this condition.

We appreciate all the public comment on this condition, and have considered all of these points of view. For the proposed rule, our only barrier to selecting vascular catheter-associated infections was the absence of a unique code to identify the condition. As CDC has since created a code to identify vascular catheter-associated infections, we believe the condition meets the criteria for being selected:

- There are unique codes that identify vascular catheter-associated infections as a CC under the MS–DRGs;
- Prevention guidelines exist to avoid vascular catheter-associated infections; and
- As shown above, vascular catheter-associated infections are high-volume conditions.

At this time, we have not decided whether there are specific clinical situations where a vascular catheter associated infection would not be considered preventable. We will consider exceptions to the policy in the circumstances provided in the public comments. We will consider these suggestions before the provision becomes effective in FY 2009.

(i) Clostridium Difficile-Associated Disease (CDAD)

Coding—This condition is identified by ICD–9–CM code 008.45 (Clostridium difficile).

Burden (High Cost/High Volume)—CDC reports that there are 178,000 cases per year in U.S. hospitals. For FY 2006, there were 110,761 reported cases of Medicare patients with CDAD as a secondary diagnosis, with average charges for the hospital stay of $52,464. Therefore, this is a high-cost and high-volume condition.

Prevention guidelines—Prevention guidelines are not available. Therefore, we do not believe this condition can reasonably be prevented through the application of evidence-based guidelines.

CC—Code 008.45 is a CC under the CMS DRGs and the MS–DRGs.

Considerations—CDAD is an emerging problem with significant public health importance. If found early CDAD cases can easily be treated. However, cases not diagnosed early can be expensive and difficult to treat. CDAD occurs in patients on a variety of antibiotic regiments, many of which are unavoidable, and therefore preventability is an issue. We did not propose to include CDAD as one of our initial hospital acquired conditions at this time, given the lack of prevention guidelines. We welcomed public comments on CDAD, specifically on its preventability and whether there is potential to develop guidelines to identify it early in the disease process and/or diminish its incidence. We indicated that we would reevaluate the selection of this condition in FY 2009.

Comment: Commenters noted the current clinical debate surrounding this condition reveals that it is very difficult to prevent in all cases; it can be prevalent within the hospital setting. In addition, some commenters noted this condition may be caused by the treatment protocol prescribed for a principal diagnosis; it can also occur if the patient is immune-compromised. Finally, some commenters stated that a significant percentage of CDAD is unavoidable, and it is difficult to distinguish community acquired from hospital acquired CDAD. Commenters

also urged CMS to delay selection of this condition because there is a lack of unique codes, complication codes, and guidelines for prevention of this condition.

Response: This condition meets two of the three statutory criteria. There is an ICD–9–CM code for CDAD. The code is 008.45 (Clostridium difficile). Therefore, the condition can be clearly identified through the use of ICD–9–CM codes. Code 008.45 is also a CC under the CMS DRGs and the MS–DRGs. Also, as shown above, CDAD occurs with significant frequency in the Medicare population and is a high cost condition. However, prevention guidelines for this condition are currently unavailable. As suggested by the commenters, leading clinicians believe this condition may not be reasonably preventable because it can occur as a result of broad spectrum antibiotic administration, which is often unavoidable. Although we agree with these commenters, we are also aware of the public interest in this issue and will continue to be interested in selecting this condition if treatment protocols evolve to the point where CDAD is a preventable condition and prevention guidelines are developed.

We are not selecting this condition for implementation in the FY 2008 final rule. It does not currently meet the statutory guidelines for being selected because there are no prevention guidelines. Nevertheless, we will consider adopting this condition in the future if prevention guidelines to avoid CDAD are developed.

(j) Methicillin-Resistant Staphylococcus Aureus (MRSA)

Coding—MRSA is identified by ICD–9–CM code V09.0 (Infection with microorganisms resistant to penicillins). One would also assign a code(s) to describe the exact nature of the infection.

Burden (High Cost/High Volume)—For FY 2006, there were 95,103 reported cases of Medicare patients who had MRSA as a secondary diagnosis. The average charges for these cases were $31,088. This condition is a high-cost and high-volume infection. MRSA has become a very common bacterium occurring both in and outside of the hospital environment.

Prevention guidelines—CDC guidelines are located at the following Web site: *http://www.cdc.gov/ncidod/dhqp/pdf/ar/mdroGuideline2006.pdf.*

CC—Code V09.0 is not a CC under the CMS DRGs and the MS–DRGs. The specific infection would be identified in a code describing the exact nature of the infection, which may be a CC.

Considerations—As stated earlier, preventability may be hard to ascertain since the bacteria have become so common both inside and outside the hospital. There are also considerations in identifying MRSA infections because hospitals would report the code for MRSA along with additional codes that would describe the exact nature of the infection. We would have to develop a list of specific infections that could be the result of MRSA. We did not propose to include MRSA as one of our initial hospital-acquired conditions because the condition is not a CC. We recognize that associated conditions may be a CC. In the proposed rule, we welcomed comments on the proposal not to include this condition. Should there be support for including this condition, we requested recommendations on what codes might be selected to identify the specific types of infections associated with MRSA.

Comment: Commenters displayed a high level of interest in this condition, not only as a hospital-acquired condition, but also as a broader public health problem that continues to affect Medicare beneficiaries. Commenters noted that MRSA is both high volume and high cost, referring to the language in the proposed rule. For this reason, many commenters believed this condition should be given a unique ICD–9–CM code to be tracked in FY 2008. Furthermore, the commenters urged CMS to include it on the list of conditions for FY 2009 for which reimbursement may be withheld. Medical device companies that provide products to screen for MRSA commented in support of selecting the condition.

However, a large number of commenters had reservations about selecting this condition because MRSA is not a CC or MCC under the new MS–DRGs. Most commenters acknowledged the clear prevention guidelines for MRSA. However, they contend that there remains debate on whether MRSA is reasonably preventable. These commenters indicated MRSA is ubiquitous and may be colonizing in so many potential patients that it is difficult to determine if it is acquired in a hospital. The commenters also noted current literature reveals a strain of community acquired MRSA that may be difficult to detect upon admission to the hospital.

Response: We acknowledge the strong public health interest in reducing the number of MRSA related infections. However, MRSA does not currently meet the statutory criteria to be selected. Although there is an ICD–9–CM code to identify MRSA and CDC has prevention guidelines to reduce its incidence, we do not believe that there is a consensus among public health experts that MRSA is preventable. The public comments and the literature on this condition reveal a vigorous debate over whether MRSA is really community-acquired rather than hospital acquired given the significant potential number of patients that can be colonized with MRSA prior to admission. While this concern may be possible to address through screening patients for MRSA upon admission, the condition is not currently identified as a CC or MCC under the MS–DRGs. If present as a secondary diagnosis, the presence of MRSA alone does not lead to higher Medicare payment. Our data do not suggest that presence of MRSA alone will lead to higher hospital costs that would justify classifying it as a CC or MCC. Therefore, as the condition is not an MCC or CC, it does not meet the statutory criteria for being selected at this time.

Although we are not selecting MRSA at this time, we believe it is a precursor to several other conditions that we have selected. MRSA may be a precursor to catheter associated urinary tract infections, vascular catheter-associated infections, and mediastinitis after coronary artery bypass graft (CABG) surgery—a surgical site infection that we have selected and is discussed in more detail below.

(k) Surgical Site Infections

Coding—Surgical site infections are identified by ICD–9–CM code 998.59 (Other postoperative infection). The code does not tell the exact location or nature of the postoperative wound infection. The code includes wound infections and additional types of postoperative infections such as septicemia. The coding guidelines instruct the coder to add an additional code to identify the type of infection. To implement this condition we would have to remove both code 998.59 and the specific infection from counting as a CC if they occurred after the admission. We would have to develop an extensive list of possible infections that would be subject to the provision. We may also need to recommend the creation of a series of new ICD–9–CM codes to identify various types of surgical site infections, should this condition merit inclusion among those that are subject to the proposed hospital-acquired conditions provision.

Burden (High Cost/High Volume)—CDC reports that there are 290,485 surgical site infections each year. As stated earlier, there is not a unique code for surgical site infection. Therefore, we examined Medicare data on patients

with any type of postoperative infection. For FY 2006, there were 38,763 reported cases of Medicare patients who had a postoperative infection. These patients had average charges for the hospital stay of $79,504. We are unable to determine how many of these patients had surgical site infections.

Prevention guidelines—CDC guidelines are available at the following Web site: *http://www.cdc.gov/ncidod/dhqp/gl_surgicalsite.html.*

CC—Code 998.59 is a CC under the CMS DRGs and the MS–DRGs.

Considerations—As mentioned earlier, code 998.59 is not exclusive to surgical site infections. It includes other types of postoperative infections. Therefore, code 998.59 does not currently meet the statutory criteria for being subject to the provision because it does not uniquely identify surgical site infections. To identify surgical site infections, we would need new codes that provide more detail about the type of postoperative infection as well as the site of the infection. In addition, one would report both code 998.59 as well a more specific code for the specific type of infection, making implementation difficult. While there are prevention guidelines, it is not always possible to identify the specific types of surgical infections that are preventable. Therefore, we did not propose to select surgical site infections as one of our proposed hospital-acquired conditions at this time. However, we welcomed public comments on whether we can develop criteria and codes to identify preventable surgical site infections that would assist us in reducing their incidence. We indicated that we were exploring ways to identify surgical site infections and would reevaluate this condition in FY 2009.

Comment: A number of commenters specifically requested that CMS consider selecting mediastinitis after coronary artery bypass graft (CABG) surgery. Commenters noted that mediastinitis is a postoperative infection that can arise after CABG.

Commenters stated that the condition meets the criteria set forth in the DRA. According to the comments, mediastinitis is a frequently occurring and costly infection that will develop after CABG surgery. The commenters noted that there are unique codes to identify mediastinitis and prevention guidelines that are backed by evidence based medicine have been developed.

Response: We agree that mediastinitis meets the statutory criteria for being selected.

Coding—There are unique ICD–9–CM codes to identify the condition. The ICD–9–CM code for mediastinitis is 519.2.

Burden (High Cost/High Volume)—We examined Medicare data on patients who received a CABG operation (with codes 36.10–36.19) and also had mediastinitis (ICD–9–CM code 519.2) as a secondary diagnosis. For FY 2006, there were 108 reported cases of Medicare patients who had this postoperative infection after CABG. These patients had average charges for the hospital stay of $304,747. Therefore, mediastinitis is a high-cost condition.

Prevention guidelines—The CDC surgical site infection prevention guidelines are backed by evidence based medicine. Further information can be found at: *http://www.cdc.gov/ncidod/dhqp/gl_surgicalsite.html.*

We are selecting this condition because it meets the statutory criteria and was suggested in the public comments. We would identify the coronary artery bypass graft procedures through procedure codes 36.10 through 36.19. Therefore, when a patient has a coronary artery bypass graft performed (code 36.10 through 36.19), and a secondary diagnosis of mediastinitis (code 519.2) is reported that was not present on admission, we will not count mediastinitis as an MCC beginning October 1, 2009.

''Surgical site infections'' is a broad category, and we were looking for assistance from the public for ways to identify specific surgical site infections. We appreciate the suggestion to select mediastinitis after CABG surgery when it is a hospital acquired condition. We are selecting this condition for implementation in this FY 2008 final rule. We welcome additional recommendations for other types of surgical site infections that could also be selected and look forward to working with stakeholders and the public as we consider additional surgical site infections in the future.

(l) Serious Preventable Event—Surgery on Wrong Body Part, Patient, or Wrong Surgery

Coding—Surgery performed on the wrong body part, wrong patient, or the wrong surgery would be identified by ICD–9–CM code E876.5 (Performance of inappropriate operation). This diagnosis code does not specifically identify which of these events has occurred.

Burden (High Cost/High Volume)—As stated earlier, there are not unique ICD–9–CM codes which capture surgery performed on the wrong body part or the wrong patient, or the wrong surgery. Therefore, we examined Medicare data on the code for performance of an inappropriate operation. For FY 2006, there was one Medicare case reported with this code, and the patient had average charges for the hospital stay of $24,962. This event is rare. Therefore, it is not high volume. Individual cases could have high costs. However, we were unable to determine the impact with our limited data.

Prevention guidelines—There are guidelines to ensure that the correct surgery was performed on the correct patient or correct patient's body part. This event should not occur. Further information and prevention guidelines can be found at: *http://www.ahrq.gov/clinic/ptsafety/.*

CC—This code is not a CC under the CMS DRGs and the MS–DRGs. Therefore, it does not meet the criteria for selection under section 1886(d)(4)(D)(iv) of the Act. However, Medicare does not pay for performing surgery on the wrong body part or patient, or performing the wrong surgery. These services are not considered to be reasonable and necessary and are excluded from Medicare coverage.

Considerations—There are significant considerations for the selection of this condition. There is not a unique ICD–9–CM code that would describe the nature of the inappropriate operation. All types of inappropriate operations are included in code E876.5. Unlike other conditions, performance of an inappropriate operation is not a complication of a prior medical event that was medically necessary. Rather, in this case, there was a needed intervention but it was done to either the wrong body part or the wrong patient, or was not the correct operation. Thus, a service was completed that was not reasonable and necessary and Medicare does not pay for any inpatient service associated with the wrong surgery. It is not necessary for us to select this condition because Medicare does not pay for it under any circumstances.

Comment: A majority of commenters agreed that there are not unique codes to identify wrong surgery. In addition, these commenters pointed out that there are guidelines to ensure that the correct surgery is being performed on the correct patient or correct patient's body part. These commenters stated that wrong surgery is a serious preventable event that should not occur.

One commenter urged CMS to rank the condition—surgery on wrong body part, wrong patient, or wrong surgery (wrong site surgery)—higher in our list of hospital-acquired conditions. This commenter stated that wrong site surgery may not be rare, but rather may be quite prevalent. The commenter disagreed with CMS' belief that wrong

site surgery should not be considered as a complication because it is a risk of being in a hospital. The commenter recommended the development of specific codes for wrong site surgery.

Response: With respect to this latter comment, the commenter may have misunderstood our discussion of this issue in the proposed rule. We never asserted wrong site surgery is not a complication because it is a risk of being in a hospital. Rather, we stated the event itself is wrong and should never occur. Unlike CCs and MCCs, wrong surgery is not a complication of a prior medical event that was medically necessary. Wrong surgery is not a CC or an MCC because the entire event itself should never occur, is not reasonable and necessary and should not result in any payment to the hospital or physician. We are not selecting wrong surgery because it is not an event for which Medicare should pay less; it is an event for which Medicare should pay nothing at all.

As stated in the proposed rule, there is not a unique ICD–9–CM code that identifies surgery performed on the wrong body part or the wrong patient, or the wrong surgery. Code E876.5 (Performance of inappropriate operation) does not describe what specifically was wrong with the surgery, such as whether it was performed on the wrong side, the wrong patient, or if the wrong surgery were performed. In examining Medicare data on the code for performance of an inappropriate operation, we found only one case reported in FY 2006. We agree this is a serious issue that requires close examination and monitoring.

The proposed rule indicated that wrong surgery (right patient, wrong surgery, right surgery, wrong patient, etc.) is not a reasonable and necessary service. Therefore, it is not covered by Medicare and should not be paid. Wrong surgery is not a CC and does not meet the criteria of the statute. As stated above, there are generally recognized guidelines hospitals and physicians must follow to ensure that the correct surgery was performed on the correct patient or correct patient's body part. This event should not occur. If hospitals fail to ensure the correct surgery is performed, there are other provisions in the regulations to address this alarming event. For instance, a hospital must meet the CoPs in order to participate in Medicare. If wrong surgery was performed, the hospital could be out of compliance with the Surgical Services CoP, the Quality Assessment and Performance Improvement CoP, or potentially others. Performance of wrong surgery may suggest a systems failure or systems that do not comply with the CoPs that should be further investigated. We are interested in promoting a culture of safety and are interested in helping hospitals improve their performance. The hospital would have an opportunity to develop and present a plan of correction to avoid termination of its participation in Medicare by addressing the deficiencies that resulted in an incorrect surgery being performed. The final action that would be taken would depend on the individual circumstances and whether the hospital has addressed the problem to reduce the chance of a similar occurrence in the future. In any event, we reiterate that the way for Medicare to address wrong surgery is not through this provision that does not pay extra for preventable hospital complications when we should be paying nothing at all, but instead through Medicare's regulations that ensure that every Medicare provider meets basic quality of care standards.

(m) Falls and Fractures, Dislocations, Intracranial Injury, Crushing Injury, and Burns

Coding—There is no single code that shows that a patient has suffered a fall in the hospital. Codes would be assigned to identify the nature of any resulting injury from the fall such as a fracture, contusion, concussion, etc. There is a code to indicate that a patient fell from bed, code E884.4 (Fall from bed). One would then assign a code that identifies the external cause of the injury (the fall from the bed) and an additional code(s) for any resulting injury (a fractured bone).

Burden (High Cost/High Volume)—As stated earlier, there is not a code to identify all types of falls. Therefore, in the FY 2008 IPPS proposed rule, we examined Medicare data on the number of Medicare beneficiaries who fell out of bed. For FY 2006, there were 2,591 cases reported of Medicare patients who fell out of bed. These patients had average charges of the hospital stay of $24,962. However, depending on the nature of the injury, costs may vary in specific cases.

Prevention guidelines—Falls may or may not be preventable. Serious preventable event guidelines can be found at the following Web site: *http://www.qualityindicators.ahrq.gov/psi_download.htm*.

CC—Code E884.4 is not a CC under the CMS DRGs or the MS–DRGs.

Considerations—There are not clear codes that identify all types of falls. Hospitals would also have to use additional codes for fractures and other injuries that result from the fall. In addition, depending on the circumstances, the falls may or may not be preventable. We did not propose the inclusion of falls as one of our initial hospital-acquired conditions because we could only identify a limited number of these cases, and they were not classified as CCs. However, we welcomed public comments on how to develop codes or coding logic that would allow us to identify injuries that result from falls in the hospital so that Medicare would not recognize the higher costs associated with treating patients who acquire these conditions in the hospital.

Comment: Several commenters stated that the category of falls is not appropriate for inclusion as one of the hospital-acquired conditions. Specifically, the commenters noted that it is impossible to prevent all falls, and the definition of what constitutes a ''preventable fall'' is not well-defined. Several commenters strongly recommended the inclusion of falls for the final rule because falls and their resulting injuries are an important public health safety issue. However, these commenters did not give further details or recommendations to CMS regarding how to identify falls and related injuries as a hospital-acquired condition that would be subject to this provision.

Response: With respect to the comment that not all falls are preventable, we reiterate that the statutory provision authorizes the Secretary to select conditions that ''could reasonably have been prevented through the application of evidence based guidelines.'' We believe that injuries that occur in the hospital due to falls are preventable. As discussed earlier, we received a couple of comments urging us to include falls as one of our hospital acquired conditions. We recognize that preventable injuries are an important patient safety issue. Therefore, we considered additional ways to identify patients who had preventable injuries that occurred in the hospital. We examined the use of a combination of External cause of injury codes and the specific injury to identify these cases. We identified five external causes of injury codes that would identify falls in a hospital. These include:

- E884.2 Fall from chair
- E884.3 Fall from wheelchair
- E884.4 Fall from bed
- E884.5 Fall from other furniture
- E884.6 Fall from commode

These codes clearly identify certain types of falls. If coded for an inpatient, they could identify that the fall occurred in the hospital. If these codes appeared

on a claim along with a fracture or trauma code that did not reflect that the condition was present on admission, we could conclude that the injury was a result of a fall in the hospital that should not be counted as an MCC or CC. However, we identified potential problems in using the external cause of injury codes. There is a separate field on the electronic claim to report one external cause of injury code. However, hospitals do not report the POA indicator with this field. Therefore, we will not be able to tell if the external cause of injury code is identifying an event that occurred before or after admission.

Hospitals can also report external cause of injury codes as a secondary diagnosis. If the hospital lists the external cause of injury code among the secondary diagnoses, the hospital would be assigning a Present on Admission indicator to the external cause of injury code. In these cases, we would be able to identify that one of the five types of falls indicated above occurred after admission. We could use this information along with the ICD–9–CM diagnosis code for the specific type of injury, such as a fracture, to not allow the specific injury to count as a MCC or CC, since it would be the result of a preventable injury. In our analysis of the use of an external cause of injury code, we believe this approach is too complicated to identify preventable injuries. Therefore, we focused on simply identifying injuries that should not occur during a hospitalization. If a preventable injury occurs during a hospitalization, it should be included on our list of hospital acquired conditions.

We reviewed diagnosis codes contained in the Injury and Poisoning Chapter of ICD–9–CM and attempted to develop a list of codes that could identify potential adverse events that may or may not have been the result of a fall occurring in the hospital setting. After reviewing each category of diagnosis codes, we identified the following injuries that should not occur during a patient's hospitalization. The generic categories of injuries are as follows:

- Fractures—ICD–9–CM code range 800 through 829
- Dislocations—ICD–9–CM code range 830 through 839
- Intracranial injury—ICD–9–CM code range 850 through 854
- Crushing injury—ICD–9–CM code range 925 through 929
- Burns—ICD–9–CM code range 940 through 949
- Other and unspecified effects of external causes—ICD–9–CM code range 991 through 994

In our view, the above conditions should not occur after admission to the hospital. That is, if the patient is admitted to the hospital without a crushing injury, a burn, fracture, dislocation, among others, we can see no reason why such an event would not be preventable while the patient is in the hospital. None of these injuries should occur after admission. We believe this range of conditions offers a relatively uncomplicated method to determine if an injury or trauma is acquired in the hospital. This range of conditions meets the statutory criteria for being selected when they are MCCs or CCs. First, they are identifiable with ICD–9–CM codes. Second, injuries that occur as a result of a fall in the hospital complicate the care and treatment of the patient. Fractures and dislocations and other injuries are common in the Medicare population. There were more than 175,000 fractures and other traumatic injuries in the above range of codes for FY 2006. Third, hospital acquired injuries included in this range of codes should not occur and are preventable. Although we have not identified specific prevention guidelines for the conditions described by the above range of codes, we believe these types of injuries and trauma should not occur in the hospital, and we look forward to working with CDC and the public in identifying research that has or will occur that will assist hospitals in following the appropriate steps to prevent these conditions from occurring after admission.

We welcome public comments on additions and deletions to this injury list as well as our findings on the use of a combination of external cause of injury codes and injury codes to identify patients that acquired an injury in the hospital due to a fall. We also welcome any additional suggestions to identify cases where preventable injuries, such as falls, occur during hospitalization. We will review all recommendations in the FY 2009 IPPS rule in order to further refine our policy to identify preventable injuries and ensure that Medicare does not pay extra by counting them as MCC or CCs.

(n) Other Conditions Suggested Through Comment: Deep Vein Thrombosis (DVT)/ Pulmonary Embolism (PE)

Comment: A number of commenters encouraged CMS to select Venous Thromboembolism (VTE), which includes both Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE), as a preventable condition. The commenters noted that prophylactic measures exist to avoid these conditions and they are preventable if these steps are followed.

The commenters asserted that this condition meets the DRA criteria requirements for a condition eligible for a payment adjustment in that it involves high cost and high volume (according to the 2006 MedPAR data, DVT resulted in more than 180,000 discharges with a mean standardization cost of $17,410 and PE in more than 100,000 discharges with a mean standardization cost of $20,742), and results in assignment to a higher paying DRG if present as a secondary diagnosis. The commenters also noted that both DVT and PE have ICD–9–CM codes that are on the MCC and CC lists. In addition, this condition can be prevented in accordance with evidence-based guidelines. These commenters cited Geerts, et al., Prevention of Venous Thromboembolism: The Seventh ACCP Conference on Antithrombotic and Thrombolytic Therapy, Chest, 126: 338S–400S (2004). The commenters acknowledged DVT and PE are identified by multiple codes, but asserted that administrative issues surrounding the selection of this condition could be resolved. They requested that CMS consider selecting DVT and PE as preventable complications for which hospitals will not receive additional payments.

Response: We appreciate these comments suggesting that we add DVT and PE to our list of conditions that would be subject to the hospital acquired conditions provision. A DVT is a blood clot that forms in a vein, most commonly in the lower extremity. It can arise secondary to a number of clinical circumstances, including prolonged inactivity or bedrest, or from extended periods of time with the lower extremity in a bent position. It can also arise in the setting of a hypercoagulable state such as that which occurs with a number of malignancies, where the blood has an increased propensity to form clots, and it is also more common in patients taking oral contraceptives, particularly in conjunction with regular tobacco use. A PE is a clot that occurs in one of the pulmonary arteries that supplies a portion of the lung, most commonly when part or all of a DVT migrates to the pulmonary vessels from its original location, although it can also occur in the absence of a DVT, and it is a particularly serious event that is often life threatening. We refer readers to the current medical literature to further define DVT and PE.

We agree that there are circumstances where these conditions are preventable,

and where the condition meets the statutory criteria to be selected. These conditions can be identified by unique ICD–9–CM codes. DVT can be identified through codes 453.40 (Venous embolism and thrombosis of unspecified deep vessels of lower extremity), 453.41 (Venous embolism and thrombosis of deep vessels of proximal lower extremity), and 453.42 (Venous embolism and thrombosis of deep vessels of distal lower extremity). All three codes are on the CC list. PE is identified through codes 415.10 (Iatrogenic pulmonary embolism and infarction) and 415.19 (Other pulmonary embolism and infarction). Both of these codes are on the MCC list. The commenters provided Medicare data showing that these conditions are both frequent and high cost in the Medicare population. Finally, the commenters have identified prevention guidelines backed by evidence based medicine to avoid DVTs and PEs. Therefore, at least in some circumstances, these conditions meet the statutory criteria for being selected.

We appreciate the collaborative efforts of other organizations to further define the prevention guidelines for this condition. We recognize that routine admission physical examinations should include efforts to detect a DVT. Although we believe DVTs and PEs may be preventable in certain circumstances (such as when an otherwise healthy patient is having elective surgery on a lower extremity), it is possible that a patient may have a DVT upon admission that goes unidentified, and it is also possible that DVT may occur because of other circumstances, such as an occult malignancy. If a DVT is clinically suspected upon admission to the hospital, the definitive diagnosis of a DVT can be made with a Doppler ultrasound examination or intravenous venogram, or both. We anticipate that it is not feasible to perform these studies on every hospitalized patient. In the case of a patient who is admitted with a clinically unapparent DVT that is not detected, the hospital will have followed all typical patient care protocols yet the DVT went undiagnosed upon admission. It may remain undetected until the patient exhibits symptoms of either the DVT or a PE that is unrelated to the patient's principal diagnosis. In these circumstances, we believe the DVT or PE should continue to be counted as an MCC or CC because, in our view, the condition either was unidentifiable prior to admission or did not likely occur as a result of poor management of the patient while they were in the hospital. We believe it is very important to select DVTs and PEs only when they are preventable through following standard prevention guidelines. We will seek to identify clearly defined instances of preventable DVT and PE that should not occur in the hospital setting which will help to further increase hospital quality of care.

We appreciate suggestions on how to identify DVTs and PEs that are preventable hospital acquired conditions. If we can identify only those circumstances where DVTs and PEs are preventable and meet the statutory criteria for being selected, we likely would make them subject to the provision in the FY 2009 IPPS final rule. We welcome comments on this issue and look forward to working with stakeholders to identify instances of preventable DVTs and PEs prior to implementation of this provision on October 1, 2008.

(o) Other Conditions Suggested Through Public Comment: Legionnaires' Disease

Comment: One commenter suggested that CMS select Legionnaire's disease. The commenter asserted that this condition is high cost/high volume: CDC estimates between 8,000 and 18,000 cases per year. Due to underreporting and underdiagnosis, only 2 to 10 percent of cases are reported. Death occurs in 10 to 15 percent of cases. In addition, the commenter cited established prevention guidelines: CDC prevention guidelines are available and widely distributed. Finally, the commenter stated that Legionnaires' disease is identified by ICD–9–CM code 482.84.

Response: While there may be a discrete ICD–9–CM code to identify Legionnaires' disease, it is not typically a hospital acquired condition. Legionnaires' disease is usually acquired outside of a hospital from a contaminated water supply that may or may not have any relation to a particular institution. Any outbreak of Legionnaires' disease suggests a significant public health emergency that should be addressed by public health resources rather than by a particular Medicare payment policy.

(p) CMS Response to Additional Comments

We welcomed any comments on the clinical aspects of the conditions and on which conditions should be selected for implementation on October 1, 2008. We also solicited comments on any problematic issues for specific conditions that may support not selecting them as one of the initial conditions. We encouraged comments on how some of the administrative problems can be overcome if there is support for a particular condition.

Commenters did not raise any general administrative concerns. Rather, a number of commenters addressed the potential for an appeals process and POA coding issues. We have included the comment and response for each issue below:

- Appeals Process:

Comment: A large number of commenters requested clarification from CMS on how hospitals appeal CMS decisions that a particular patient may fall under the hospital-acquired conditions policy and, therefore, is not eligible for higher payment through assignment to the higher CC/MCC level of the MS-DRG. They asked CMS to provide specific instructions for hospitals to follow for appealing a decision.

Response: We do not believe a separate appeals process is necessary for the payment adjustment for hospital-acquired conditions because existing procedures provide adequate opportunity for review. Under 42 CFR § 412.60(d), a hospital has 60 days after the date of the notice of the initial assignment of a discharge to a DRG to request a review of that assignment. The hospital may submit additional information as a part of its request. A hospital that believes a discharge was assigned to the incorrect DRG as a result of the payment adjustment for hospital-acquired conditions may request review of the DRG assignment by its fiscal intermediary or MAC.

However, we note that section 1886(d)(7)(B) of the Act, as amended by section 5001(c)(2) of the DRA, provides that there shall be no administrative or judicial review of the establishment of DRGs, including the selection and revision of codes under the payment adjustment for hospital acquired conditions. Therefore, although a hospital may request review of a DRG assignment in a particular case, the statute does not provide for review of the codes we select to be subject to the payment adjustment for hospital-acquired conditions.

- POA Coding

Comment: Commenters suggested that all secondary diagnoses coded as present on admission be used to support the development of new complication rate measures and other quality indicators in the future. They suggested that CMS should develop special Grouper logic to exclude similar ICD–9-CM codes. The commenters stated that reducing hospital payments for a condition present upon admission, but not documented, is too punitive.

Many commenters submitted the experiences of two States that already use present-on-admission coding. They believed it takes several years and intense educational efforts to achieve reliable data and therefore there must be a strong clinical training component.

The commenters recommended that CMS implement the collection of the POA indicator but delay the implementation of any conditions that are dependent on its use until physicians and hospitals have an appropriate level of experience.

Response: We refer commenters to the Change Request No. 5499 released on May 11, 2007, for answers to additional questions regarding present-on-admission coding. We remind commenters that the DRG payment adjustment based on the POA indicator is not applicable until October 1, 2008. It is important to note that hospitals will gain experience in reporting POA information during FY 2008 prior to it having a payment impact in FY 2009.

• Prevention Guidelines

Comment: A small number of commenters questioned the feasibility and reliability of current prevention guidelines. The commenters supported CMS' goal of encouraging improvements in health care and reducing the number of preventable infections, but believed that hospitals must be reimbursed appropriately for providing the care patients need. The commenters believed that CMS should be sure that hospitals are not penalized for infections that originated outside the hospital or that are caused by factors beyond the hospital's control.

The commenters suggested that CMS should recognize that, even with the best infection control practices, some infections will occur anyway. They added that reducing payments for all cases in which those infections occur could harm hospitals' ability to purchase and provide advanced drugs and treatment modalities or invest in other infection control technologies.

Response: We address each concern regarding prevention guidelines in the respective response for each condition. We are committed to improving quality and decreasing the number of hospital-acquired conditions. In that goal, we have chosen these specific conditions because they fulfill the criteria outlined in the DRA: the conditions have unique codes that are MCCs or CCs; the conditions are high volume, high cost or both; and the conditions can be reasonably prevented through the application of evidence-based guidelines.

• Academic Centers/Hospitals with high risk patients:

Comment: Commenters representing academic centers and hospitals with high risk patient populations urged CMS to consider excluding patients considered to be high risk such as those that are more susceptible to infections.

Response: As indicated above, we are selecting conditions that are ''reasonably preventable'' through application of evidence-based guidelines and meet the other statutory criteria. In response to comments on each of the conditions considered, we indicated that we are researching whether to establish exceptions to the conditions for specific clinical circumstances where the condition may not be preventable. The determination of whether a patient is ''high risk'' will depend on the specific circumstances of the patient and the condition under consideration. We do not believe it is possible to classify a patient generally as ''high risk'' in all the circumstances where the provision could potentially apply. As we indicated above, we welcome public comments on clinical scenarios where a specific condition may not be reasonably preventable in the hospital and how to identify and distinguish those circumstances from other situations where the condition is preventable.

7. Other Issues

Under section 1886(d)(4)(D)(vi) of the Act, ''[a]ny change resulting from the application of this subparagraph shall not be taken into account in adjusting the weighting factors under subparagraph (C)(i) or in applying budget neutrality under subparagraph (C)(iii).'' Subparagraph (C)(i) refers to DRG classifications and relative weights. Therefore, the statute requires the Secretary to continue counting the conditions selected under section 5001(c) of the DRA as MCCs or CCs when updating the relative weights annually. Thus, the higher costs associated with a case with a hospital-acquired MCC or CC will continue to be assigned to the MCC or CC DRG when calculating the relative weight but payment will not be made to the hospital at one of these higher-paying DRGs. Further, subparagraph (C)(iii) refers to the budget neutrality calculations that are done so aggregate payments do not increase as a result of changes to DRG classifications and relative weights. Again, the higher costs associated with the cases that have a hospital-acquired MCC or CC will be included in the budget neutrality calculation but Medicare will make a lower payment to the hospital for the specific cases that includes a hospital-acquired MCC or CC. Thus, to the extent that the provision applies and cases with an MCC or CC are assigned to a lower-paying DRG, section 5001(c) of the DRA will result in cost savings to the Medicare program. We note that the provision will only apply when the selected conditions are the only MCCs and CCs present on the claim. Therefore, if a nonselected MCC or CC is on the claim, the case will continue to be assigned to the higher paying MCC or CC DRG, and there will be no savings to Medicare from the case. We believe the provision will apply in a small minority of cases because it is rare that one of the selected conditions will be the only MCC or CC present on the claim.

To summarize, we appreciate all of the comments on hospital-acquired conditions and look forward to continued input as we plan to implement these hospital-acquired conditions. Below is the list of conditions that we are selecting in this FY 2008 final rule. These conditions will be made subject to the provision beginning on October 1, 2008 (FY 2009).

• Serious Preventable Event—Object Left in Surgery

• Serious Preventable Event—Air Embolism

• Serious Preventable Event—Blood incompatibility

• Catheter-Associated Urinary Tract Infections

• Pressure Ulcers (Decubitus Ulcers)

• Vascular Catheter-Associated Infection

• Surgical Site Infection—Mediastinitis After Coronary Artery Bypass Graft (CABG) Surgery

• Hospital Acquired Injuries—Fractures, Dislocations, Intracranial Injury, Crushing Injury, Burn, and Other Unspecified Effects of External Causes

We will also propose the following conditions for consideration in the FY 2009 IPPS proposed rule. We will work diligently to address issues surrounding these conditions and propose to select these conditions in the FY 2009 IPPS final rule.

• Ventilator Associated Pneumonia (VAP)

• Staphylococcus Aureus Septicemia

• Deep Vein Thrombosis (DVT)/Pulmonary Embolism (PE)

Finally, we list below the set of conditions that signal further analysis for future implementation.

• Methicillin Resistant Staphylococcus Aureus (MRSA)

• Clostridium Difficile-Associated Disease (CDAD)

• Wrong Surgery—Provision not applicable because Medicare should not pay less; it should not pay at all.

TABLE 1.—HOSPITAL-ACQUIRED CONDITIONS
(in rank order)

Condition	Considered in NPRM	Proposed in NPRM	Selected in FY 2008 final rule	May be considered in future rulemaking
1. Serious Preventable Event—Object left in surgery.	Yes	Yes	Yes	N/A.
2. Serious Preventable Event—Air embolism.	Yes	Yes	Yes	N/A.
3. Serious Preventable Event—Blood incompatibility.	Yes	Yes	Yes	N/A.
4. Catheter-Associated Urinary Tract Infections.	Yes	Yes	Yes	N/A.
5. Pressure Ulcers (Decubitus Ulcers).	Yes	Yes	Yes	N/A.
6. Vascular Catheter-Associated Infection.	Yes	No (No FY 2008 code)	Yes (Code Created for FY 2008).	N/A.
7. Surgical Site Infection—Mediastinitis after Coronary Artery Bypass Graft (CABG) surgery.	Yes (All surgical site infections, not just Mediastinitis).	No (No unique codes)	Yes (Comments suggested Mediastinitis which has unique code).	N/A.
8. Falls	Yes	No (Coding not unique)	Yes (Operational difficulties will be overcome by FY 2009).	Expand to all hospital acquired injuries, adverse events.
9. Ventilator Associated Pneumonia (VAP).	Yes	No (Coding not unique)	No (Coding not unique)	Yes—FY 2009 IPPS final rule (Pursuing code with CDC).
10. Staphylococcus Aureus Septicemia.	Yes	Yes	No (Must identify subset where preventable).	Yes—FY 2009 IPPS final rule.
11. Deep Vein Thrombosis (DVT)/Pulmonary Embolism (PE).	No	No	No	Yes—FY 2009 IPPS final rule (Work to identify situations where it should be preventable).
12. Methicillin Resistant Staphylococcus Aureus (MRSA).	Yes	No	No	Yes.
13. Clostridium Difficile—Associated Disease (CDAD).	Yes	No	No	Yes.
Other: Medicare Does not Pay For:				
14. Wrong Surgery	Yes	No	No	Provision not Applicable. Medicare should not pay at all.

G. Changes to Specific DRG Classifications

1. Pre-MDCs: Intestinal Transplantation

In the FY 2005 IPPS final rule (69 FR 48976), we reassigned intestinal transplant cases from CMS DRG 148 (Major Small and Large Bowel Procedures with CC) and CMS DRG 149 (Major Small and Large Bowel Procedures without CC) to CMS DRG 480 (Liver Transplant and/or Intestinal Transplantation). In the FY 2006 IPPS final rule (70 FR 47286), we continued to evaluate these cases to see if a further DRG change was warranted. While we found that intestinal only transplants and combination liver-intestine transplants have higher average charges than other cases in CMS DRG 480, these cases are extremely rare (there were only 4 cases in FY 2004) and the insufficient number of cases did not warrant creating a separate DRG.

For FY 2008, we examined the September 2006 update of the FY 2006 MedPAR file and found 1,208 cases assigned to CMS DRG 480. In section II.C. of the preamble of the FY 2008 IPPS proposed rule, we proposed to split CMS DRG 480 into two severity levels: MS–DRG 005 (Liver Transplant and/or Intestinal Transplant with MCC) and MS–DRG 006 (Liver Transplant and/or Intestinal Transplant without MCC). The following table displays our results:

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 006—All cases	446	10.05	$129,519
MS–DRG 006—Intestinal transplant cases only	3	34	354,793
MS–DRG 005—All cases	762	22.25	243,271
MS–DRG 005—Intestinal transplant cases only	9	40.22	460,089
MS–DRG 005—Intestinal and liver transplant	1	56	1,179,425

Under the MS–DRGs, 10 of 13 intestinal transplant cases are assigned to proposed MS–DRG 005 based on the secondary diagnosis of the patient. The three remaining intestinal transplant cases do not have an MCC and would

be assigned to MS–DRG 006, absent further changes to the DRG logic. These three intestinal transplants have average charges of approximately $354,793 and an average length of stay of 34 days. Average charges and length of stay for these three cases are more comparable to the average charges of approximately $243,271 and average length of stay of 22.25 days for all cases assigned to proposed MS–DRG 005. For this reason, we proposed to move all intestinal transplant cases to MS–DRG 005. As part of the proposal, we proposed to redefine proposed MS–DRG 005 as ''Liver Transplant with MCC or Intestinal Transplant.'' The presence of a liver transplant with MCC or an intestinal transplant would assign a case to the higher severity level. We also proposed to redefine proposed MS–DRG 006 as ''Liver Transplant without MCC''.

Comment: Two commenters supported the proposed reassignment of intestinal transplants to MS–DRG 005. One commenter stated that CMS should continue to evaluate the frequency of this procedure and reassign it to an appropriate DRG reflective of its high resource utilization.

Response: We appreciate the support of the commenters and agree that when we receive sufficient data, we will again consider a separate intestinal transplant DRG.

Comment: One commenter supported separate MS–DRGs for intestinal transplants and combination liver-intestine transplants. The commenter cited that the data from the Milliman 2005 U.S. Organ and Tissue Transplant Cost Estimates and Discussion Research Report supports separate MS–DRGs. This report provided data for 58 intestine only transplants with estimated first year billed charges of $813,600 and 47 liver-intestine transplants with estimated first year billed charges of $830,200.

Response: The report submitted by the commenter does not indicate whether the patients cited in the study were Medicare. Further, it is not clear whether the identified costs were hospital inpatient only or total. For these reasons, we are not using these data to make an MS–DRG assignment. However, we are open to considering, to the extent feasible, reliable, validated data other than MedPAR data in annually recalibrating and reclassifying the DRGs.

In this final rule with comment period, we are adopting as final our proposal to reassign intestinal transplantation cases to MS–DRG 005. We are also redefining MS–DRG 005 as ''Liver Transplant with MCC or Intestinal Transplant'' and MS–DRG 006 as ''Liver Transplant without CC''.

2. MDC 1 (Diseases and Disorders of the Nervous System)

a. Implantable Neurostimulators

We received a joint request from three manufacturers to review the DRG assignment for cases involving neurostimulators. The commenters are concerned that:

- Neurostimulator cases may be assigned to 30 different DRGs in 12 different MDCs depending upon the patient's principal diagnosis.
- Neurostimulator cases represent a small proportion of the total cases in their assigned DRG and have higher costs.
- The 11 new ICD–9–CM codes created beginning in FY 2007 that identify pain are assigned to MDC 23 (Factors Influencing Health Status and Other Contacts With Health Services) rather than MDC 1 (Diseases and Disorders of the Nervous System). The manufacturers were concerned that these pain codes will be a common principal diagnosis for patients who receive a neurostimulator and will be assigned to MDC 23, which contains a wide variety of dissimilar diagnoses. The new ICD–9–CM codes are: 338.0 (Central pain syndrome), 338.11 (Acute pain due to trauma), 338.12 (Acute post-thoracotomy pain), 338.18 (Other acute postoperative pain), 338.19 (Other acute pain), 338.21 (Chronic pain due to trauma), 338.22 (Chronic post-thoracotomy pain), 338.28 (Other chronic postoperative pain), 338.29 (Other chronic pain), 338.3 (Neoplasm related pain (acute)(chronic)), and 338.4 (Chronic pain syndrome).

The manufacturers recommended that we:

- Reroute all spinal and peripheral neurostimulator cases into a common set of base DRGs.
- Reclassify ICD–9–CM pain codes 338.0 through 338.4 currently assigned to MDC 23 into MDC 1 when reported as the principal diagnosis.
- Revise surgical CMS DRGs in MDC 1 based on whether the patient received a major device.
- Split the single surgical CMS DRG in MDC 19 (Mental Diseases and Disorders) and MDC 23 into two CMS DRGs: one CMS DRG for minor procedures as defined by CMS DRGs 477 (Non-Extensive O.R. Procedure Unrelated to Principal Diagnosis) and CMS DRG 468 (Extensive O.R. Procedure Unrelated to Principal Diagnosis) and one CMS DRG for major procedures.
- Create a new CMS DRG in MDC 1 for major devices.

The manufacturers recognized that implementing a re-routing feature in the CMS DRG system would be a major undertaking and, alternatively, suggested reassigning the pain codes to MDC 1 as an interim step. In the FY 2008 IPPS proposed rule, we noted that we agreed with this suggestion. With respect to the suggestion to split the single surgical CMS DRG in MDCs 19 and 23 into two CMS DRGs and create a major device CMS DRG within MDC 1, in the FY 2008 IPPS proposed rule, we encouraged commenters to examine the assignment of neurostimulator cases under the MS–DRGs to determine whether the changes we proposed to adopt to better recognize severity in the CMS DRG system would address these concerns.

The implantation of a neurostimulator requires two types of procedures. First, the surgeons implant leads containing electrodes into the targeted section of the brain, spine, or peripheral nervous system. Second, a neurostimulator pulse generator is implanted into the pectoral region and extensions from the neurostimulator pulse generator are tunneled under the skin and connected with the proximal ends of the leads. Hospitals stage the two procedures required for a full system neurostimulator implant.

There are separate ICD–9–CM procedure codes that identify the implant of the leads and the insertion of the pulse generator. The three codes for the leads insertion are: 02.93 (Implantation or replacement of intracranial neurostimulator lead(s)); 03.93 (Implantation or replacement of spinal neurostimulator lead(s)); and code 04.92 (Implantation or replacement of peripheral neurostimulator lead(s). The five codes for the insertion of the pulse generator are: 86.94 (Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable); 86.95 (Insertion or replacement of dual array neurostimulator pulse generator, not specified as rechargeable); 86.96 (Insertion or replacement of other neurostimulator pulse generator); 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator); and 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator).

The patient's principal diagnosis determines the MDC assignment. Implant of a cranial, spinal or peripheral neurostimulator will result in assignment of the case to a surgical DRG within that MDC. Although the manufacturers are correct that neurostimulator cases can potentially be assigned to many different CMS DRGs

based on the patient's principal diagnosis, they also provided data that showed that nearly 90 percent are assigned to 6 different CMS DRGs that cross two MDCs. In MDC 1, neurostimulator cases are assigned to four CMS DRGs: CMS DRG 7 (Peripheral and Cranial Nerve and Other Nervous System Procedures with CC); CMS DRG 8 (Peripheral and Cranial Nerve and Other Nervous System Procedures without CC); CMS DRG 531 (Spinal Procedures with CC); and CMS DRG 532 (Spinal Procedures without CC). In MDC 8 (Disease and Disorders of the Musculoskeletal System and Connective Tissue), neurostimulator cases are assigned to two CMS DRGs: CMS DRG 499 (Back and Neck Procedures Except Spinal Fusion with CC); and CMS DRG 500 (Back and Neck Procedures Except Spinal Fusion without CC).

With very limited exceptions, such as tracheostomies and certain types of transplants, the principal diagnosis is fundamental to the assignment of a case to an MDC within the DRG system. By relying on the patient's principal diagnosis, the DRG system will group together patients who are clinically similar. As indicated in the proposed rule, for this reason, we were concerned about adopting the suggestion that all neurostimulator cases be rerouted to a common DRG irrespective of the patient's principal diagnosis. We believe such a step would be fundamentally inconsistent with the idea of creating common groups of patients who are clinically similar based on diagnosis and procedures. For this reason, we do not believe that a rerouting step should be adopted that would group together all neurostimulator cases.

However, in the FY 2008 IPPS proposed rule, we agreed with the manufacturers' suggestion that the new ICD–9–CM codes created in FY 2007 for central and chronic pain syndrome and chronic pain (codes 338.0, 338.21 through 338.29, and 338.4) should be assigned to MDC 1 when present as the principal diagnosis. The manufacturers requested that we reclassify the pain codes (338.0 through 338.4) from MDC 23 to MDC 1. Our medical consultants advised that the acute pain codes (codes 338.11 through 338.19) should remain in MDC 23 because the acute pain is not a neurological condition. According to the manufacturers, the National Center for Health Statistics' (NCHS) choice in locating the pain codes within ICD–9–CM's Nervous System chapter has much clinical validity, particularly for chronic pain. The manufacturers further noted that acute pain is typically self-limited, a symptomatic response to an immediate insult that serves the body as a warning sign. However, chronic pain is unrelenting and serves no warning or protective function. It is a disease process of its own accord, according to the commenters.

The manufacturers described pain as follows. Broadly, there are two main categories of pain: Nociceptive and neuropathic. Nociceptive pain is caused by sensory neurons, called nociceptors, responding to tissue damage. This type of pain is the body's normal response to injury. The pain is usually localized and time-limited. That is, when the tissue damage heals, the pain typically resolves. Acute pain is typically nociceptive. In general, nociceptive pain is typically treated with anti-inflammatories and, in more severe cases, with opioids via a morphine pump for example.

In contrast, neuropathic pain is caused by malfunctioning or pathologically altered nervous pathways stemming from injury to the nervous system, either as a direct result of trauma to a nerve (phantom limb syndrome, reflex sympathetic dystrophy/complex regional pain syndrome after injury) or due to other medical conditions that cause damage to the nerve such as herpes (postherpetic neuralgia), diabetes (diabetic neuropathy), and peripheral vascular disease (critical limb ischemia). Failed back surgery syndrome (FBSS) is another common source of neuropathic pain. Typically, neuropathic pain is chronic and may persist for months or years beyond the healing of damaged tissue. Because the nerves themselves have been damaged, neuropathic pain can be considered its own disease process. Neuropathic pain may be more difficult to treat than nociceptive pain and has been shown to be more responsive to neurostimulation.

The pain codes, created effective October 1, 2006, are currently assigned to MDC 23. The neurostimulator cases with a principal diagnosis using the pain codes were assigned to CMS DRG 461 (O.R. Procedure with Diagnoses of Other Contact with Health Services) for the first time in FY 2007. As explained above, prior to our adoption of the new pain codes in FY 2007, these cases had historically been assigned to CMS DRGs 7 and 8 (Peripheral and Cranial Nerve and Other Nervous System Procedure with and without CC, respectively) in MDC 1. Adopting the commenters' recommendation would result in the neurostimulator cases being assigned to their historic CMS DRGs.

Our medical officers agreed that cases that use the new pain diagnosis codes for central and chronic pain syndrome and chronic pain (codes 338.0, 338.21 through 338.29, and 338.4) as a principal diagnosis should be assigned to MDC 1. For this reason, in the FY 2008 IPPS proposed rule, we proposed to assign cases with a principal diagnosis of central pain syndrome (code 338.0), chronic pain due to trauma (code 338.21), chronic post-thoracotomy pain (code 338.22), other chronic postoperative pain (code 338.28), other chronic pain (code 338.29), or chronic pain syndrome (code 338.4) to MDC 1, although we explained that we planned to monitor their use and may reassign them if needed.

Comment: Several commenters supported our proposal to assign diagnosis codes for central and chronic pain syndrome and chronic pain as a principal diagnosis to MDC 1. One commenter stated that this proposal recognizes the fundamentally neurologic nature of these cases.

Response: We appreciate the support of the commenters. Accordingly, in this final rule with comment period, we are adding diagnosis codes 338.0, 338.21, 338.22, 338.28, 338.29, and 338.4 when assigned as a principal diagnosis to MDC 1.

b. Intracranial Stents

Effective October 1, 2004, the ICD–9–CM Coordination and Maintenance Committee created procedure code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s)). At the same time, we created code 00.65 (Percutaneous insertion of intracranial vascular stent(s)). It is our customary practice to assign new codes to the same DRG as their predecessor codes. The service described by code 00.62 was removed from code 39.50 (Angioplasty or atherectomy of other noncoronary vessel(s)), which is assigned to CMS DRG 533 (Extracranial Procedures with CC) and CMS–DRG 534 (Extracranial Procedures without CC) (MS–DRGs 37, 38, and 39 (Extracranial Procedures with MCC, with CC, and without CC/MCC, respectively, in this final rule with comment period) when the patient has a principal diagnosis in MDC 1. Therefore, we assigned code 00.62 to CMS DRGs 533 and 534 in MDC 1 beginning in FY 2005. In addition, we made code 00.65 a non-O.R. procedure for DRG assignment. We also assigned code 00.62 to the Non-Covered Procedure edit of the MCE, as Medicare had a national non-coverage determination for intracranial angioplasty and atherectomy with stenting.

Effective November 6, 2006, Medicare covers percutaneous transluminal angioplasty (PTA) and stenting of intracranial arteries for the treatment of

cerebral artery stenosis in cases in which stenosis is 50 percent or greater in patients with intracranial atherosclerotic disease when furnished in accordance with FDA-approved protocols governing Category B Investigational Device Exemption (IDE) clinical trials. CMS determined that coverage of intracranial PTA and stenting is reasonable and necessary under these circumstances. All other indications for PTA without stenting to treat obstructive lesions of the vertebral and cerebral arteries remain noncovered. This decision can be found online in the CMS Coverage Manual (Publication 100.3): *http://www.cms.hhs.gov/Manuals/IOM/itemdetail.asp* at section 20.7.B.5.

A manufacturer recently met with CMS to request that code 00.62 be reassigned to CMS DRGs 1 and 2 (Craniotomy Age > 17 with and without CC, respectively) (MS–DRGs 025 (Craniotomy and Endovascular Intracranial Procedures with MCC), 026 (Craniotomy and Endovascular Intracranial Procedures with CC), and 027 (Craniotomy and Endovascular Intracranial Procedures without CC/MCC) in this final rule with comment period) and CMS–DRG 543 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis) (MS–DRGs 023 and 024 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC and without MCC, respectively, in this final rule with comment period). The manufacturer noted that other similar endovascular intracranial procedures that treat a cerebrovascular blockage are currently assigned to the craniotomy CMS DRGs. These endovascular-approach cases already assigned to the craniotomy CMS DRGs are identified by procedure codes 39.72 (Endovascular repair or occlusion of head and neck vessels), 39.74 (Endovascular removal of obstruction from head and neck vessel(s)), and 39.79 (Other endovascular repair (of aneurysm) of other vessels). Under the MS–DRGs in the FY 2008 IPPS proposed rule, we proposed the assignment of procedure codes 39.72, 39.74, and 39.79 to MS–DRGs 025, 026, and 027 and MS–DRGs 023 and 024. Although we have concerns about the assignment of additional endovascular procedures to an open surgical DRG, we agreed that there is clinical consistency between procedure codes 39.72, 39.74, and 39.79 and procedure code 00.62. For this reason, we agreed that procedure code 00.62 should be assigned to MS–DRGs 025, 026, and 027, and MS–DRGs 023 and 024, which are divided by the presence or absence of specific CCs.

In order to assure appropriate DRG assignment as described above, we proposed to make conforming changes to the MCE by removing code 00.62 from the Non-Covered Procedure edit. However, as intracranial PTA is only covered when performed in conjunction with insertion of a stent, we proposed to redefine the edit by specifying that code 00.62 must be accompanied by code 00.65 (Percutaneous insertion of intracranial vascular stent(s)). Should code 00.65 not be reported on the claim, the case would fail the MCE edit. For a full discussion of this change, we refer readers to the MCE discussion in section II.F.6. of the preamble of this final rule with comment period.

Although we proposed to assign endovascular intracranial procedures to the same MS–DRGs as craniotomy, we remained concerned that endovascular intracranial procedures are clinically different than open craniotomy surgical procedures and may have very different resource requirements. At the current time, there are an insufficient number of cases to warrant creation of a separate base DRG for endovascular intracranial procedures. However, as we indicated in the proposed rule, we intend to revisit the assignment of intracranial endovascular procedures at a later date when more data are available to analyze these cases.

Comment: Several commenters supported the proposal to assign endovascular procedure codes to open surgical DRGs. One commenter commended CMS for the proposal and stated that the reassignment places these cases in DRGs of more appropriate clinical and resource homogeneity (than their previous assignments to the extracranial procedure DRGs).

Response: We continue to have reservations about the classification of open craniotomy surgeries and endovascular cranial procedures within the same DRGs. However, we note that there is clinical consistency between procedure codes 39.72, 39.74, 39.79 (endovascular procedures on the head and neck), which are assigned to open surgical DRGs, and code 00.62 (an intracranial endovascular procedure). We will continue to monitor these DRGs for uniformity both from a clinical as well as a resource-consumption standpoint as more data become available.

In this final rule with comment period, for FY 2008, we are assigning code 00.62 to MS–DRGs 25, 26, and 27 as well as MS–DRGs 23 and 24, as we proposed and describe above. We note that the claims containing code 00.62 must be accompanied by code 00.65 in order to qualify as a covered procedure. As previously stated, the lack of code 00.65 on the claim will cause the claim to fail the MCE edit, and the claim will be denied.

3. MDC 3 (Diseases and Disorders of the Ear, Nose, Mouth, and Throat)—Cochlear Implants

Cochlear implants were first covered by Medicare in 1986 and were assigned to CMS DRG 49 (Major Head and Neck Procedures) in MDC 3 (Diseases and Disorders of the Ear, Nose, Mouth, and Throat). CMS DRG 49 is the highest weighted DRG in that MDC. However, two manufacturers of cochlear implants contend that this DRG assignment is clinically and economically inappropriate and have requested that cochlear implant cases be reassigned from CMS DRG 49 to CMS DRG 543 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis).

The manufacturers stated that procedures assigned to CMS DRG 49 are performed mostly for diseases such as head and neck cancers, while procedures in CMS DRG 543 include operations on and inside the skull and implantation of complex devices, including intracranial neurostimulators. The manufacturers described the cochlear implant procedure as requiring incisions behind the ear to remove a section of the temporal bone, followed by microscopic neurotologic surgery under general anesthesia, and is typically completed in 2 to 4 hours to restore hearing to the profoundly deaf. For these reasons, these manufacturers believe cochlear implant procedures are similar to open craniotomies.

Based on their analysis of the FY 2005 MedPAR data, the manufacturers identified a total of 139 cochlear implant cases using ICD–9–CM procedure codes 20.96 (Implantation or replacement of cochlear prosthetic device NOS), 20.97 (Implantation or replacement of cochlear prosthetic device, single channel), and 20.98 (Implantation or replacement of cochlear prosthetic device, multiple channel). The manufacturers reported 121 out of 139 cochlear implant cases were assigned to CMS DRG 49 with average standardized charges of approximately $58,078.

When we reviewed the FY 2006 MedPAR data, we identified 104 cochlear implant cases assigned to CMS DRG 49. In the MS–DRGs in the FY 2008 IPPS proposed rule, CMS–DRG 49 is subdivided into two severity levels: MS–DRG 129 (Major Head and Neck

Procedures with CC or MCC) and MS DRG 130 (Major Head and Neck Procedures without CC). The following table displays our results:

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 130—All cases	1,095	3.04	$23,928
MS–DRG 130—Code 20.96 cases only	38	1.63	51,740
MS–DRG 130—Code 20.97 cases only	2	1.50	38,855
MS–DRG 130—Code 20.98 cases only	45	1.24	50,219
MS–DRG 129—All cases	1,244	5.35	34,169
MS–DRG 129—Code 20.96 cases only	10	2.70	81,351
MS–DRG 129—Code 20.97 cases only	1	5.00	95,441
MS–DRG 129—Code 20.98 cases only	8	3.13	53.510

Under the proposed MS–DRGs, 19 out of 104 cochlear implant cases are assigned to MS–DRG 129 based on the secondary diagnosis of the patient. The 85 remaining cochlear implant cases do not have a CC or MCC and were proposed to be assigned to MS–DRG 130, absent further changes to the DRG logic.

The average charges of approximately $54,238 for cochlear implant cases are higher than the average charges of approximately $29,375 for the other cases in CMS DRG 49. However, the average charges are not as high as the average charges of approximately $78,118 for cases assigned to CMS DRG 543. Further, our medical advisors do not believe that surgery to implant a cochlear implant is clinically similar to an open craniotomy in MDC 1 because typically a craniotomy involves removing and then replacing a section of the skull in order to perform a procedure on or within the brain, whereas a cochlear implant involves drilling a hole in the mastoid bone in order to insert the implant into the inner ear.

We have been unable to address this issue under the current DRGs because there are not enough inpatient cochlear implant cases to warrant creation of a separate DRG. Although these cases will continue to have higher charges than other cases in their assigned DRG, in the FY 2008 proposed rule, we proposed to move the cochlear implant cases to the higher DRG severity level within CMS DRG–49. As part of this proposal, we indicated that we would redefine MS–DRG 129 as ''Major Head and Neck Procedures with CC or MCC or Major Device.'' The presence of a major head and neck procedure with a CC or MCC or major device would assign the case to the higher severity level within CMS–DRG 49.

Comment: Some commenters supported the proposed reassignment of cochlear implant cases to MS–DRG 129.

Response: We appreciate the commenters' support for the proposed MS–DRG assignment for these cases.

Comment: Two commenters expressed appreciation for CMS's recognition of the payment issues facing cochlear implants by proposing to classify these cases to MS–DRG 129. However, one of the commenters stated that, even with the proposed reassignment, the costs of these cases are nearly 60 percent higher than all cases within MS–DRG 129.

The commenters contended that these procedures should be assigned to MS–DRG 24 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC). They pointed out that cases that have been assigned to DRG 543 in the CMS–DRGs are assigned to MS–DRGs 23 and 24 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with and without MCC) in the MS–DRGs. The commenters stated that cochlear implant procedures are clinically and resource coherent with other craniotomy procedures such as Kinetra® dual array deep brain stimulator and should be assigned to MS–DRG 024. One of the commenters indicated that the principal diagnosis codes for hearing loss are currently assigned to MDC 3, not MDC 1. They believed that this MDC assignment prevents cochlear implants from being assigned to MS–DRG 024. The commenters suggested that sensorineural hearing loss (codes 389.10–389.18) is a nervous system disorder that should be assigned to MDC 1. One commenter stated that cochlear implantation cases should be assigned as a pre-MDC based on complexity and should be assigned to a separate or different DRG that involves implantation of a complex neural stimulation device. Another commenter recommended that CMS develop a third level of complexity for major head and neck procedures and assign cochlear implants to the highest severity level.

Response: Our medical advisors do not believe that surgery to implant a cochlear implant is clinically similar to an open craniotomy in MDC 1. Typically, a craniotomy involves removing and then replacing a section of the skull in order to perform a procedure on or within the brain, whereas a cochlear implant involves entering the mastoid bone, not the intracranial space.

With regard to the MDC assignment, we believe that sensorineural hearing loss is due to a defect in the inner ear or the acoustic nerve and is a disorder of the ear that is appropriately assigned to MDC 3.

As the low volume of cochlear implant cases does not justify a new MS–DRG, the current base DRG assignment for cochlear implants is appropriate. In addition, MS–DRG 129 does not meet the criteria for a three-level split. Therefore, we do not believe there is a better alternative to the policy we proposed. Accordingly, in this final rule with comment period, we are assigning all cochlear implant cases to MS–DRG 129. MS–DRG 129 is redefined as ''Major Head and Neck Procedures with CC or MCC or Major Device.''

4. MDC 8 (Diseases and Disorders of the Musculoskeletal System and Connective Tissue)

a. Hip and Knee Replacements

In the FY 2006 IPPS final rule (70 FR 47303), we deleted DRG 209 (Major Joint and Limb Reattachment Procedures of Lower Extremity) and created two new DRGs: 544 (Major Joint Replacement or Reattachment of Lower Extremity) and 545 (Revision of Hip or Knee Replacement). The two new DRGs were created because revisions of joint replacement procedures are significantly more resource intensive than original hip and knee replacement procedures. DRG 544 includes the following procedure code assignments:

- 81.51, Total hip replacement
- 81.52, Partial hip replacement
- 81.54, Total knee replacement

- 81.56, Total ankle replacement
- 84.26, Foot reattachment
- 84.27, Lower leg or ankle reattachment
- 84.28, Thigh reattachment

DRG 545 includes the following procedure code assignments:

- 00.70, Revision of hip replacement, both acetabular and femoral components
- 00.71, Revision of hip replacement, acetabular component
- 00.72, Revision of hip replacement, femoral component
- 00.73, Revision of hip replacement, acetabular liner and/or femoral head only
- 00.80, Revision of knee replacement, total (all components)
- 00.81, Revision of knee replacement, tibial component
- 00.82, Revision of knee replacement, femoral component
- 00.83, Revision of knee replacement, patellar component
- 00.84, Revision of knee replacement, tibial insert (liner)
- 81.53, Revision of hip replacement, not otherwise specified
- 81.55, Revision of knee replacement, not otherwise specified

Further, we created a number of new ICD–9–CM procedure codes effective October 1, 2005, that better distinguish the many different types of joint replacement procedures that are currently being performed. In the FY 2006 IPPS final rule (70 FR 47305), we indicated a commenter had requested that, once we receive claims data using the new procedure codes, we closely examine data from the use of the codes under the two new DRGs to determine if future additional DRG modifications are needed.

Further, the American Association of Hip & Knee Surgeons (AAHKS) recommended that we make further refinements to the DRGs for knee and hip arthroplasty procedures. AAHKS previously presented data to CMS on the important differences in clinical characteristics and resource utilization between primary and revision total joint arthroplasty procedures. AAHKS stated that CMS' decision to create a separate DRG for revision of total joint arthroplasty (TJA) in October 2005 resulted in more equitable reimbursement for hospitals that perform a disproportionate share of complex revision of TJA procedures, recognizing the higher resource utilization associated with these cases. AAHKS stated that this important payment policy change led to increased access to care for patients with failed total joint arthroplasties, and ensured that high volume TJA centers could continue to provide a high standard of care for these challenging patients.

AAHKS further stated that the addition of new, more descriptive ICD–9–CM diagnosis and procedure codes for TJA in October 2005 gave it the opportunity to further analyze differences in clinical characteristics and resource intensity among TJA patients and procedures. Inclusive of the preparatory work to submit its recommendations, the AAHKS compiled, analyzed, and reviewed detailed clinical and resource utilization data from over 6,000 primary and revision TJA procedure codes from 4 high volume joint arthroplasty centers located within different geographic regions of the United States: University of California, San Francisco, CA; Mayo Clinic, Rochester, MN; Massachusetts General Hospital, Boston, MA; and the Hospital for Special Surgery, New York, NY. Based on its analysis, AAHKS recommended that CMS examine Medicare claims data and consider the creation of separate DRGs for total hip and total knee arthroplasty procedures. CMS DRG 545 currently contains revisions of both hip and knee replacement procedures. AAHKS stated that based on the differences between patient characteristics, procedure characteristics, resource utilization, and procedure code payment rates between total hip and total knee replacements, separate DRGs were warranted. Furthermore, AAHKS recommended that CMS create separate base DRGs for routine versus complex joint revision or replacement procedures as shown below.

Routine Hip Replacements

- 00.73, Revision of hip replacement, acetabular liner and/or femoral heal only
- 00.85, Resurfacing hip, total, acetabulum and femoral head
- 00.86, Resurfacing hip, partial, femoral head
- 00.87, Resurfacing hip, partial, acetabulum
- 81.51, Total hip replacement
- 81.52, Partial hip replacement
- 81.53, Revision of hip replacement, not otherwise specified

Complex Hip Replacements

- 00.70, Revision of hip replacement, both acetabular and femoral components
- 00.71, Revision of hip replacement, acetabular component
- 00.72, Revision of hip replacement, femoral component

Routine Knee Replacements and Ankle Procedures

- 00.83, Revision of knee replacement, patellar component
- 00.84, Revision of knee replacement, tibial insert (liner)
- 81.54, Revision of knee replacement, not otherwise specified
- 81.55, Revision of knee replacement, not otherwise specified
- 81.56, Total ankle replacement

Complex Knee Replacements and Other Reattachments

- 00.80, Revision of knee replacement, total (all components)
- 00.81, Revision of knee replacement, tibial component
- 00.82, Revision of knee replacement, femoral component
- 84.26, Foot reattachment
- 84.27, Lower leg or ankle reattachment
- 84.28, Thigh reattachment

AAHKS also recommended the continuation of CMS DRG 471 (Bilateral or Multiple Major Joint Procedures of Lower Extremity) without modifications. CMS DRG 471 includes any combination of two or more of the following procedure codes:

- 00.70, Revision of hip replacement, both acetabular and femoral components
- 00.80, Revision of knee replacement, total (all components)
- 00.85, Resurfacing hip, total, acetabulum and femoral head
- 00.86, Resurfacing hip, partial, femoral head
- 00.87, Resurfacing hip, partial, acetabulum
- 81.51, Total hip replacement
- 81.52, Partial hip replacement
- 81.54, Total knee replacement
- 81.56, Total ankle replacement

As discussed in section II.C. of the preamble of this final rule with comment period, we proposed, and are adopting in this final rule with comment period, MS–DRGs to better recognize severity of illness for FY 2008. The MS–DRGs include two new severity of illness levels under the current base DRG 544. We also proposed to add three new severity of illness levels to the base DRG for Revision of Hip or Knee Replacement (currently DRG 545). The new MS–DRGs are as follows:

- MS–DRG 466 (Revision of Hip or Knee Replacement with MCC)
- MS–DRG 467 (Revision of Hip or Knee Replacement with CC)
- MS–DRG 468 (Revision of Hip or Knee Replacement without CC/MCC)
- MS–DRG 469 (Major Joint Replacement or Reattachment of Lower Extremity with MCC)

• MS–DRG 470 (Major Joint Replacement or Reattachment of Lower Extremity without MCC)

We found that the MS–DRGs greatly improved our ability to identify joint procedures with higher resource costs. The following table indicates the average charges for each new MS–DRG for the joint procedures.

MS–DRGs That Replace DRGs 544 and 535 With New Severity Levels

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 466	3,886	9.55	$69,649.08
MS–DRG 467	10,078	6.06	48,575.01
MS–DRG 468	26,718	4.06	38,720.28
MS–DRG 483	28,211	8.46	53,676.09
MS–DRG 484	390,344	4.03	33,465.85

AAHKS analyzed Medicare data under the CMS DRG system and was unaware of how its analysis would change under the proposed MS–DRGs. Under the CMS DRGs, the AAHKS recommendation would replace 2 DRGs with 4 new ones. However, under the proposed MS– DRGs, the AAHKS recommendation would result in 5 DRGs becoming 12. Because AAHKS is recommending four new joint replacement DRGs (two for knees and two for hips), each would need to be subdivided into severity levels under our proposed MS–DRG system. Therefore, the four new joint DRGs could be subdivided into three levels each, leading to 12 new DRGs. For the proposed rule, we indicated that the changes we proposed to adopt are sufficiently better for recognizing severity of illness among the hip and knee replacement cases. We did not believe that there would be significant improvements in the proposed MS–DRGs' recognition of severity of illness from creating an additional 7 DRGs. However, we acknowledged the valuable assistance the AAHKS had provided to CMS in creating the new joint replacement procedure codes and modifying the joint replacement DRGs beginning in FY 2006. These efforts greatly improved our ability to categorize significantly different groups of patients according to severity of illness. In the proposed rule, we welcomed comments from AAHKS on whether the proposed MS–DRGs recognize patient complexity and severity of illness in the hip and knee replacement DRGs consistent with the concerns it expressed to us in previous comments. We also welcomed public comments from others on whether the proposed changes to the hip and knee replacement DRGs better recognize severity of illness and complexity of these operations in the Medicare patient population.

Comment: Two commenters supported CMSs' efforts to refine the DRG system to better identify costs associated with different joint procedures. The commenters encouraged CMS to continue working with the orthopedic community, including AAHKS, to monitor the need for additional new DRGs. The commenters stated that proposed MS–DRGs 466 through 470 are a good first step. However, they stated that CMS should continue to evaluate the data for these procedures and consider additional refinements to the MS–DRGs, including the need for additional severity levels.

Response: We agree that MS–DRGs better identify resource costs for joint procedures than do the CMS DRGs. The AAHKS and others are welcome to suggest additional refinements to us if they believe further improvements are needed.

Comment: One commenter (AAHKS) stated that it was pleased that CMS decided to recognize both surgical complexity and medical severity of illness in the MS–DRGs. The commenter stated that MS–DRGs are more reflective of procedural complexity than the CS–DRGs proposed last year. In addition, the commenter believed that the process is fairly straightforward, making it easier to understand, with the grouping logic available in the public domain. However, the commenter raised several concerns about the proposed joint replacement and revision MS–DRGs. AAHKS stated that its data suggest that all three base DRGs (primary replacement, revision of major joint replacement, and bilateral joint replacement) should be separated into three severity levels (that is, MCC, CC, and non-CC). We proposed three severity levels for revision of hip and knee replacement (MS–DRGs 466, 467, and 468). The commenter agreed with this 3-level subdivision.

The commenter recommended that the base DRG for the proposed two severity subdivision MS–DRGs for major joint replacement or reattachment of lower extremity with and without CC/MCC (MS–DRGs 483 and 484) be subdivided into three severity levels, as was the case for the revision of hip and knee replacement MS–DRGs. The commenter also recommended that the two severity subdivision MS–DRGs for bilateral or multiple major joint procedures of lower extremity with and without MCC (MS–DRGs 461 and 462) be subdivided three ways for this base DRG. The commenter acknowledged that the three-way split would not meet all five of the criteria for establishing a subgroup, and stated that these criteria were too restrictive, lack face validity, and create perverse admission selection incentives for hospitals by significantly overpaying for cases without a CC and underpaying for cases with a CC. The commenter recommended that the existing five criteria be modified for low volume subgroups to assure materiality. For higher volume MS–DRG subgroups, the commenter recommended that two other criteria be considered, particularly for nonemergency, elective admissions:

• Is the per-case underpayment amount significant enough to affect admission vs. referral decisions on a case-by-case basis?

• Is the total level of underpayments sufficient to encourage systematic admission vs. referral policies, procedures, and marketing strategies?

The commenter also recommended refining the five existing criteria for MCC/CC without subgroups as follows:

• Create subgroups if they meet the five existing criteria, with cost difference between subgroups ($1,350) substituted for charge difference between subgroups ($4,000);

• If a proposed subgroup meets criteria number 2 and 3 (at least 5 percent and at least 500 cases) but fails one of the others, then create the subgroup if either of the following criteria are met:

• At least $1,000 cost difference per case between subgroups; or

• At least $1 million overall cost should be shifted to cases with a CC (or

MCC) within the base DRG for payment weight calculations.

Response: In section II.B.3. of this preamble, we respond to the recommendation that we modify our five criteria for creating severity subgroups and state we do not believe it is appropriate to do so at this time. At this time, we believe the criteria we established to create subdivisions within a base DRG are reasonable and establish the appropriate balance between better recognition of severity of illness, sufficient differences between the groups, and a reasonable number of cases in each subgroup. However, we may consider further modifications to the criteria at a later date once we have had some experience with MS–DRGs created using the proposed criteria. We examined data for the base DRGs for MS–DRGs 461 and 462 (Bilateral or Multiple Major Joint Procedures of Lower Extremity with MCC and without MCC, respectively) as well as the base DRGs for MS–DRGs 469 and 470 (Major Joint Replacement or Reattachment of Lower Extremity with CC and without CC, respectively) for the proposed rule.

Our data did not support creating additional subdivisions based on the criteria we proposed.

Comment: Another commenter (AAHKS) continued to support the separation of routine and complex joint procedures. The commenter believed that certain joint replacement procedures have significantly lower average charges than do other joint replacements. The commenter's data suggest that more routine joint replacements are associated with substantially less resource utilization than other more complex revision procedures. The commenter stated that leaving these procedures in the revision MS–DRGs results in substantial overpayment for these relatively simple, less costly revision procedures, which in turn results in a relative underpayment for the more complex revision procedures.

Response: We examined data on this issue and identified two procedure codes for partial knee revisions that had significantly lower average charges than did other joint revisions. The two codes are as follows:

- 00.83 Revision of knee replacement, patellar component
- 00.84 Revision of total knee replacement, tibial insert (liner)

The following table illustrates our findings for MS–DRG 466 (Revision of Hip or Knee Replacement with MCC), MS–DRG 467 (Revision of Hip or Knee replacement with CC), and MS–DRG 468 (Revision of Hip or Knee Replacement without CC/MCC):

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 466—All cases	3,886	9.55	$69,649.08
MS–DRG 466 with code 00.83 or 00.84 only	258	10.53	54,141.72
MS–DRG 467—All cases	10,078	6.06	48,575.01
MS–DRG 467 with code 00.83 or 00.84 only	955	5.47	31,191.04
MS–DRG 468—All cases	26,718	4.06	38,720.28
MS–DRG 468 with code 00.83 or 00.84 only	2,718	3.45	22,799.31

Cases with codes 00.83 and 00.84 have significantly lower charges than do other cases in these DRGs. For cases in MS–DRG 466, those with codes 00.83 or 00.84 have average charges of $54,141.72 compared to average charges of $69,646.08 for all cases within the DRG, a difference of $15,507.36. There is a difference of $17,383.97 for MS–DRG 467 and $15,920.97 for MS–DRG 468. The data suggest that these less complex partial knee revisions are less resource intensive than other cases assigned to MS–DRGs 466, 467, or 468. We examined other orthopedic DRGs to which these two codes could be assigned. As can be seen in the table below, these cases have very similar average charges to those in MS–DRG 485 (Knee Procedures with Principal Diagnosis of Infection with MCC), MS–DRG 486 (Knee Procedures with Principal Diagnosis of Infection with CC), MS–DRG 487 (Knee Procedures with Principal Diagnosis of Infection without CC), MS–DRG 488 (Knee Procedures without Principal Diagnosis of Infection with CC or MCC), and MS–DRG 489 (Knee Procedures without Principal Diagnosis of Infection without CC).

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 485—All cases	916	12.69	$59,722.69
MS–DRG 485 with code 00.83 or 00.84 only	174	11.71	57,649.86
MS–DRG 486—All cases	1,461	8.39	37,730.19
MS–DRG 486 with code 00.83 or 00.84 only	336	7.73	37,315.10
MS–DRG 487—All cases	1,139	5.84	27,184.41
MS–DRG 487 with code 00.83 or 00.84 only	262	7.73	29,142.35
MS–DRG 488—All cases	1,462	5.66	30,073.21
MS–DRG 488 with code 00.83 or 00.84 only	703	4.24	30,138.06
MS–DRG 489—All cases	3,687	3.11	18,865.79
MS–DRG 489 with code 00.83 or 00.84 only	2,456	3.18	22,122.64

Given the very similar resource requirements of MS–DRG 485 and the fact that these DRGs also contain knee procedures, we will move codes 00.83 and 00.84 out of MS–DRGs 466, 467, and 468 and into MS–DRGs 485, 486, 487, 488, and 489. We will continue to monitor the revision DRGs to determine if additional modifications are needed.

Comment: One commenter expressed concern about the grouper logic for assigning cases to MS–DRG 471 (Bilateral or Multiple Major Joint Procedures of Lower Extremity (current CMS–DRG 471)). Specifically, the commenter stated that the following bilateral joint replacements should be,

but are not, assigned to MS–DRGs 461 and 462.

- A patient receives identical acetabular revisions of both hips (00.71 and 00.71).
- A patient receives a total revision of one hip (00.70) and an acetabular revision of the other hip (00.71).
- A patient receives both a total hip replacement (81.51) and a total knee replacement (81.54).
- A patient receives both a total revision of one hip (00.70) and a total replacement of the other hip (81.51).

Response: We addressed this issue in the FY 2007 final rule and do not believe additional modifications are needed. We are providing the following summary of the previous action. After publication of the FY 2006 IPPS final rule, a number of hospitals and coding personnel advised us that the DRG logic for CMS DRG 471 (Bilateral or Multiple Major Joint Procedures of Lower Extremity), which utilizes the new and revised hip and knee procedure codes under CMS DRGs 544 and 545, also includes codes that describe procedures that are not bilateral or that do not involve multiple major joints. CMS DRG 471 was developed to include cases where major joint procedures such as revisions or replacements were performed either bilaterally or on two joints of one lower extremity. We changed the logic for CMS DRG 471 in FY 2006 for the first time when we added the new and revised codes. The commenters indicated that, by adding the more detailed codes that do not include total revisions or replacements to the list of major joint procedures to CMS DRG 471, we were assigning cases to CMS DRG 471 that did not have bilateral or multiple joint procedures. For example, when a hospital reported a code for revision of the tibial component (code 00.81) and patellar component of the right knee (code 00.83), the FY 2006 DRG logic assigned the case to CMS DRG 471. The commenters indicated that this code assignment was incorrect because only one joint has undergone surgery, but two components were used. One commenter indicated that ICD–9–CM did not identify left/right laterality. Therefore, it was difficult to use the current coding structure to determine if procedures were performed on the same leg or on both legs. The commenters raised concern about whether CMS intended to pay hospitals using CMS DRG 471 for procedures performed on one joint. The commenters indicated that the DRG assignments for these codes would also make future data analysis misleading. The commenters recommended removing codes from CMS DRG 471 that do not specifically identify bilateral or multiple joint procedures so that it would only include cases involving the more resource intensive cases of bilateral or multiple total joint replacements and revisions.

We agreed that the new and revised joint procedure codes should not be assigned to CMS DRG 471 unless they include bilateral and multiple joints. Therefore, in the FY 2007 IPPS final rule, we removed the following codes from CMS DRG 471 that did not identify bilateral and multiple joint revisions or replacements:

- 00.71, Revision of hip replacement, acetabular component
- 00.72, Revision of hip replacement, femoral component
- 00.73, Revision of hip replacement, acetabular liner and/or femoral head only
- 00.81, Revision of knee replacement, tibial component
- 00.82, Revision of knee replacement, femoral component
- 00.83, Revision of knee replacement, patellar component
- 00.84, Revision of total knee replacement, tibial insert (liner)
- 81.53, Revision of hip replacement, not otherwise specified
- 81.55, Revision of knee replacement, not otherwise specified

DRG 471 contains the following codes:

- 00.70, Revision of hip replacement, both acetabular and femoral components
- 00.80, Revision of knee replacement, total (all components)
- 00.85, Resurfacing hip, total, acetabulum and femoral head
- 00.86, Resurfacing hip, partial, femoral head
- 00.87, Resurfacing hip, partial, acetabulum
- 81.51, Total hip replacement
- 81.52, Partial hip replacement
- 81.54, Total knee replacement
- 81.56, Total ankle replacement

As a result of the removal of the identified codes from CMS DRG 471 in FY 2007, the reporting of one or more of the following hip or knee revision codes would be assigned to DRG 545: 00.71, 00.72, 00.73, 00.81, 00.82, 00.83, 00.84, 81.53, and 81.55. This list included partial revisions of the knee and hip as well as unspecified joint procedures such as code 81.55 where it was not clear if the revision is total or partial.

Given this historical information of the changes we made in FY 2007, we will address the current commenter's concerns. The commenter's first scenario in which a patient received identical acetabular revisions of both hips 00.71 and 00.71 would not be assigned to CMS DRG 471 (Bilateral or Multiple Major Joint Procedures of Lower Extremity), which becomes MS–DRGs 461 and 462. Even though this scenario identified revisions to two joints, they were both partial revisions that were less resource intensive than full bilateral or multiple joint revisions or replacements. In our view, the decision not to assign these cases to CMS DRG 471 was consistent with the public comments we received on the FY 2007 IPPS rule to ensure that CMS DRG 471 includes only full bilateral or multiple joint replacements or revisions. Similarly, the second scenario in which a patient receives a total revision of one hip (00.70) and a partial acetabular revision of the other hip (00.71) would not lead to the assignment of CMS DRG 471 for the same reason. As with the first scenario, code 00.71 was not included in CMS DRG 471. There was only one total and one partial joint revision in this scenario. Again, we believe that our decision not to assign these cases to CMS DRG 471 was consistent with the public comments to only include bilateral or multiple full revisions or replacements in this DRG. The third and fourth scenarios in which a patient received both a total hip replacement (81.51) and a total knee replacement (81.54) and another patient received both a total revision of one hip (00.70) and a total replacement of the other hip (81.51) would be assigned to CMS DRG 471. These are either full replacements or revisions on multiple joints. As we adopted the same logic to assign cases under the MS–DRGs as under the CMS DRGs, only full replacements or revisions of multiple joints will be included in MS–DRGs 461 and 462 (the MS–DRG analog to CMS DRG 471). Therefore, we are not making any revisions to the bilateral or multiple major joint procedures of lower extremity DRGs, MS DRG 461 and 462. The same procedure code DRG logic used in CMS DRG 471 will be applied to MS DRGs 461 and 462.

b. Spinal Fusions

In the FY 2007 IPPS final rule (71 FR 47947), we discussed a request that urged CMS to consider applying a severity concept to all of the back and spine surgical cases, similar to the approach that was used in the FY 2006 final rule in refining the cardiac DRGs with an MCV. Specifically, the commenter recommended that the use of spinal devices be uniquely identified within the spine DRGs. The commenter's suggestion involved the development of 10 new spine DRGs as

well as additional modifications. One of these modifications included revising CMS DRG 546 (Spinal Fusions Except Cervical with Curvature of the Spine or Malignancy). The commenter stated CMS DRG 546 did not adequately recognize clinical severity or the resource differences among spinal fusion patients whose surgeries include fusing multiple levels of their spinal vertebrae.

We agreed with the commenter that it was important to recognize severity when classifying groups of patients into specific DRGs. In addition, in response to recommendations from MedPAC's March 2005 Report to Congress, we stated that we were conducting a comprehensive analysis of the entire DRG system to determine if we could better identify severity of illness. We further stated that until results from our analysis were available, it would be premature to implement a severity concept for the spine DRGs. Therefore, we did not make any adjustments to those DRGs at that time.

Under the MS–DRGs described in section II.D. of the preamble of the proposed rule, we proposed a number of refinements that would better recognize severity for FY 2008. The proposed MS–DRGs, which we are adopting in this final rule with comment period, included several refinements to the spine DRGs. These refinements are described in detail below.

In the FY 2006 IPPS final rule, we noted that there are numerous innovations occurring in spinal surgery such as artificial spinal disc prostheses, kyphoplasty, vertebroplasty and the use of spine decompression devices. As part of our analysis of the DRG system for the proposed rule, we did a comprehensive review of the DRGs for spinal fusion and other back and neck procedures to determine whether additional refinements beyond the proposed MS–DRGs were necessary. We studied data from the FY 2006 MedPAR file for the entire group of spine DRGs. This group included DRG 496 (Combined Anterior/Posterior Spinal Fusion), DRGs 497 and 498 (Spinal Fusion Except Cervical with and without CC, respectively), DRGs 499 and 500 (Back and Neck Procedures Except Spinal Fusion with and without CC, respectively), DRGs 519 and 520 (Cervical Spinal Fusion with and without CC, respectively), and DRG 546 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy).

As indicated earlier, we proposed a two or three-way split for each of these spine DRGs to better recognize severity of illness, complexity of service, and resource utilization. In addition, we examined the procedure codes that identify multiple fusion or refusion of the vertebrae (codes 81.62 through 81.64) to determine if the data supported further refinement when a greater number of vertebrae are fused.

In applying the proposed MS–DRG logic, CMS DRG 497 and 498 were collapsed and the result was a split with two severity levels: proposed MS–DRG 459 (Spinal Fusion Except Cervical with MCC) and proposed MS–DRG 460 (Spinal Fusion Except Cervical without MCC). There were a total of 51,667 cases in proposed MS–DRGs 459 and 460. We identified 288 cases where nine or more (T1–S1) vertebrae were fused (code 81.64) that we proposed to assign to MS–DRGs 459 and 460. The average charges and length of stay for cases in these MS–DRGs were closer to the average charges and length of stay for cases in proposed MS–DRGs 456 through 458 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy with MCC, with CC, and without CC, respectively). For example, in proposed MS–DRG 460, there were 238 cases with an average length of stay of 6.20 days and average charges of $110,908 when nine or more noncervical (T1–S1) vertebrae are fused. There were an additional 50 cases in which nine or more vertebrae were fused in proposed MS–DRG 459 with average charges of $171,839. Without any further modification to the proposed MS–DRGs, these cases would be assigned to proposed MS–DRGs 459 and 460 that have average charges of $59,698 and $99,298, respectively. However, we believe that the average charges for these cases ($142,871, $95,489, and $77,528, respectively) are more comparable to the average charges for cases in proposed MS–DRGs 456 through 458. We believe these data support assigning cases where nine or more noncervical (T1–S1) vertebrae are fused from MS–DRG 459 and 460 into MS–DRG 456 through 458. The table below represents our findings.

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 459 (Spinal Fusion Except Cervical with MCC)—All Cases	3,186	10.10	$99,298
MS–DRG 459 (Spinal Fusion Except Cervical with MCC)—Cases with Procedure Code 81.64 (Fusion or refusion of 9 or more vertebrae)	50	13.00	171,839
MS–DRG 460 (Spinal Fusion Except Cervical without MCC)—All Cases	48,481	4.36	59,698
MS–DRG 460 (Spinal Fusion Except Cervical without MCC)—Cases with Procedure Code 81.64 (Fusion or refusion of 9 or more vertebrae)	238	6.20	110,908
MS–DRG 456 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy with MCC)—All Cases	548	14.79	142,871
MS–DRG 456 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy with MCC)—Cases with Procedure Code 81.64 (Fusion or refusion of 9 or more vertebrae)	61	13.34	170,655
MS–DRG 457 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy with CC)—All Cases	1,500	8.14	95,489
MS–DRG 457 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy with CC)—Cases With Procedure Code 81.64 (Fusion or refusion of 9 or more vertebrae)	146	8.88	125,722
MS–DRG 458 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy without CC)—All Cases	1,340	4.58	77,528
MS–DRG 458 (Spinal Fusion Except Cervical with Curvature of the Spine or Malignancy without CC)—Cases with Procedure Code 81.64 (Fusion or refusion of 9 or more vertebrae)	81	6.21	123,823

Therefore, we proposed to move those cases that include fusing or refusing nine or more noncervical (T1–S1) vertebrae from MS–DRGs 459 and 460 into MS DRGs 456 though 458. This modification would include revising the MS–DRG title to reflect the fusion or refusion of nine or more noncervical (T1–S1) vertebrae. The revised titles for proposed MS–DRGs 456 through 458 would be as follows:

- MS–DRG 456 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with MCC)
- MS–DRG 457 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with CC)
- MS–DRG 458 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions without CC/MCC)

In the FY 2008 IPPS proposed rule, we invited public comment on this topic as well as on the additional changes we proposed to the spine MS–DRGs discussed below.

Further analysis demonstrated that spinal fusion cases with a principal diagnosis of tuberculosis or osteomyelitis also have higher average charges than other cases in CMS DRG 497 (MS–DRGs 459 and 460 in this final rule with comment period) that were more similar to the cases assigned to CMS DRG 546 (MS–DRGs 456 through 458 in this final rule with comment period). Although the volume of cases is relatively low, the data show very high average charges for these patients. The following tables display our results:

MS–DRGs	Number of cases	Average length of stay	Average charges
MS–DRG 459 (Spinal Fusion Except Cervical with MCC)	3,186	10.10	$99,298
MS–DRG 460 (Spinal Fusion Except Cervical without MCC)	48,481	4.36	59,698
MS–DRG 456 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with MCC)	548	14.79	142,870
MS–DRG 457 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with CC)	1,500	8.14	95,489
MS–DRG 458 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions without CC/MCC)	1,340	4.58	77,528

TUBERCULOSIS AND OSTEOMYELITIS

Principal diagnosis	Number of cases	Average length of stay	Average charges
Codes 015.02, 015.04, 015.05, 730.08, 730.18 and 730.28	194	24.8	$128,073

For this reason, we proposed to add the following diagnoses to the principal diagnosis list for MS–DRGs 456 through 458:

- 015.02, Tuberculosis of bones and joints, vertebral column, bacteriological or histological examination unknown (at present)
- 015.04, Tuberculosis of bones and joints, vertebral column, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture
- 015.05, Tuberculosis of bones and joints, vertebral column, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically
- 730.08, Acute osteomyelitis of other specified sites
- 730.18, Chronic osteomyelitis of other specified sites
- 730.28, Unspecified osteomyelitis of other specified sites.

For the complete list of principal diagnosis codes that lead to assignment of CMS DRG 546 (MS–DRGs 496 through 498 in this final rule with comment period), we refer readers to section II.D.4.b. of the preamble of the FY 2007 IPPS final rule (71 FR 47947).

Comment: One commenter expressed support of CMS' refinement of the DRGs for spinal procedures, and noted that it had made several recommendations in the past. Specifically, this commenter was pleased with the refinements to address multiple level procedures such as those in proposed MS–DRGs 456–458 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with MCC/with CC/and without CC/MCC, respectively), as well as the proposal to add specified diagnoses of tuberculosis and osteomyelitis to the list of principal diagnoses for MS–DRGs 456–458. The commenter also supported the proposal to move cases involving the use of motion-preserving spine devices into the higher severity level of MS–DRG 490.

This commenter suggested that MS–DRG 460 (Spinal Fusion Except Cervical without MCC) should include severity levels that distinguish with CC and without CC cases. The commenter urged CMS to create a CC split for this MS–DRG.

Response: We appreciate the commenter's support for the refinements proposed to the spine DRGs. The data analysis conducted in developing the MS–DRGs did not support a CC split for proposed MS–DRG 460. As stated in the FY 2008 proposed rule, in order to warrant creation of a CC or major CC subgroup within a base MS–DRG, the subgroup had to meet all five criteria. We refer readers to the FY 2008 proposed rule (72 FR 24705) and section II.D.3 of this final rule with comment period for a complete listing of the criteria. As stated in the proposed rule, the data did support a split for proposed MS–DRG 460 with two severity levels of with MCC and without MCC. Therefore, in this final rule with comment period we are implementing MS–DRG 460 as final policy.

Comment: One manufacturer requested that CMS reassign newly created procedure code 84.82 (Insertion or replacement of pedicle-based dynamic stabilization device(s)), effective October 1, 2007, from proposed MS–DRG 490 to MS–DRG 460. The commenter stated the surgical procedure requirements for code 84.82 are very similar to other procedures that were proposed for assignment to MS–DRG 460 as a result of the complexity and resources utilized. The commenter further noted that in the FY 2008 proposed rule (72 FR 24734) CMS reported a total of 83 cases identified by code 84.59 (Insertion of other spinal devices) a predecessor code to 84.82 and it is unknown whether the cases reported with code 84.59 truly reflect dynamic stabilization procedures.

Response: In developing the MS–DRGs, we conducted a comprehensive review of the entire group of spine DRGs and proposed a number of revisions to account for differences in level of severity, complexity, and resource utilization. We believe the proposed spinal MS–DRGs more appropriately classify the variety of emerging spinal technologies. In response to the uncertainty of correct coding and

accurate charge information for the reporting of pedicle-based dynamic stabilization devices by code 84.59, we refer the commenter to the ICD–9–CM Coordination and Maintenance Committee Meeting's September 28–29, 2006 and March 22–23, 2007 interim coding advice regarding these devices, which was to continue using code 84.59 to describe this technology.

Effective October 1, 2007, new code 84.82 will be available to identify and describe procedures using pedicle-based dynamic stabilization devices more accurately. Our practice has been to assign a new code to the same MS–DRG as its predecessor code unless we have clinical information or cost data that demonstrates a different MS–DRG assignment is warranted. At this time, we have no information to suggest that ICD–9–CM code 84.82 should be reassigned from MS–DRG 490. As final policy for FY 2008, code 84.82 will be assigned to MS–DRG 490.

Comment: Two commenters indicated that they supported the reassignment of spinal fusion cases with a principal diagnosis of tuberculosis or osteomyelitis to MS–DRGs 456–458 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with MCC/with CC/and Without CC/MCC, respectively) to better recognize the utilization of resources involved with these cases, however they recommended that the MS–DRG titles be modified to reflect these conditions. One of the commenters suggested the following title modifications:

- MS–DRG 456 (Spinal Fusion Except Cervical with Spinal Curvature, Malignancy, Tuberculosis, or Osteomyelitis or 9+ Fusions with MCC)
- MS–DRG 457 (Spinal Fusion Except Cervical with Spinal Curvature, Malignancy, Tuberculosis, or Osteomyelitis or 9+ Fusions with CC)
- MS–DRG 458 (Spinal Fusion Except Cervical with Spinal Curvature, Malignancy, Tuberculosis, or Osteomyelitis or 9+ Fusions without CC/MCC)

Response: We appreciate the commenter's support of the proposal to reassign cases with a principal diagnosis of tuberculosis or osteomyelitis to MS–DRGs 456–458. We also appreciate the suggestion for revising the DRG titles to better classify these patients. While we recognize the creative approach to modifying the code titles, we must limit the DRG titles to 68 characters.

We have reviewed the MS–DRG titles and are revising them as follows:

- MS–DRG 456 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with MCC)
- MS–DRG 457 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions with CC)
- MS–DRG 458 (Spinal Fusion Except Cervical with Spinal Curvature or Malignancy or 9+ Fusions without CC/MCC)

Therefore, effective October 1, 2007, the new titles for MS–DRGs 456–458 will be implemented as above.

c. Spinal Disc Devices

Over the past several years, manufacturers of spinal disc devices have requested reassignment of DRGs for their products and applied for new technology add-on payment. CHARITE™ is one of these devices. CHARITE™ is a prosthetic intervertebral disc. On October 26, 2004, the FDA approved the CHARITE™ Artificial Disc for single level spinal arthroplasty in skeletally mature patients with degenerative disc disease between L4 and S1. On October 1, 2004, we created new procedure codes for the insertion of spinal disc prostheses (codes 84.60 through 84.69). We provided the CMS DRG assignments for these new codes in Table 6B of the FY 2005 IPPS proposed rule (69 FR 28673). We received comments on the FY 2005 proposed rule recommending that we change the assignments for these codes from CMS DRG 499 (Back and Neck Procedures Except Spinal Fusion with CC) and CMS DRG 500 (Back and Neck Procedures Except Spinal Fusion without CC) to the CMS DRGs for spinal fusion, CMS DRG 497 (Spinal Fusion Except Cervical with CC) and CMS DRG 498 (Spinal Fusion Except Cervical without CC), for procedures on the lumbar spine and to CMS DRGs 519 and 520 for procedures on the cervical spine. In the FY 2005 IPPS final rule (69 FR 48938), we indicated that CMS DRGs 497 and 498 are limited to spinal fusion procedures. Because the surgery involving the CHARITE™ Artificial Disc is not a spinal fusion, we decided not to include this procedure in these CMS DRGs. However, we stated that we would continue to analyze this issue and solicited further public comments on the DRG assignment for spinal disc prostheses.

In the FY 2006 final rule (70 FR 47353), we noted that, if a product meets all of the criteria for Medicare to pay for the product as a new technology under section 1886(d)(5)(K) of the Act, there is a clear preference expressed in the statute for us to assign the technology to a DRG based on similar clinical or anatomical characteristics or costs. However, for FY 2006, we did not find that the CHARITE™ Artificial Disc met the substantial clinical improvement criterion and, thus, did not qualify as a new technology. Consequently, we did not address the DRG classification request made under the authority of this provision of the Act.

We did evaluate whether to reassign the CHARITE™ Artificial Disc to different CMS DRGs using the Secretary's authority under section 1886(d)(4) of the Act (70 FR 47308). We indicated that we did not have Medicare charge information to evaluate CMS DRG changes for cases involving an implant of a prosthetic intervertebral disc like the CHARITE™ and did not make a change in its CMS DRG assignments. We stated that we would consider whether changes to the CMS DRG assignments for the CHARITE™ Artificial Disc were warranted for FY 2007, once we had information from Medicare's data system that would assist us in evaluating the costs of these patients.

As we discussed in the FY 2007 IPPS proposed rule (71 FR 24036), we received correspondence regarding the CMS DRG assignments for the CHARITE™ Artificial Disc, code 84.65 (Insertion of total spinal disc prosthesis, lumbosacral). The commenter had previously submitted an application for the CHARITE™ Artificial Disc for new technology add-on payments for FY 2006 and had requested a reassignment of cases involving CHARITE™ implantation to CMS DRGs 497 and 498. The commenter asked that we examine claims data for FY 2005 and reassign procedure code 84.65 from CMS DRGs 499 and 500 into CMS DRGs 497 and 498. The commenter again stated the view that cases with the CHARITE™ Artificial Disc reflect comparable resource use and similar clinical indications as do those in CMS DRGs 497 and 498. If CMS were to reject reassignment of the CHARITE™ Artificial Disc to CMS DRGs 497 and 498, the commenter suggested creating two separate DRGs for lumbar disc replacements.

On February 15, 2006, we posted a proposed national coverage determination (NCD) on the CMS Web site seeking public comment on our proposed finding that the evidence is not adequate to conclude that lumbar artificial disc replacement with the CHARITE™ Artificial Disc is reasonable and necessary. The proposed NCD stated that lumbar artificial disc replacement with the CHARITE™ Artificial Disc is generally not indicated in patients over 60 years old. Further, it stated that there is insufficient evidence among either the aged or disabled Medicare population to make a

reasonable and necessary determination for coverage. With an NCD pending to make spinal arthroplasty with the CHARITE™ Artificial Disc noncovered, we indicated in the FY 2007 IPPS proposed rule that we did not believe it was appropriate at that time to reassign procedure code 84.65 from CMS DRGs 499 and 500 to CMS DRGs 497 and 498.

After considering the public comments and additional evidence received, we made a final NCD on May 16, 2006, that Medicare would not cover the CHARITE™ Artificial Disc for the Medicare population over 60 years of age. For Medicare beneficiaries 60 years of age and under, local Medicare contractors have the discretion to determine coverage for lumbar artificial disc replacement procedures involving the CHARITE™ Artificial Disc. The final NCD can be found on the CMS Web site at: *http://www.cms.hhs.gov/mcd/viewncd.asp:ncd_id-150.10&ncd_version1&basket=ncd%3A150%2E10%3A1%3ALumbar+Artificial+Disc+Replacement%280ADR%29*.

We agreed with a commenter on the FY 2007 IPPS proposed rule that it was not appropriate to consider a DRG revision at that time for the CHARITE™ Artificial Disc, given the recent decision to limit coverage for surgical procedures involving this device. Although we had reviewed the Medicare charge data, we were concerned that there were a very small number of cases for patients under 60 years of age who had received the CHARITE™ Artificial Disc. We believed it appropriate to base the decision of a DRG change on charge data only on the population for which the procedure is covered. We had an extremely small number of cases for Medicare beneficiaries under 60 on which to base such a decision. For this reason, we did not believe it was appropriate to modify the CMS DRGs in FY 2007 for CHARITE™ cases.

For FY 2008, we proposed to collapse CMS DRGs 499 and 500 (Back and Neck Procedures Except Spinal Fusion With and Without CC, respectively) and identified a total of 74,989 cases. Under the proposed MS–DRGs (which we are adopting in this final rule with comment period), the result of the analysis of the data supports that these CMS DRGs split into two severity levels: MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC or MCC) and MS–DRG 491 (Back and Neck Procedures Except Spinal Fusion Without CC or MCC). We found a total of 53 cases that used the CHARITE™ Artificial Disc. Without any further modification to the proposed MS–DRGs, average charges are $26,481 for 6 cases with a CC or MCC and $37,324 for 47 CHARITE™ cases without a CC or MCC. (We find it counterintuitive that average charges for cases in the higher severity level are lower but checked our data and found it to be correct).

We also analyzed data for other spinal disc devices. Average charges for the X Stop Interspinous Process Decompression Device (code 84.58) are $31,400 for cases with a CC or MCC and $28,821 for cases without a CC or MCC. Average charges for other specified spinal devices described by code 84.59 (Coflex, Dynesys, M-Brace) are $34,002 for 18 cases with a CC or MCC and $33,873 for 65 cases without a CC or MCC. We compared these average charges to data in the proposed spinal fusion MS–DRGs 453 (Combined Anterior/Posterior Spinal Fusion With MCC), 454 (Combined Anterior/Posterior Spinal Fusion with CC), 455 (Combined Anterior/Posterior Spinal Fusion without CC/MCC), 459 (Spinal Fusion Except Cervical with MCC), and 460 (Spinal Fusion Except Cervical without MCC). These cases have lower average charges than the spinal fusion MS–DRGs. The following tables display the results:

MS–DRGs 490 and 491	Number of cases	Average length of stay	Average charges
MS–DRG 490—All Cases	17,493	5.13	$29,656
MS–DRG 490—Cases with Procedure Code 84.65 (CHARITE™)	6	3.33	26,481
MS–DRG 491—All Cases	57,496	2.27	17,789
MS–DRG 491—Cases with Procedure Code 84.65 (CHARITE™)	47	2.43	37,324
MS–DRG 491—Cases without Procedure Code 84.65 (CHARITE™)	57,449	2.27	17,773
MS–DRG 490—All Cases	17,493	5.13	29,656
MS–DRG 490—Cases with Procedure Code 84.58 (X Stop)	179	2.65	31,400
MS–DRG 490—Cases without Procedure Code 84.58 (X Stop)	17,314	5.15	29,638
MS–DRG 491—All Cases	57,496	2.27	17,789
MS–DRG 491—Cases with Procedure Code 84.58 (X Stop)	1,174	1.34	28,821
MS–DRG 491—Cases without Procedure Code 84.58 (X-Stop)	56,322	2.29	17,559
MS–DRG 490—All Cases	17,493	5.13	29,656
MS–DRG 490—Cases with Procedure Code 84.59 (Coflex/Dynesys/M-Brace)	18	5.56	34,002
MS–DRG 490—Cases without Procedure Code 84.59 (Coflex/Dynesys/M-Brace)	17,475	5.13	29,651
MS–DRG 491—All Cases	57,496	2.27	17,789
MS–DRG 491—Cases with Procedure Code 84.59 (Coflex/Dynesys/M-Brace)	65	2.35	33,873
MS–DRG 491—Cases without Procedure Code 84.59 (Coflex/Dynesys/M-Brace)	57,431	2.27	17,770

MS–DRGs 453, 454, 455, 459 and 460	Number of cases	Average length of stay	Average charges
MS–DRG 453—Combined Anterior/Posterior Spinal Fusion With MCC	792	15.84	$180,658
MS–DRG 454—Combined Anterior/Posterior Spinal Fusion With CC	1,411	8.69	116,402
MS–DRG 455—Combined Anterior/Posterior Spinal Fusion Without CC/MCC	1,794	4.84	85,927
MS–DRG 459—Spinal Fusion Except Cervical with MCC	3,186	10.10	99,298
MS–DRG 460—Spinal Fusion Except Cervical without MCC	48,481	4.36	59,698

The data demonstrate that the average charges for CHARITE™ and the other devices are higher than other cases in proposed MS–DRGs 490 and 491 but lower than proposed MS–DRGs 453 through 455 and 459 and 460. For this reason, we do not believe that any of the cases that use these spine devices should be assigned to the spinal fusion

MS–DRGs. However, we do believe that the average charges for cases using these spine devices are more similar to the higher severity level in MS–DRG 490.

As such, in the FY 2008 IPPS proposed rule, we proposed to move cases with procedure codes 84.58, 84.59, and 84.65 into proposed MS–DRG 490 and revise the title to reflect disc devices. The proposed modified MS–DRG title would be: MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC or MCC or Disc Devices).

We believe these proposed changes to the spine DRGs are appropriate to recognize the similar utilization of resources, differences in levels of severity, and complexity of the services performed for various types of spinal procedures described above. We encouraged commenters to provide input on this approach to better recognize the types of patients these procedures are being performed upon and their outcomes.

Comment: Several commenters supported our proposal to recognize utilization of resources, differences in levels of severity, and the complexity of spinal procedures in proposed MS–DRGs 490 and 491. The commenters were pleased with the proposal to reassign cases identified by procedure codes 84.58 [24], 84.59 and 84.65 to proposed MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC or MCC or Disc Devices). One commenter stated that the proposed refinements to MS–DRG 490 result in Medicare payment that better recognizes patient conditions and procedural complexity. Another commenter believed that the proposals will provide more appropriate payment and ensure patient access to spine technologies. This commenter commended CMS for its responsiveness in considering resource use associated with new technologies, such as spine motion preservation devices, and stated the proposal to assign higher payment rates will enable hospitals to provide Medicare patients with access to these technologies.

Two commenters suggested CMS also consider moving cases with procedure code 84.62 (Insertion of total spinal disc prosthesis, cervical) into MS–DRG 490. The commenters stated that this procedure is clinically coherent with the other cases proposed for reassignment to this DRG. Many commenters also recommended that CMS continue analyzing claims data in the future to ensure appropriate DRG assignment for all spinal related procedures.

Response: We greatly appreciate the commenters' support of our proposal. We analyzed data for procedure code 84.62 and found 23 cases with an average length of stay of 1.48 days and average charges of $30,114 in MS–DRG 491. We also identified 4 cases in MS–DRG 490 with an average length of stay of 10.5 days and average charges of $104,313. The table below displays our results.

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 490—All cases	17,493	5.13	$29,655
MS–DRG 490—Cases with code 84.62	4	10.50	104,313
MS–DRG 490—Cases without code 84.62	17,484	5.13	29,633
MS–DRG 491—All cases	57,496	2.27	17,788
MS–DRG 491—Cases with code 84.62	23	1.48	30,114
MS–DRG 491—Cases without code 84.62	57,470	2.27	17,783

We agree that cases with procedure code 84.62 appear to require greater utilization of resources than other cases in MS–DRG 491 and they are clinically similar to other spine disc prostheses cases we are assigning to MS–DRG 490. Therefore, in this FY 2008 final rule, we are moving cases identified by procedure code 84.62 from MS–DRG 491 to MS–DRG 490.

Comment: One commenter urged CMS to reconsider the placement of procedure code 84.65 (Insertion of total spinal disc prosthesis, lumbosacral) into MS–DRG 490. The commenter indicated this code represents technology that is a significant alternative to spinal fusion for a number of patients diagnosed with degenerative disc disease. The commenter noted that a total disc replacement is different from the other procedures included in MS–DRG 490 and is more complex. For example, excision of an intervertebral disc (code 80.51) represents only one component of a total disc replacement surgery; however, both procedures are assigned to the same DRG and receive the same payment. The commenter further noted that other procedures included in MS–DRG 490 do not involve the removal of a disc and including all of these procedures together is not an accurate reflection of clinical coherence.

According to the commenter, a variety of new artificial discs are leading to improvements in the area of total disc replacement procedures, including the ProDisc-L™ Total Disc Arthroplasty. In addition, the commenter stated, ''appropriate Medicare payment is essential to ensure access to this alternative treatment and the diffusion of an innovative new technology.'' The commenter believed that the most appropriate MS–DRG assignment for code 84.65 is MS–DRG 460 (Spinal Fusion Except Cervical without MCC) and requested that CMS reassign procedure code 84.65 to MS–DRG 460 and modify the title to ''Spinal Fusion Except Cervical without MCC and Artificial Disc Replacement.''

Response: We disagree with the commenter that cases identified by procedure code 84.65 should be reassigned to MS–DRG 460 with a revised title. We provided the analysis in the FY 2008 IPPS proposed rule that demonstrated the average charges for code 84.65 were substantially lower than the average charges for the spinal fusion MS–DRGs but higher than the average charges for other cases in proposed MS–DRGs 490 and 491. As a result, we proposed to move cases identified by procedure code 84.65 into the higher severity level and modify the proposed title to reflect disc devices. We agree with the above statement, ''appropriate Medicare payment is essential to ensure access to this alternative treatment and the diffusion of an innovative new technology'' made by the commenter. The charge data do not support moving cases with procedure code 84.65 into the spinal fusion DRGs at this time. As a result, effective October 1, 2007, cases

[24] Effective October 1, 2007, procedure code 84.58 (Implantation of interspinous process decompression device) has been deleted and replaced by new procedure code 84.80 (Insertion or replacement of interspinous process device(s)).

identified by procedure code 84.65 will remain assigned to MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC or MCC or Disc Devices) with the modified title as proposed.

d. Other Spinal DRGs

We did not identify any data to support moving cases in or out of CMS DRGs 496 (Combined Anterior/Posterior Spinal Fusion), 519 (Cervical Spinal Fusion with CC), or 520 (Cervical Spinal Fusion without CC)). Under the proposed MS–DRG system, we proposed to split CMS DRG 496 into three severity levels: MS–DRG 453 (Combined Anterior/Posterior Spinal Fusion with MCC), MS–DRG 454 (Combined Anterior/Posterior Spinal Fusion with CC), and proposed MS–DRG 455 (Combined Anterior/Posterior Spinal Fusion without CC). We also proposed to split CMS DRG 519 into three severity levels: MS–DRG 471 (Cervical Fusion with MCC), MS–DRG 472 (Cervical Fusion with CC), and MS–DRG 473 (Cervical Fusion without CC). In the FY 2008 IPPS proposed rule, we did not propose changes to these DRGs.

We did not receive any public comments on the above proposals to refine the remaining spinal DRGs. Therefore, in this final rule with comment period, we are adopting as final MS–DRGs 453, 454, 455, 471, 472, and 473.

5. MDC 17 (Myeloproliferative Diseases and Disorders, Poorly Differentiated Neoplasm): Endoscopic Procedures

Between last year's final rule and this year's proposed rule, we received a request from a manufacturer to review the DRG assignment of codes 33.71 (Endoscopic insertion or replacement of bronchial valve(s)), 33.78 (Endoscopic removal of bronchial device(s) or substances), and 33.79 (Endoscopic insertion of other bronchial device or substances) with the intent of moving these three codes out of CMS DRG 412 (History of Malignancy With Endoscopy) (MS–DRGs 843, 844, and 845 in this final rule with comment period). The requestor noted that CMS DRG 412 is titled to be a DRG for cases with a history of malignancy, and none of the three codes (33.71, 33.78, or 33.79) necessarily involve treatment for malignancies. In addition, the requestor believed the integrity of the DRG is compromised because the other endoscopy codes assigned to CMS DRG 412 are all diagnostic in nature, while codes 33.71, 33.78, and 33.79 represent therapeutic procedures.

The requestor also stated that while the diagnostic endoscopies in CMS DRG 412 do not have significant costs for equipment or pharmaceutical agents beyond the basic endoscopy, the therapeutic procedures described by codes 33.71, 33.78, and 33.79 involve substantial costs for devices or substances in relation to the cost of the endoscopic procedure itself. The requestor was concerned that, if these three codes continue to be assigned to CMS DRG 412, payment will be so inadequate as to constitute a substantial barrier to Medicare beneficiaries for these treatments.

ICD–9–CM procedure codes 33.71, 33.78, and 33.79 were all created for use beginning October 1, 2006. In the proposed rule, we stated that these codes have been in use only for a few months, and we had no data to make a different DRG assignment. We assigned these codes based on the advice of our medical officers to a DRG that included similar clinical procedures.

On the matter of codes 33.71, 33.78, and 33.79 being therapeutic in nature while all other endoscopies assigned to CMS DRG 412 are diagnostic, we disagreed with the commenter in the proposed rule. CMS DRG 412 includes procedure codes for therapeutic endoscopic destruction of lesions of the bronchus, lung, stomach, anus, and duodenum, as well as codes for polypectomy of the intestine and rectum. In addition, we note that there are codes for insertion of therapeutic devices currently located in this DRG.

In the proposed rule, we stated that it would be premature to assign these codes to another DRG without any supporting data. We indicated that we would reconsider our decision for these codes if we had data suggesting that a DRG reassignment was warranted. Therefore, aside from the proposed changes to the MS–DRGs, in the FY 2008 IPPS proposed rule, we did not propose to change the current DRG assignment for codes 33.71, 33.78, and 33.79.

Comment: We did not receive any specific comments addressing the published proposal. We did receive comments asking CMS to use external data to make DRG assignments until Medicare data are available.

Response: We reiterate that the new codes under discussion were created for use beginning October 1, 2006. Commenters did not provide any external data for us to evaluate. We have no data that would support a different DRG assignment for these codes. Therefore, codes 33.71 (Endoscopic insertion or replacement of bronchial valve(s)), 33.78 (Endoscopic removal of bronchial device(s) or substances), and 33.79 (Endoscopic insertion of other bronchial device or substances) will remain assigned to MS–DRGs 843, 844, and 845 (Other Myeloproliferative Disease or Poorly Differentiated Neoplasm Diagnosis w/MCC, w/CC or w/o CC/MCC respectively) until we have data that suggest a different DRG assignment would be warranted.

6. Medicare Code Editor (MCE) Changes

As explained under section II.B.1. of the preamble of this final rule with comment period, the Medicare Code Editor (MCE) is a software program that detects and reports errors in the coding of Medicare claims data. Patient diagnoses, procedure(s), and demographic information are entered into the Medicare claims processing systems and are subjected to a series of automated screens. The MCE screens are designed to identify cases that require further review before classification into a DRG. For FY 2008, we proposed to make the following changes to the MCE edits.

a. Non-Covered Procedure Edit: Code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s))

As discussed in II.G.2. of the preamble of this final rule with comment period, under MDC 1, code 00.62 is a covered service when performed in conjunction with code 00.65 (Percutaneous insertion of intracranial vascular stent(s)). Effective November 6, 2006, Medicare covers PTA and stenting of intracranial arteries for the treatment of cerebral artery stenosis in cases in which stenosis is 50 percent or greater in patients with intracranial atherosclerotic disease when furnished in accordance with the FDA-approved protocols governing Category B Investigational Device Exemption (IDE) clinical trials. CMS determined that coverage of intracranial PTA and stenting is reasonable and necessary under these circumstances. Therefore, we proposed to make a conforming change and to add the following language to this edit: Procedure code 00.62 (PTA of intracranial vessel(s)) is identified as a noncovered procedure except when it is accompanied by procedure code 00.65 (Intracranial stent).

We did not receive any public comments on this proposal. Therefore, for FY 2008, we are adopting as final our proposed revision of the coverage edit, recognizing procedure code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s)) as a covered procedure when reported in conjunction with procedure code 00.65 (Intracranial stent).

b. Non-Specific Principal Diagnosis Edit 7 and Non-Specific O.R. Procedures Edit 10

When MCE Non-Specific Principal Diagnosis Edit 7 and Non-Specific O.R. Procedures Edit 10 were created at the beginning of the IPPS, it was with the intent that they were to encourage hospitals to code as specifically as possible. While the codes on both edits are valid according to the ICD–9–CM coding scheme, more precise codes are preferable to give a more complete understanding of the services provided on the Medicare claims. When the MCE was created, we had intended that these specific edits would allow educational contact between the provider and the contractor. It was never the intention that these edits would be used to deny/reject or return-to-provider those claims submitted with non-specific codes. However, we found these two edits to be misunderstood, and found that claims were erroneously being denied, rejected, or returned. On November 11, 2006, CMS issued a Joint Signature Memorandum that instructed all fiscal intermediaries and all Part A and Part B Medicare Administrative Contractors (A/B MACs) to deactivate the Fiscal Intermediary Shared System Edits W1436 through W1439 and W1489 through W1491 which edited for Non-Specific Diagnoses and the Non-Specific Procedures.

Therefore, in the FY 2008 IPPS proposed rule, we proposed to make a conforming change to the MCE by removing the following codes from Edit 7:

00320
01590
01591
01592
01593
01594
01596
0369
0399
0528
05310
0538
05440
0548
0558
05600
0568
06640
07070
07071
0728
0738
07420
08240
0979
09810
09830
09950
0999
1009
1109
1129
1149
1279
129
1309
13100
1319
1329
1369
1370
1371
1372
1373
1374
138
1390
1391
1398
1409
1419
1429
1439
1449
1469
1479
1509
1519
1529
1539
1543
1579
1589
1590
1609
1619
1629
1639
1649
1709
1719
1729
1739
1749
1769
179
1809
1839
1874
1879
1889
1899
1909
1929
1949
1969
1991
20490
20491
20590
20591
20690
20691
20890
20891
2129
2139
2149
2159
2169
2189
2199
2229
2239
2249
2259
2279
22800
2299
2306
2319
2329
2349
23690
23770
23875
2390
2391
2392
2393
2394
2396
2397
2398
2399
2469
2519
25200
2529
2539
2549
25510
2569
2579
2589
2681
2709
2719
2729
2739
27540
2759
27650
27730
2779
2793
2799
28730
28800
28850
28860
28950
3239
3249
326
32700
32710
32720
32730
32740
3309
3319
3349
3359
34120

3419
3439
3449
34690
34691
3489
3499
3509
3519
3529
3539
3569
3579
3589
3599
3609
3619
3629
3639
3649
3659
3669
3679
3689
36900
36901
36902
36903
36904
36905
36906
36907
36908
36910
36911
36912
36913
36914
36915
36916
36917
36918
36920
36921
36922
36923
36924
36925
3693
3694
36960
36961
36962
36963
36964
36965
36966
36967
36968
36969
36970
36971
36972
36973
36974
36975
36976
3698
3699
3709
3719
3729
3739
3749
3759
3769
3779
3789
37960
3809
3819
3829
3839
3849
3859
3879
38800
38810
38830
38840
38860
38870
3889
38900
38910
3897
3899
41090
41091
41092
412
4149
4179
42650
4275
4279
42820
42830
42840
4289
4299
4329
43390
43490
4379
4389
4419
4429
4449
44620
4479
4519
45340
4539
4579
4599
4619
46450
46451
4749
4919
5169
51900
5199
5209
52100
52110
52120
52130
52140
5219
52320
52330
52340
5239
52400
52420
52430
52450
52460
52470
5249
52520
52540
52550
52560
5259
5269
5279
52800
5299
5309
53640
5379
5539
56400
5649
5679
5689
56960
5699
5739
57510
5759
5769
5779
5799
5859
5889
5890
5891
5899
5909
5959
5969
5989
59960
5999
60090
60091
6019
6029
60820
6089
6109
6169
6179
61800
6184
6189
6199
6209
62130
6219
62210
6229
6239

6249
6269
6279
62920
63390
63391
64090
64091
64093
64100
64110
64120
64130
64180
64190
64191
64193
64200
64210
64220
64230
64240
64250
64260
64270
64290
64300
64310
64320
64380
64390
64400
64410
64420
64600
64610
64620
64630
64640
64650
64660
64670
64680
64690
64700
64710
64720
64730
64740
64750
64760
64780
64790
64791
64792
64793
64794
64800
64810
64820
64830
64840
64850
64860
64870
64880
64890
64900
64910
64920
64930
64940
64950
64960
65100
65110
65120
65130
65140
65150
65160
65180
65190
65191
65193
65200
65210
65220
65230
65240
65250
65260
65270
65280
65290
65291
65293
65300
65310
65320
65330
65340
65350
65360
65370
65380
65390
65391
65393
65400
65410
65420
65430
65440
65450
65460
65470
65480
65490
65491
65492
65493
65494
65500
65510
65520
65530
65540
65550
65560
65570
65580
65590
65591
65593
65600
65610
65620
65630
65640
65650
65660
65670
65680
65690
65700
65800
65810
65820
65830
65840
65880
65890
65891
65893
65900
65910
65920
65930
65940
65950
65960
65980
65990
65991
65993
66000
66010
66020
66030
66040
66050
66060
66070
66080
66090
66100
66110
66120
66130
66140
66190
66191
66193
66200
66210
66220
66230
66300
66310
66320
66330
66340
66350
66360
66380
66390
66391
66393
66400
66410
66420
66430
66440
66441
66444
66450

66480
66490
66491
66494
66500
66510
66520
66530
66540
66550
66560
66570
66580
66590
66591
66592
66593
66594
66600
66610
66620
66630
66700
66710
66800
66810
66820
66880
66890
66891
66892
66893
66894
66900
66910
66920
66930
66940
66950
66960
66970
66980
66990
66991
66992
66993
66994
67000
67100
67110
67120
67130
67140
67150
67180
67190
67191
67192
67193
67194
67200
67300
67310
67320
67330
67380
67400
67410
67420
67430
67440
67450
67480
67490
67492
67494
67500
67510
67520
67580
67590
67600
67610
67620
67630
67640
67650
67660
67680
67690
67691
67692
67693
67694
677
6809
6819
6829
68600
6869
6949
7019
7049
7059
7069
70700
70710
7079
7149
71590
7179
71849
71850
71870
72230
72270
72280
72290
7239
7244
7289
73000
73010
73020
73030
73090
73091
73092
73093
73094
73095
73096
73097
73098
73099
73310
73340
73390
7359
73600
73620
73630
73670
7369
73810
7389
74100
74190
7429
7439
7449
7459
7469
74760
7489
74900
74910
7509
7519
7529
75310
75312
75320
7539
7559
75670
7579
7599
7600
7601
7602
7603
7604
7605
7606
76070
76072
76073
76074
76079
7608
7609
7610
7611
7612
7613
7614
7615
7616
7617
7618
7619
7629
7630
7631
7632
7633
7634
7635
7636
7637
76383
7639
76520
7679
7689
77010

7709
77210
7729
7759
7769
7779
7789
7799
78031
78051
78052
78053
78054
78055
78057
78058
78079
7825
78261
78262
78340
78830
78900
78930
78940
78960
79009
7901
7904
7905
7906
79091
79092
79099
7929
79380
79500
7954
7964
7969
7993
79989
7999
8290
8291
8398
8399
8409
8419
8439
8469
8479
8489
8678
8679
86800
86810
9009
9019
9029
9039
9048
9049
9050
9051
9052
9053
9054
9055
9056
9057
9058
9059
9060
9061
9062
9063
9064
9065
9066
9067
9068
9069
9070
9071
9072
9073
9074
9075
9079
9080
9081
9082
9083
9084
9085
9086
9089
9090
9091
9092
9093
9094
9095
9099
9219
9229
9239
9249
9269
9279
9289
9299
9349
9399
94100
94101
94102
94103
94104
94105
94106
94107
94108
94109
94200
94201
94202
94203
94204
94205
94209
94300
94301
94302
94303
94304
94305
94306
94309
94400
94401
94402
94403
94404
94405
94406
94407
94408
94500
94501
94502
94503
94504
94505
94506
94509
9460
9479
9490
9491
9492
9493
9494
9495
9519
9529
9539
9549
9559
9569
9579
95890
9599
9609
9639
9649
9659
9679
9699
9709
9739
9769
9779
9809
9849
9859
9889
9899
9929
9939
99520
99522
99523
99529
99550
99580
99590
99600
99630
99640
99660
99670
99680
99690
99700
99760

9989

In addition, we proposed to make a conforming change to the MCE by removing the following codes from Edit 10:

0650
0700
3500
3510
3520
3550
3560
3570
3610
3710
3770
3800
3810
3830
3840
3850
3860
3880
4040
4050
4100
4210
4240
4400
4440
4500
4590
0763
0769
4610
4620
4640
4650
4660
4680
5300
5310
5640
7550
7670
7700
7720
7760
7770
7780
7790
7800
7810
7820
7830
7840
7850
7870
7880
7890
0780
2630
7910
7920
7930
7940
7950
7960
7980
7990
8000
8010
8020
8040
8070
8080
8090
8100
8120
8130
8153
8155
8400
8440
8460
8469
8660
8670

Comment: Several commenters commended CMS for simplifying what they considered to be a burdensome edit that has ceased to serve its intended purpose.

Response: We appreciate the commenters' support for the removal of the specified codes from Edit 7 and Edit 10.

Comment: One commenter pointed out that code 015.95 (Tuberculosis of unspecified bones and joints, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically) was included on the list of nonspecific principal diagnoses in the MCE, but was not included in the list of codes to be deleted in the proposed rule.

Response: The commenter is correct; code 015.95 should have been included in the list of codes to be deleted from Edit 7. We have modified the list to include deletion of this code as part of the deletion of the edit in the MCE software.

After consideration of the public comments received, in this final rule with comment period, we are finalizing our deletion of the specified listed codes in Edit 7 (Non-Specific Principal Diagnosis) (including code 015.95) and in Edit 10 (Non-Specific O.R. Procedures) of the MCE.

c. Limited Coverage Edit 17

Edit 17 in the MCE contains ICD–9–CM procedure codes describing medically complex procedures, including lung volume reduction surgery, organ transplants, and implantable heart assist devices which are to be performed only in certain pre-approved medical centers. CMS has established, through regulation (CMS–3835–F: Medicare Conditions of Participation: Requirements for Approval and Reapproval of Transplant Centers to Perform Organ Transplants, published in the **Federal Register** on March 30, 2007 (72 FR 15198)), a survey and certification process for organ transplant programs. The organs covered in this transplant regulation are heart, heart and lung combined, intestine, kidney, liver, lung, pancreas, and multivisceral. Historically, kidney transplants have been regulated under the End-Stage Renal Disease (ESRD) conditions for coverage. Other types of organ transplant facilities have been regulated under various NCDs.

The regulation becomes effective on June 28, 2007. Organ transplant programs will have 180 days from the June 28, 2007 effective date of the regulation to apply for participation in the Medicare program under the new survey and certification process. After these programs apply, we will survey and approve programs that meet the new Medicare conditions of participation. Until transplant facilities are surveyed and approved, kidney transplant facilities will continue to be regulated under the ESRD conditions for coverage, and other types of organ transplant facilities will continue to be regulated under the NCDs.

In the FY 2008 IPPS proposed rule, we proposed to add conforming Medicare Part A payment edits to the MCE, consistent with the requirements of the organ transplant regulation (CMS–3835–F), to ensure that Medicare covers only those organ transplants performed in Medicare approved facilities. We proposed to add the following procedure codes to the existing list of limited coverage procedures under Edit 17:

- 55.69, Other kidney transplantation
- 52.80, Pancreatic transplant, not otherwise specified
- 52.82, Homotransplant of pancreas

We did not receive any public comments on this portion of the proposed MCE revisions. Therefore, we will implement the changes as stated above by adding procedure codes 55.69, 52.80, and 52.82 to the list of limited coverage procedures in the MCE.

d. Revision to Part 1, Pancreas Transplant Edit A

Effective for services performed on or after April 26, 2006, we published an NCD for Pancreas Transplants in section 260.3 of the Coverage Manual, stating that pancreas alone transplants are reasonable and necessary for Medicare beneficiaries in facilities that are Medicare-approved for kidney transplantation. In addition, patients must have a diagnosis of Type I diabetes mellitus. The complete NCD can be found at the following CMS Web site: *http://www.cms.hhs.gov/mcd/ viewncd*

.asp?ncd_id=260.3&ncd_version=3&basket=ncd%3A260%2E3%3A3%3APancreas+Transplants.

Edit A in the MCE currently includes the following language and codes.

Procedure codes 52.80 (Pancreatic transplant, not otherwise specified) and 52.82 (Homotransplant of pancreas) are identified as non-covered procedures except for the following two conditions:

When either 52.80 or 52.82 are combined with the procedure code in Procedure list 2 and there is at least one principal or secondary diagnosis code present from both Diagnosis List 1 and Diagnosis List 2.

Procedure List 1:
Code 52.80
Code 52.82
Procedure List 2:
Code 55.69
Diagnosis List 1:
Codes 250.00 through 250.93
Diagnosis List 2:
Code 403.01
Code 403.11
Code 403.91
Code 404.02
Code 404.03
Code 404.12
Code 404.13
Code 404.92
Code 404.93
Codes 585.1 through 585.6
Code 585.9
Code V42.0
Code V43.89''

This technical correction was not included in the FY 2008 IPPS proposed rule because of the timing of the release of the NCD. However, we need to make a revision to Edit A in the MCE to conform to the changes in our national coverage of the pancreas alone (PA) procedure. This NCD was implemented on July 3, 2006, which prevented us from addressing the MCE edit in the FY 2007 IPPS final rule. However, because the MCE changes for FY 2007 are retroactive to April 26, 2006, both procedure codes 52.80 and 52.82 will still trigger a limited coverage edit when coverage criteria have been met. Therefore, we are removing Edit A in its entirety from the MCE.

7. Surgical Hierarchies

Some inpatient stays entail multiple surgical procedures, each one of which, occurring by itself, could result in assignment of the case to a different DRG within the MDC to which the principal diagnosis is assigned. Therefore, it is necessary to have a decision rule within the GROUPER by which these cases are assigned to a single DRG. The surgical hierarchy, an ordering of surgical classes from most resource intensive to least resource intensive, performs that function. Application of this hierarchy ensures that cases involving multiple surgical procedures are assigned to the DRG associated with the most resource intensive surgical class.

Because the relative resource intensity of surgical classes can shift as a function of DRG reclassification and recalibrations, we reviewed the surgical hierarchy of each MDC, as we have for previous reclassifications and recalibrations, to determine if the ordering of classes coincides with the intensity of resource utilization.

A surgical class can be composed of one or more DRGs. For example, in MDC 11, the surgical class ''kidney transplant'' consists of a single DRG (DRG 302) and the class ''kidney, ureter and major bladder procedures'' consists of three DRGs (DRGs 303, 304, and 305). Consequently, in many cases, the surgical hierarchy has an impact on more than one DRG. The methodology for determining the most resource intensive surgical class involves weighting the average resources for each DRG by frequency to determine the weighted average resources for each surgical class. For example, assume surgical class A includes DRGs 1 and 2 and surgical class B includes DRGs 3, 4, and 5. Assume also that the average charge of DRG 1 is higher than that of DRG 3, but the average charges of DRGs 4 and 5 are higher than the average charge of DRG 2. To determine whether surgical class A should be higher or lower than surgical class B in the surgical hierarchy, we would weight the average charge of each DRG in the class by frequency (that is, by the number of cases in the DRG) to determine average resource consumption for the surgical class. The surgical classes would then be ordered from the class with the highest average resource utilization to that with the lowest, with the exception of ''other O.R. procedures'' as discussed below.

This methodology may occasionally result in assignment of a case involving multiple procedures to the lower weighted DRG (in the highest, most resource intensive surgical class) of the available alternatives. However, given that the logic underlying the surgical hierarchy provides that the GROUPER search for the procedure in the most resource intensive surgical class, in cases involving multiple procedures, this result is sometimes unavoidable.

We note that, notwithstanding the foregoing discussion, there are a few instances when a surgical class with a lower average charge is ordered above a surgical class with a higher average charge. For example, the ''other O.R. procedures'' surgical class is uniformly ordered last in the surgical hierarchy of each MDC in which it occurs, regardless of the fact that the average charge for the DRG or DRGs in that surgical class may be higher than that for other surgical classes in the MDC. The ''other O.R. procedures'' class is a group of procedures that are only infrequently related to the diagnoses in the MDC, but are still occasionally performed on patients in the MDC with these diagnoses. Therefore, assignment to these surgical classes should only occur if no other surgical class more closely related to the diagnoses in the MDC is appropriate.

A second example occurs when the difference between the average charges for two surgical classes is very small. We have found that small differences generally do not warrant reordering of the hierarchy because, as a result of reassigning cases on the basis of the hierarchy change, the average charges are likely to shift such that the higher ordered surgical class has a lower average charge than the class ordered below it.

For FY 2008, we did not propose any revisions of the surgical hierarchy for any MDC. In general, the MS DRGs that we proposed (and are adopting in this final rule with comment period) for use in FY 2008 and discussed in section II.D. of the preamble of this final rule with comment period follow the same hierarchical order as the CMS DRGs they are replacing, except for DRGs that were deleted and consolidated.

Comment: Two commenters supported no changes in the surgical hierarchy for FY 2008. However, one commenter stated that CMS should continue to revisit this issue on an annual basis.

Response: We will continue to conduct annual analysis of the surgical hierarchy in the MS-DRGs as we have with the CMS-DRGs and propose revisions when necessary. For FY 2008, there will no changes to the surgical hierarchy.

8. CC Exclusions List

a. Background

As indicated earlier in the preamble of this final rule with comment period, under the IPPS DRG classification system, we have developed a standard list of diagnoses that are considered CCs. Historically, we developed this list using physician panels that classified each diagnosis code based on whether the diagnosis, when present as a secondary condition, would be considered a substantial complication or

comorbidity. A substantial complication or comorbidity was defined as a condition that, because of its presence with a specific principal diagnosis, would cause an increase in the length of stay by at least 1 day in at least 75 percent of the patients. We refer readers to section II.D.2. and 3. of the preamble of this final rule with comment period for a discussion of the refinement of CCs in relation to the MS-DRGs we proposed and are adopting in this final rule with comment period for FY 2008.

b. CC Exclusions List for FY 2008

In the September 1, 1987 final notice (52 FR 33143) concerning changes to the DRG classification system, we modified the GROUPER logic so that certain diagnoses included on the standard list of CCs would not be considered valid CCs in combination with a particular principal diagnosis. We created the CC Exclusions List for the following reasons: (1) to preclude coding of CCs for closely related conditions; (2) to preclude duplicative or inconsistent coding from being treated as CCs; and (3) to ensure that cases are appropriately classified between the complicated and uncomplicated DRGs in a pair. As we indicated above, we developed a list of diagnoses, using physician panels, to include those diagnoses that, when present as a secondary condition, would be considered a substantial complication or comorbidity. In previous years, we have made changes to the list of CCs, either by adding new CCs or deleting CCs already on the list.

In the May 19, 1987 proposed notice (52 FR 18877) and the September 1, 1987 final notice (52 FR 33154), we explained that the excluded secondary diagnoses were established using the following five principles:

- Chronic and acute manifestations of the same condition should not be considered CCs for one another.
- Specific and nonspecific (that is, not otherwise specified (NOS)) diagnosis codes for the same condition should not be considered CCs for one another.
- Codes for the same condition that cannot coexist, such as partial/total, unilateral/bilateral, obstructed/unobstructed, and benign/malignant, should not be considered CCs for one another.
- Codes for the same condition in anatomically proximal sites should not be considered CCs for one another.
- Closely related conditions should not be considered CCs for one another.

The creation of the CC Exclusions List was a major project involving hundreds of codes. We have continued to review the remaining CCs to identify additional exclusions and to remove diagnoses from the master list that have been shown not to meet the definition of a CC.[25]

For FY 2008, as we proposed, we are making limited revisions to the CC Exclusions List to take into account the changes that will be made in the ICD–9–CM diagnosis coding system effective October 1, 2007. (See section II.G.10. of the preamble of this final rule with comment period for a discussion of ICD–9–CM changes.) We are making these changes in accordance with the principles established when we created the CC Exclusions List in 1987. In addition, as discussed in section II.D.3. of the preamble of this final rule with comment period, we are indicating on the CC exclusion list some updates to reflect the exclusion of a few codes from being an MCC under the MS-DRG system that we are adopting for FY 2008.

Tables 6G and 6H, Additions to and Deletions from the CC Exclusion List, respectively, which are included in the Addendum to this final rule with comment period, will be effective for discharges occurring on or after October 1, 2007. Each of these principal diagnoses for which there is a CC exclusion is shown with an asterisk, and the conditions that will not count as a CC are provided in an indented column immediately following the affected principal diagnosis.

A complete updated MCC, CC, and Non-CC Exclusions List is available through the Internet on the CMS Web site at: *http:/www.cms.hhs.gov/AcuteInpatientPPS.* Beginning with discharges on or after October 1, 2007, the indented diagnoses will not be recognized by the GROUPER as valid CCs for the asterisked principal diagnosis.

Alternatively, the complete documentation of the GROUPER logic, including the current CC Exclusions List, is available from 3M/Health Information Systems (HIS), which, under contract with CMS, is responsible for updating and maintaining the GROUPER program. The current DRG Definitions Manual, Version 24.0, is available for $225.00, which includes $15.00 for shipping and handling. Version 25.0 of this manual, which will include the final FY 2008 DRG changes, will be available in hard copy for $250.00. Version 25.0 of the manual is also available on a CD for $200.00; a combination hard copy and CD is available for $400.00. These manuals may be obtained by writing 3M/HIS at the following address: 100 Barnes Road, Wallingford, CT 06492; or by calling (203) 949–0303. Please specify the revision or revisions requested.

9. Review of Procedure Codes in CMS DRGs 468, 476, and 477

Each year, we review cases assigned to CMS DRG 468 (Extensive O.R. Procedure Unrelated to Principal Diagnosis), CMS DRG 476 (Prostatic O.R. Procedure Unrelated to Principal Diagnosis), and CMS DRG 477 (Nonextensive O.R. Procedure Unrelated to Principal Diagnosis) to determine whether it would be appropriate to change the procedures assigned among these CMS DRGs. Under the MS-DRGs that we are adopting for FY 2008, discussed in section II.D. of the preamble of this final rule with comment period, CMS DRG 468 has a three-way split and becomes MS-DRGs 981, 982, and 983 (Extensive O.R. Procedure Unrelated to Principal Diagnosis with MCC, with CC, and without CC/MCC). CMS DRG 476 becomes proposed MS-DRGs 984, 985, and 986 (Prostatic O.R. Procedure Unrelated to Principal Diagnosis with MCC, with CC, and without CC/MCC). CMS DRG 477 becomes MS–DRGs 987, 988, and 989 (Nonextensive O.R. Procedure Unrelated to Principal Diagnosis with MCC, with CC, and without CC/MCC).

MS–DRGs 981 through 983, 984 through 986, and 987 through 989 (formerly CMS DRGs 468, 476, and 477, respectively) are reserved for those cases in which none of the O.R. procedures performed are related to the principal diagnosis. These CMS DRGs are

[25] See the FY 1989 final rule (53 FR 38485, September 30, 1988), for the revision made for the discharges occurring in FY 1989; the FY 1990 final rule (54 FR 36552, September 1, 1989), for the FY 1990 revision; the FY 1991 final rule (55 FR 36126, September 4, 1990), for the FY 1991 revision; the FY 1992 final rule (56 FR 43209, August 30, 1991) for the FY 1992 revision; the FY 1993 final rule (57 FR 39753, September 1, 1992), for the FY 1993 revision; the FY 1994 final rule (58 FR 46278, September 1, 1993), for the FY 1994 revisions; the FY 1995 final rule (59 FR 45334, September 1, 1994), for the FY 1995 revisions; the FY 1996 final rule (60 FR 45782, September 1, 1995), for the FY 1996 revisions; the FY 1997 final rule (61 FR 46171, August 30, 1996), for the FY 1997 revisions; the FY 1998 final rule (62 FR 45966, August 29, 1997) for the FY 1998 revisions; the FY 1999 final rule (63 FR 40954, July 31, 1998), for the FY 1999 revisions; the FY 2001 final rule (65 FR 47064, August 1, 2000), for the FY 2001 revisions; the FY 2002 final rule (66 FR 39851, August 1, 2001), for the FY 2002 revisions; the FY 2003 final rule (67 FR 49998, August 1, 2002), for the FY 2003 revisions; the FY 2004 final rule (68 FR 45364, August 1, 2003), for the FY 2004 revisions; the FY 2005 final rule (69 FR 49848, August 11, 2004), for the FY 2005 revisions; the FY 2006 final rule (70 FR 47640, August 12, 2005), for the FY 2006 revisions; and the FY 2007 final rule (71 FR 47870) for the FY 2007 revisions. In the FY 2000 final rule (64 FR 41490, July 30, 1999, we did not modify the CC Exclusions List because we did not make any changes to the ICD–9–CM codes for FY 2000.

intended to capture atypical cases, that is, those cases not occurring with sufficient frequency to represent a distinct, recognizable clinical group. MS-DRGs 984 through 986 (previously CMS DRG 476) are assigned to those discharges in which one or more of the following prostatic procedures are performed and are unrelated to the principal diagnosis:

- 60.0, Incision of prostate.
- 60.12, Open biopsy of prostate.
- 60.15, Biopsy of periprostatic tissue.
- 60.18, Other diagnostic procedures on prostate and periprostatic tissue.
- 60.21, Transurethral prostatectomy.
- 60.29, Other transurethral prostatectomy.
- 60.61, Local excision of lesion of prostate.
- 60.69, Prostatectomy, not elsewhere classified.
- 60.81, Incision of periprostatic tissue.
- 60.82, Excision of periprostatic tissue.
- 60.93, Repair of prostate.
- 60.94, Control of (postoperative) hemorrhage of prostate.
- 60.95, Transurethral balloon dilation of the prostatic urethra.
- 60.96, Transurethral destruction of prostate tissue by microwave thermotherapy.
- 60.97, Other transurethral destruction of prostate tissue by other thermotherapy.
- 60.99, Other operations on prostate.

All remaining O.R. procedures are assigned to MS–DRGs 981 through 983 and 987 through 989 (previously CMS DRGs 468 and 477), with MS–DRGs 987 through 989 (previously CMS DRG 477) assigned to those discharges in which the only procedures performed are nonextensive procedures that are unrelated to the principal diagnosis.[26]

In the FY 2008 IPPS proposed rule, we did not propose to change the procedures assigned among these DRGs. We did not receive any public comments on this subject. Therefore, for FY 2008, we are not changing the procedures assigned among these DRGs.

a. Moving Procedure Codes From CMS DRG 468 (MS–DRGs 981 Through 983) or CMS DRG 477 (MS–DRGs 987 through 989) to MDCs

We annually conduct a review of procedures producing assignment to CMS DRG 468 (MS–DRGs 981 through 983 in this final rule with comment period) or CMS DRG 477 (MS–DRGs 987 through 989 in this final rule with comment period) on the basis of volume, by procedure, to see if it would be appropriate to move procedure codes out of these DRGs into one of the surgical DRGs for the MDC into which the principal diagnosis falls. The data are arrayed in two ways for comparison purposes. We look at a frequency count of each major operative procedure code. We also compare procedures across MDCs by volume of procedure codes within each MDC.

We identify those procedures occurring in conjunction with certain principal diagnoses with sufficient frequency to justify adding them to one of the surgical DRGs for the MDC in which the diagnosis falls. In the FY 2008 IPPS proposed rule, we did not propose to remove any procedures from CMS DRG 468 (MS–DRGs 981 through 983 in this final rule with comment period) or CMS DRG 477 (MS–DRGs 987 through 989). We did not receive any public comments on this subject. Therefore, based on this year's review, we are not removing any procedures from these DRGs.

b. Reassignment of Procedures Among CMS DRGs 468, 476, and 477 (MS–DRGs 981 through 983, 984 through 986, and 987 through 989)

We also annually review the list of ICD–9–CM procedures that, when in combination with their principal diagnosis code, result in assignment to CMS DRGs 468, 476, and 477 (MS–DRGs 981 through 983, 984 through 986, and 987 through 989, respectively, in this final rule with comment period), to ascertain whether any of those procedures should be reassigned from one of these three DRGs to another of the three DRGs based on average charges and the length of stay. We look at the data for trends such as shifts in treatment practice or reporting practice that would make the resulting DRG assignment illogical. If we find these shifts, we would propose to move cases to keep the DRGs clinically similar or to provide payment for the cases in a similar manner. Generally, we move only those procedures for which we have an adequate number of discharges to analyze the data.

We did not propose to move any procedure codes among these DRGs. We did not receive any public comments on this subject. Therefore, we are not moving any procedure codes from CMS DRG 476 (MS–DRGs 984, 985, and 986 in this final rule with comment period) to CMS DRG 468 (MS–DRGs 981, 982, and 983 in this final rule with comment period) or to CMS DRG 477 (MS–DRGs 987, 988, and 989 in this final rule with comment period), or from CMS DRG 477 (MS–DRGs 987, 988, and 989 in this final rule with comment period) to CMS DRGs 468 (MS–DRGs 981, 982, and 983 in this final rule with comment period) or to CMS DRG 476 (MS–DRGs 984, 985, and 986 in this final rule with comment period) for FY 2008.

c. Adding Diagnosis or Procedure Codes to MDCs

Based on our review this year, as we proposed, we are not adding any diagnosis codes to MDCs for FY 2008. We did not receive any public comments on this subject.

10. Changes to the ICD–9–CM Coding System

As described in section II.B.1. of the preamble of this final rule with comment period, the ICD–9–CM is a coding system used for the reporting of diagnoses and procedures performed on a patient. In September 1985, the ICD–9–CM Coordination and Maintenance Committee was formed. This is a Federal interdepartmental committee, co chaired by the National Center for Health Statistics (NCHS), the Centers for Disease Control and Prevention, and CMS, charged with maintaining and updating the ICD–9–CM system. The Committee is jointly responsible for approving coding changes, and developing errata, addenda, and other modifications to the ICD–9–CM to reflect newly developed procedures and technologies and newly identified diseases. The Committee is also responsible for promoting the use of Federal and non Federal educational programs and other communication techniques with a view toward

[26] The original list of the ICD–9–CM procedure codes for the procedures we consider nonextensive procedures, if performed with an unrelated principal diagnosis, was published in Table 6C in section IV. of the Addendum to the FY 1989 final rule (53 FR 38591). As part of the FY 1991 final rule (55 FR 36135), the FY 1992 final rule (56 FR 43212), the FY 1993 final rule (57 FR 23625), the FY 1994 final rule (58 FR 46279), the FY 1995 final rule (59 FR 45336), the FY 1996 final rule (60 FR 45783), the FY 1997 final rule (61 FR 46173), and the FY 1998 final rule (62 FR 45981), we moved several other procedures from DRG 468 to DRG 477, and some procedures from DRG 477 to DRG 468. No procedures were moved in FY 1999, as noted in the final rule (63 FR 40962); in FY 2000 (64 FR 41496); in FY 2001 (65 FR 47064); or in FY 2002 (66 FR 39852). In the FY 2003 final rule (67 FR 49999) we did not move any procedures from DRG 477. However, we did move procedure codes from DRG 468 and placed them in more clinically coherent DRGs. In the FY 2004 final rule (68 FR 45365), we moved several procedures from DRG 468 to DRGs 476 and 477 because the procedures are nonextensive. In the FY 2005 final rule (69 FR 48950), we moved one procedure from DRG 468 to 477. In addition, we added several existing procedures to DRGs 476 and 477. In the FY 2006 (70 FR 47317), we moved one procedure from DRG 468 and assigned it to DRG 477. In FY 2007, we moved one procedure from DRG 468 and assigned it to DRGs 479, 553, and 554.

standardizing coding applications and upgrading the quality of the classification system.

The Official Version of the ICD–9–CM contains the list of valid diagnosis and procedure codes. (The Official Version of the ICD–9–CM is available from the Government Printing Office on CD–ROM for $25.00 by calling (202) 512–1800.) The Official Version of the ICD–9–CM is no longer available in printed manual form from the Federal Government; it is only available on CD–ROM. Users who need a paper version are referred to one of the many products available from publishing houses.

The NCHS has lead responsibility for the ICD–9–CM diagnosis codes included in the *Tabular List* and *Alphabetic Index for Diseases,* while CMS has lead responsibility for the ICD–9–CM procedure codes included in the *Tabular List* and *Alphabetic Index for Procedures.*

The Committee encourages participation in the above process by health-related organizations. In this regard, the Committee holds public meetings for discussion of educational issues and proposed coding changes. These meetings provide an opportunity for representatives of recognized organizations in the coding field, such as the American Health Information Management Association (AHIMA), the American Hospital Association (AHA), and various physician specialty groups, as well as individual physicians, health information management professionals, and other members of the public, to contribute ideas on coding matters. After considering the opinions expressed at the public meetings and in writing, the Committee formulates recommendations, which then must be approved by the agencies.

The Committee presented proposals for coding changes for implementation in FY 2008 at a public meeting held on September 28–29, 2006, and finalized the coding changes after consideration of comments received at the meetings and in writing by December 4, 2006. Those coding changes are announced in Tables 6A through 6F in the Addendum to this proposed rule. The Committee held its 2007 meeting on March 22–23, 2007. Proposed new codes for which there was a consensus of public support and for which complete tabular and indexing changes can be made by May 2007 will be included in the October 1, 2007 update to ICD–9–CM. Code revisions that were discussed at the March 22–23, 2007 Committee meeting could not be finalized in time to include them in the Addendum to the proposed rule. These additional codes are included in Tables 6A through 6F of this final rule with comment period and are marked with an asterisk (*).

Copies of the minutes of the procedure codes discussions at the Committee's September 28–29, 2006 meeting can be obtained from the CMS Web site at: *http://cms.hhs.gov/ICD9ProviderDiagnosticCodes/03_meetings.asp.* The minutes of the diagnosis codes discussions at the September 28–29, 2006 meeting are found at: *http://www.cdc.gov/nchs/icd9.htm.* Paper copies of these minutes are no longer available and the mailing list has been discontinued. These Web sites also provide detailed information about the Committee, including information on requesting a new code, attending a Committee meeting, and timeline requirements and meeting dates.

We encourage commenters to address suggestions on coding issues involving diagnosis codes to: Donna Pickett, Co Chairperson, ICD–9–CM Coordination and Maintenance Committee, NCHS, Room 2402, 3311 Toledo Road, Hyattsville, MD 20782. Comments may be sent by E mail to: *dfp4@cdc.gov.*

Questions and comments concerning the procedure codes should be addressed to: Patricia E. Brooks, Co Chairperson, ICD–9–CM Coordination and Maintenance Committee, CMS, Center for Medicare Management, Hospital and Ambulatory Policy Group, Division of Acute Care, C4–08–06, 7500 Security Boulevard, Baltimore, MD 21244 1850. Comments may be sent by E mail to: *patricia.brooks2@cms.hhs.gov.*

The ICD–9–CM code changes that have been approved will become effective October 1, 2007. The new ICD–9–CM codes are listed, along with their DRG classifications, in Tables 6A and 6B (New Diagnosis Codes and New Procedure Codes, respectively) in the Addendum to this final rule with comment period. As we stated above, the code numbers and their titles were presented for public comment at the ICD–9–CM Coordination and Maintenance Committee meetings. Both oral and written comments were considered before the codes were approved. In the FY 2008 IPPS proposed rule, we only solicited comments on the proposed classification of these new codes.

Comment: One commenter expressed concern that the 2-month timeframe between adoption of new ICD–9–CM codes and the effective date of new codes creates a disadvantage for the coding community because updating of facility-specific and industry information, such as education/training materials and code books, is based on the final codes. The commenter noted that ICD–9–CM code changes discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting were not listed in the FY 2008 IPPS proposed rule, so the coding community has 2 months, rather than 5 months, to update its coding products. The commenter recommended that CMS consider implementation of codes discussed at the spring meeting in April of the following year, rather than forcing the new codes into the October release.

Response: We are sympathetic to the commenter's concern that the short timeframe between adoption of new codes and the effective date of new codes may make it challenging to update coding products. However, this short time period has proven to be invaluable for collecting MedPAR data on new technologies as soon as possible. Therefore, we will continue our current process of attempting to expedite the creation of new ICD–9–CM codes.

For codes that have been replaced by new or expanded codes, and the corresponding new or expanded diagnosis codes are included in Table 6A. New procedure codes are shown in Table 6B. Diagnosis codes that have been replaced by expanded codes or other codes or have been deleted are in Table 6C (Invalid Diagnosis Codes). These invalid diagnosis codes will not be recognized by the GROUPER beginning with discharges occurring on or after October 1, 2007. Table 6D contains invalid procedure codes. These invalid procedure codes will not be recognized by the GROUPER beginning with discharges occurring on or after October 1, 2007. Revisions to diagnosis code titles are in Table 6E (Revised Diagnosis Code Titles), which also includes the DRG assignments for these revised codes. Table 6F includes revised procedure code titles for FY 2008.

In the September 7, 2001 final rule implementing the IPPS new technology add on payments (66 FR 46906), we indicated we would attempt to include proposals for procedure codes that would describe new technology discussed and approved at the Spring meeting as part of the code revisions effective the following October. As stated previously, ICD –9–CM codes discussed at the March 22–23, 2007 Committee meeting that received consensus and that were finalized by May 2007, are included in Tables 6A through 6F of the Addendum to this final rule with comment period.

Section 503(a) of Pub. L. 108–173 included a requirement for updating ICD–9–CM codes twice a year instead of a single update on October 1 of each

year. This requirement was included as part of the amendments to the Act relating to recognition of new technology under the IPPS. Section 503(a) amended section 1886(d)(5)(K) of the Act by adding a clause (vii) which states that the ''Secretary shall provide for the addition of new diagnosis and procedure codes on April 1 of each year, but the addition of such codes shall not require the Secretary to adjust the payment (or diagnosis related group classification) * * * until the fiscal year that begins after such date.'' This requirement improves the recognition of new technologies under the IPPS system by providing information on these new technologies at an earlier date. Data will be available 6 months earlier than would be possible with updates occurring only once a year on October 1.

While section 1886(d)(5)(K)(vii) of the Act states that the addition of new diagnosis and procedure codes on April 1 of each year shall not require the Secretary to adjust the payment, or DRG classification, under section 1886(d) of the Act until the fiscal year that begins after such date, we have to update the DRG software and other systems in order to recognize and accept the new codes. We also publicize the code changes and the need for a mid year systems update by providers to identify the new codes. Hospitals also have to obtain the new code books and encoder updates, and make other system changes in order to identify and report the new codes.

The ICD–9–CM Coordination and Maintenance Committee holds its meetings in the spring and fall in order to update the codes and the applicable payment and reporting systems by October 1 of each year. Items are placed on the agenda for the ICD–9–CM Coordination and Maintenance Committee meeting if the request is received at least 2 months prior to the meeting. This requirement allows time for staff to review and research the coding issues and prepare material for discussion at the meeting. It also allows time for the topic to be publicized in meeting announcements in the **Federal Register** as well as on the CMS Web site. The public decides whether or not to attend the meeting based on the topics listed on the agenda. Final decisions on code title revisions are currently made by March 1 so that these titles can be included in the IPPS proposed rule. A complete addendum describing details of all changes to ICD–9–CM, both tabular and index, is published on the CMS and NCHS Web sites in May of each year. Publishers of coding books and software use this information to modify their products that are used by health care providers. This 5 month time period has proved to be necessary for hospitals and other providers to update their systems.

A discussion of this timeline and the need for changes are included in the December 4–5, 2005 ICD–9–CM Coordination and Maintenance Committee minutes. The public agreed that there was a need to hold the fall meetings earlier, in September or October, in order to meet the new implementation dates. The public provided comment that additional time would be needed to update hospital systems and obtain new code books and coding software. There was considerable concern expressed about the impact this new April update would have on providers.

In the FY 2005 IPPS final rule, we implemented section 1886(d)(5)(K)(vii) of the Act, as added by section 503(a) of Pub. L. 108–173, by developing a mechanism for approving, in time for the April update, diagnosis and procedure code revisions needed to describe new technologies and medical services for purposes of the new technology add-on payment process. We also established the following process for making these determinations. Topics considered during the Fall ICD–9–CM Coordination and Maintenance Committee meeting are considered for an April 1 update if a strong and convincing case is made by the requester at the Committee's public meeting. The request must identify the reason why a new code is needed in April for purposes of the new technology process. The participants at the meeting and those reviewing the Committee meeting summary report are provided the opportunity to comment on this expedited request. All other topics are considered for the October 1 update. Participants at the Committee meeting are encouraged to comment on all such requests. There were no requests for an expedited April l, 2007 implementation of an ICD–9–CM code at the September 28–29, 2006 Committee meeting. Therefore, there were no new ICD–9–CM codes implemented on April 1, 2007.

We believe that this process captures the intent of section 1886(d)(5)(K)(vii) of the Act. This requirement was included in the provision revising the standards and process for recognizing new technology under the IPPS. In addition, the need for approval of new codes outside the existing cycle (October 1) arises most frequently and most acutely where the new codes will identify new technologies that are (or will be) under consideration for new technology add-on payments. Thus, we believe this provision was intended to expedite data collection through the assignment of new ICD–9–CM codes for new technologies seeking higher payments.

Current addendum and code title information is published on the CMS Web site at: *www.cms.hhs.gov/icd9ProviderDiagnosticCodes/01_overview.asp#TopofPage.* Information on ICD–9–CM diagnosis codes, along with the Official ICD–9–CM Coding Guidelines, can be found on the Web site at: *www.cdc.gov/nchs/icd9.htm.* Information on new, revised, and deleted ICD–9–CM codes is also provided to the AHA for publication in the *Coding Clinic for ICD–9–CM.* AHA also distributes information to publishers and software vendors.

CMS also sends copies of all ICD–9–CM coding changes to its contractors for use in updating their systems and providing education to providers.

These same means of disseminating information on new, revised, and deleted ICD–9–CM codes will be used to notify providers, publishers, software vendors, contractors, and others of any changes to the ICD–9–CM codes that are implemented in April. The code titles are adopted as part of the ICD–9–CM Coordination and Maintenance Committee process. Thus, although we publish the code titles in the IPPS proposed and final rules, they are not subject to comment in the proposed or final rules. We will continue to publish the October code updates in this manner within the IPPS proposed and final rules. For codes that are implemented in April, we will assign the new procedure code to the same DRG in which its predecessor code was assigned so there will be no DRG impact as far as DRG assignment. Any midyear coding updates will be available through the Web sites indicated above and through the *Coding Clinic for ICD–9–CM.* Publishers and software vendors currently obtain code changes through these sources in order to update their code books and software systems. We will strive to have the April 1 updates available through these Web sites 5 months prior to implementation (that is, early November of the previous year), as is the case for the October 1 updates.

11. Other DRG Issues Addressed in the FY 2008 IPPS Proposed Rule

a. Seizures and Headaches

After publication of the FY 2007 IPPS final rule (71 FR 47928), we received correspondence expressing concerns about the revisions we made to the seizure and headache DRGs effective on October 1, 2006. We created new DRGs

562 (Seizure Age > 17 With CC), DRG 563 (Seizure Age > 17 Without CC), and DRG 564 (Headaches Age > 17) as an interim step to better recognize severity of illness among seizure and headache patients for FY 2007. Although national Medicare utilization data supported the revised DRGs, the commenter indicated that the change did not appropriately recognize hospital resources associated with the patients treated in the hospital's inpatient headache program. The commenter stated that patients who are admitted to the hospital's inpatient headache program suffer from chronic headache pain and require inpatient treatment that can last up to 12 days. The commenter noted that these patients are referred from around the country after several months of unsuccessful pain relief and treatment. The commenter indicated that the majority of patients treated at the hospital's inpatient headache program are drug dependent from being administered increasing dosages of pain relievers that have been unsuccessful in resolving chronic headache pain. Further, the commenter noted that the patients require detoxification before any headache treatment begins. The commenter urged CMS to subdivide the headache DRG to better recognize the higher level of severity associated with treating chronic headache patients in the hospital's program.

Although we are sympathetic to the commenter, it is not feasible to design a DRG system that addresses concerns that may be unique to one facility. Other than this one commenter, we did not receive any concern about our decision to create separate DRGs for seizures and headaches. However, we agreed to review this issue as part of our effort to redesign the DRG system to better recognize severity of illness for FY 2008.

As discussed in section II.C. of the preamble of this final rule with comment period, we are adopting MS–DRGs for FY 2008. While the CMS DRG structure did not support splitting the headache DRG based on the presence or absence of a CC, the MS–DRGs support the creation of a split for the headache DRGs based on whether the patient has a MCC as shown below:

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 102 (Headaches with MCC)	1,268	5.04	$19,077
MS–DRG 103 (Headaches without MCC)	14,277	3.22	11,989

(The criteria for determining whether to subdivide a DRG are described in detail earlier in section II.D. of the preamble of this final rule with comment period.) Thus, we proposed to create two MS–DRGs for headaches under the MS–DRGs as shown below:

- MS–DRG 102 (Headaches with MCC).
- MS–DRG 103 (Headaches without MCC).

We believe this proposed structure would better recognize those headache patients who are severely ill and require more resources as described by the commenter. We refer the readers to section II.D. of the preamble of this final rule with comment period for a detailed discussion of the MS–DRGs.

Comment: Three commenters supported a DRG system that accounts for the severity of illness, intensity of service, and differences in the cost of care in treating headache patients. They strongly support CMS' proposal to revise its current headache classification, CMS DRG 564 (Headaches Age > 17), that was effective as of October 1, 2006 (FY 2007). One of the commenters stated that CMS DRG 564 does not adequately classify headache cases based on the presence or absence of complicating conditions and assumes a relatively short length of stay, resulting in inadequate payments to cover the costs of treating severely complex chronic headache patients that are referred to specialized treatment centers such as theirs. The commenters also agreed with the use of secondary diagnoses to improve payments and better account for severity within a DRG that is defined by the diagnosis of headache. However, the commenters indicated that certain secondary diagnoses related to medication overuse and dependency are not considered MCCs for headache cases. According to one of the commenters, the common secondary diagnosis codes used for patients with medication overuse and dependency are identified by the following ICD–9–CM codes (a fifth digit representing the drug dependence as unspecified (0), continuous (1), episodic (2), or in remission (3) would be applied according to the physician documentation):

- 304.0x, Opioid type dependence.
- 304.1x, Sedative, hypnotic or anxiolytic dependence.
- 304.2x, Cocaine dependence.
- 304.3x, Cannabis dependence.
- 304.4x, Amphetamine and other psychostimulant dependence.
- 304.5x, Hallucinogen dependence.
- 304.6x, Other specified drug dependence.
- 304.7x, Combinations of opioid type drug with any other.
- 304.8x, Combinations of drug dependence excluding opioid type drug.
- 304.9x, Unspecified drug dependence.

The commenters recognize that most of the above listed conditions were included on the proposed CC list; however, none of them were included on the proposed MCC list. Therefore, the majority of patients treated in the commenter's specialized headache program will not qualify to be assigned to proposed MS–DRG 102 (Headache with MCC) and will be paid using proposed MS–DRG 103 (Headache without MCC)—the lower severity level. The commenter further noted that, in contrast to patients who primarily exhibit substance abuse, the headache patient does not primarily exhibit addictive disease, but is a desperate individual who takes increasing amounts of medication to control pain that has not successfully been controlled. In addition, the patient experiences withdrawal phenomena (sweating, shaking, crawling skin, sleeplessness, changes to blood pressure and pulse) as he or she attempts to reduce the drugs at the recommendation of the physician. The commenter noted that a chronic headache patient with a narcotics addiction is more costly to treat because, to ensure a successful treatment outcome, the patient must be effectively withdrawn from the offending medication, while simultaneously addressing the escalating pain and controlling it which requires inpatient hospitalization that can last up to 2 weeks.

Another commenter suggested that according to the MCCs identified, there appeared to be a significant variance in cost for headache patients whose stay involved an additional two days. This commenter encouraged CMS to examine the creation of a CC split under the current CMS DRG classification if the adoption of the MS–DRG system does not take place. The commenter stated the determination should consider whether the MCCs used in the MS–DRG

analysis are on the current CMS DRG CC list.

One of the commenters provided several suggestions for how the proposed MS–DRG classification could more accurately identify case complexity for inpatient headache cases. The suggestions are described below.

1. Include the ICD–9–CM codes (304.00–304.93) on the list of MCCs. These conditions are true indicators of case complexity and patients with these complications should be paid at the higher severity level if there are only these two adult headache DRGs.

2. If the above suggestion of moving those codes to the MCC list has unintended consequences for a large number of the other (non-headache) DRGs, another approach would be to add a modifier to the CC list recognizing these codes as MCCs for cases in which the principal diagnosis is headache.

3. Add a third headache MS–DRG specifically for the opioid and other medication overuse codes.

The commenter indicated a preference for the third option stating that based on the data available and medical judgment, this MS–DRG would be the most clinically appropriate method to better recognize severity among headache cases. In addition, the commenter noted it is most consistent with efforts already underway in the ICD–10 classification system to identify medication overuse in patients with a principal diagnosis of headache, although ICD–10 is not yet available.

Response: We appreciate the commenter's support of the proposed MS–DRG classification system to better recognize severity of illness, intensity of service, and differences in the cost of care in treating headache patients. The commenters are correct that the drug dependency diagnosis codes (304.0x–304.9x) are not considered MCCs in the proposed MS–DRG system. As we discussed in the proposed rule (72 FR 24702), we categorized diagnoses as MCCs, CCs, and non-CC based on an iterative approach in which each diagnosis was evaluated to determine the extent to which its presence as a secondary diagnosis resulted in increased hospital resources.

We examined the MedPAR data for headache patients with drug dependency (codes 304.00–304.93). Our medical advisors also analyzed clinical issues surrounding patients who have these codes reported as a secondary diagnosis. After evaluation of the data and clinical issues, our medical advisors recommend that we not change the CC status for the drug dependency codes. Our analysis demonstrated approximately 254 cases in MS DRG 103 with an average length of stay of 4.9 days and average charges approximately $2,500 higher than without drug dependency. There were 25 cases in MS DRG 102 with an average length of stay of 7 days and average charges approximately $5,000 higher than all cases in MS–DRG 102. The results are shown in the table below.

HEADACHES

DRG	Number of cases	Average length of stay	Average charges
MS–DRG 102 with MCC—All cases	1,268	5.04	$19,077
MS–DRG 102 with MCC—With secondary diagnosis of drug dependency codes 304.00–304.93	25	7	24,061
MS–DRG 103 without MCC—all cases	14,277	3.22	11,989
MS–DRG 103 with MCC—With secondary diagnosis of drug dependency codes 304.00–304.93	254	4.9	14,447

The process used to subdivide a MS–DRG into severity levels based upon the presence of a CC or MCC included five criteria. All five criteria had to be met to satisfy the requirement of creating severity levels. We refer readers to section II.D.3. of the preamble to this final rule with comment period for a complete discussion of these criteria.

In studying the data for headaches, the number of cases that include secondary diagnoses of drug dependency does not meet the minimum requirement of 500 cases to create another subdivision. Therefore, only the ''with MCC'' and ''without MCC'' severity levels were established and proposed for headache cases.

We agree with the commenter that headache patients who suffer from medication overuse are not identical to substance abuse patients. However, if a headache patient presents to the hospital with withdrawal phenomena and it is the drug withdrawal symptoms that require attention and resolution prior to directing treatment towards the headache symptoms, the reason for the patient's admission (or principal diagnosis) appears to be the drug withdrawal. The Official ICD–9–CM Guidelines for Coding and Reporting instruct that the principal diagnosis is defined in the Uniform Hospital Discharge Data Set (UHDDS) as ''that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.'' Therefore, these headache patients are being admitted to address their drug dependency and drug withdrawal before any headache treatment can begin.

As discussed above, at this time, analysis of the data does not support assigning the drug dependency codes as MCCs. Secondly, there is not justification to warrant adding modifiers to the drug dependency codes that are currently on the CC list to consider those diagnoses as MCCs for headache cases only. (Further, modifiers are not used in ICD–9–CM.) Lastly, the data does not support subdividing the proposed MS–DRGs for headaches into another severity level.

In this FY 2008 final rule, we are adopting the MS–DRGs. Therefore, effective October 1, 2007, the MS–DRGs for headache cases will be as follows:

- MS–DRG 102 (Headaches with MCC)
- MS–DRG 103 (Headaches without MCC).

Comment: One commenter applauded CMS for the changes in the DRG structure to better recognize differences in patient severity. This commenter recommended further refinements to proposed MS–DRG 100 (Seizures with MCC) and MS–DRG 101 (Seizures without MCC). According to the commenter, most Medicare patients who are assigned to the seizure DRGs are admitted to receive acute treatment that is typically provided in the general medical setting. Alternatively, the commenter stated that patients who suffer from uncontrolled seizures or intractable epilepsy are admitted to an epilepsy center for a comprehensive evaluation to identify the epilepsy seizure type, the cause of the seizure, and the location of the seizure. The commenter added that these patients are admitted to the hospital for 4 to 6 days with 24-hour monitoring that includes the use of EEG video monitoring along with cognitive testing and brain imaging procedures. The commenter noted that

patients treated in an epilepsy center receive highly technical care that is comparable to the care received in a hospital's intensive care unit, and these patients are more costly to treat.

With the assistance of an outside reviewer, the commenter analyzed cost data for proposed MS–DRGs 100 and 101, which focused on a target group of patients identified with a diagnosis of epilepsy (diagnosis codes 345.0 through 345.9) or convulsions (diagnosis code 780.39) and the presence of EEG video monitoring (vEEG) (procedure code 89.10) or a Wada test (procedure code 89.19). The commenter stated that the patients identified with those codes are treated in specialized epilepsy centers. The commenter recommended that CMS further refine proposed MS–DRGs 100 and 101 by subdividing cases with the combination of a diagnosis of epilepsy and one of the diagnostic tests performed into separate DRGs defined as follows:

- MS–DRG XXX (Epilepsy Evaluation with MCC)
- MS–DRG XXX (Epilepsy Evaluation without MCC)

The commenter acknowledged that the target group of cases constitutes a small portion of the total cases found in MS–DRGs 100 and 101. However, the commenter noted that the diagnostic procedures described above (codes 89.10 and 89.19) are performed by a small minority of hospitals in the United States. The commenter believed that the recommendation to refine these DRGs would result in a minimal impact on other hospitals, while substantially improving the accuracy of payment to those hospitals specializing in epilepsy treatment.

Response: We appreciate the commenter's support of our efforts to better recognize severity in the DRG system and its recommendation to further refine the proposed seizure DRGs. Epilepsy is currently identified by ICD–9–CM diagnosis codes 345.0x through 345.9x. There are two fifth-digits that may be assigned to a subset of the epilepsy codes, depending on the physician documentation:

- 0—without mention of intractable epilepsy.
- 1—with intractable epilepsy.

According to the commenter, the specialized epilepsy centers focus on treating patients who suffer from intractable epilepsy. The data that the commenter reviewed included the range of epilepsy codes (345.0 through 345.9), the code for convulsions (780.39) and the codes for the diagnostic tests (89.10 and 89.19). The data that were submitted by the commenter did not clearly identify the specific epilepsy codes reviewed or the combination of the diagnostic procedures performed along with specified epilepsy codes. It was also unclear what secondary codes were reviewed in the analysis. As a result, we were unable to conduct our own analysis to evaluate the commenter's recommendation. In addition, we do not believe that we should make further changes to the MS–DRG assignments based on combinations of selected diagnoses. These types of analyses could be done with virtually any MS–DRG and would add significant complexity to the DRG system that we do not believe is warranted at this time. We encourage the commenter to provide the specific codes used in its analysis so we can examine this issue as we continue to make further refinements to the DRGs for FY 2009.

We also note that the topic of epilepsy has been discussed over the last couple of years at the ICD–9–CM Coordination and Maintenance Committee meetings due to confusion with physician documentation and the implications of coding a patient as having a one-time seizure versus ''labeling'' the patient as having the diagnosis of epilepsy. It is unclear if the data identifying these conditions are accurate and reliable as a result of this confusion.

In conclusion, as final policy for FY 2008, effective October 1, 2007, the following seizure DRGs are adopted as proposed:

- MS–DRG 100 (Seizures with MCC).
- MS–DRG 101 (Seizures without MCC).

b. Devices That Are Replaced Without Cost or Where Credit for a Replaced Device Is Furnished to the Hospital

(1) Background

We addressed the topic of Medicare payment for devices that are replaced without costs or where credit for a replaced device is furnished to the hospital in the FY 2007 IPPS final rule (71 FR 47962). In that final rule, we included the following background information:

In recent years, there have been several field actions and recalls with regard to failure of implantable cardiac defibrillators (ICDs) and pacemakers. In many of these cases, the manufacturers have offered replacement devices without cost to the hospital or credit for the device being replaced if the patient required a more expensive device. In some circumstances, manufacturers have also offered, through a warranty package, to pay specified amounts for unreimbursed expenses to persons who had replacement devices implanted. Nonetheless, we believe that incidental device failures that are covered by manufacturer warranties occur routinely. While we understand that some device malfunctions may be inevitable as medical technology grows increasingly sophisticated, we believe that early recognition of problems would reduce the number of people who would be potentially adversely affected by these device problems. The medical community needs heightened and early awareness of patterns of device failures, voluntary field actions, and recalls so that it can take appropriate corrective action to care for patients. Systematic efforts must be undertaken by all interested and involved parties, including manufacturers, insurers, and the medical community, to ensure that device problems are recognized, and are addressed as early as possible so that patients' quality of health care is protected and high quality medical care, equipment, and technologies are provided. We are taking several steps to assist in the early recognition and analysis of patterns of device problems to minimize the potential for harm from device related defects to Medicare beneficiaries and the public in general.

In recent years, CMS has recognized the importance of data collection as a condition of Medicare coverage for selected services. In 2005, we issued an NCD that expanded coverage of ICDs and also required registry participation when the devices were implanted for certain clinical indications. The NCD included this requirement in order to ensure that the medical care received by Medicare beneficiaries was reasonable and necessary and, therefore, that the provider or supplier would be appropriately paid. Presently, the American College of Cardiology μ National Cardiovascular Data Registry (ACC NCDR) collects these data and maintains the registry.

In addition to ensuring appropriate payment of claims, collection, and ongoing analysis of ICD implantation, registry data can facilitate public response to the quality of health care issues in the event of future device recalls. Analysis of registry data may uncover patterns of device malfunction, device related infection, or early battery depletion that would trigger a more specific investigation. Patterns found in registry data may identify problems in patient outcomes earlier than the currently available mechanisms, which do not systematically collect detailed information about each patient who receives an ICD.

We encourage the medical community to work to develop additional registries

for implantable devices, so that timely and comprehensive information is available regarding devices, recipients of those devices, and patients' quality of health care status and medical outcomes. While participation in an ICD registry is required as a Medicare condition of coverage for ICD implantation for certain clinical conditions, we believe that the potential benefits of other data collection extend well beyond their application in Medicare's specific NCDs. As medical technology continues to advance swiftly, data collection regarding the short term and long term medical outcomes of new technologies, especially concerning implanted devices that may remain in the bodies of patients for their lifetimes, will be essential to the timely recognition of any specific device related problems, patterns of complications, and health-related outcomes. This information will facilitate early interventions to mitigate any harm potentially imposed upon Medicare beneficiaries and the public, and to improve the quality and efficiency of health care services provided.

Moreover, published data from registries may further help the development of high quality, evidence based clinical practice guidelines for the care of patients who may receive device implants. In turn, widespread use of evidence based guidelines may reduce variation in medical practice, leading to improved personal care and overall public health. Registry information may also contribute to the development of more comprehensive and refined quality metrics that may be used to systematically assess the collected data, and then improve the safety and quality of health care provided to Medicare beneficiaries. Such improvements in the quality of care that result in better personal health will require the sustained commitment of industry, payers, health care providers, and others to progressively work towards that goal, and to ensure excellent and open communication and rapid system wide responses.

One strategy for this data collection involves adding information to the claims forms. CMS has a long history of collecting hemoglobin or hematocrit data from ESRD patients on the claims form. Modification of claims forms was necessary to do that. CMS is exploring the use of claims data to collect other types of clinical or technical data such as device manufacturer and model number. The systematic recording of model numbers can enhance knowledge of device-related outcomes and complications. We look forward to further discussions with the public about new strategies to both recognize device related problems early as well as recognize health-related outcomes of new technologies.

In addition, we believe that the routine identification of Medicare claims for certain device implantation procedures in situations where a payment adjustment is appropriate may enhance the medical community's recognition of device related problems, potentially leading to more timely improvements in medical device technologies. This systematic approach, which enables hospitals to identify and then appropriately report selected services when devices are replaced without cost to the hospital, or with full or partial credit to the hospital for the cost of the replaced device, should provide comprehensive information regarding the hospitals' experiences with Medicare beneficiaries who have specific medical devices that are being replaced. Because Medicare beneficiaries are common recipients of implanted devices, the claims information may be particularly helpful in identifying patterns of device related problems early in their natural history, so that appropriate strategies to reduce future problems may be developed. One possible strategy would be for the Medicare program to use information obtained through the use of bar coding of medical devices. The FDA issued a final rule in the **Federal Register** on February 26, 2004 (69 FR 9119), that required bar codes for human drugs and biological product labels effective April 26, 2006. In the final rule, FDA deferred action on requiring bar codes for medical devices, noting the difficulty in standardizing medical devices, as compared to drugs and biologicals, which have the unique NDC numbering system. This rule can be reviewed on the **Federal Register**'s Web site at: *http://www.docket.access.gpo.gov/2004/04-4249.htm.*

We intend to monitor FDA's work in this area to determine how this technology could help CMS promote higher quality through better clinical decision making and, as discussed below, assist in improving the accuracy of the Medicare payment system.

In addition to our concern for overall public health, we also have a fiduciary responsibility to the Medicare Trust Fund to ensure that Medicare pays only for covered services. Therefore, in the FY 2007 IPPS final rule, we indicated that we believe we need to consider whether it is appropriate to reduce the Medicare payment in cases in which an implanted device is replaced at reduced or no cost to the hospital or with partial or full credit for the removed device. Such consideration could cover certain devices for which credit for the replaced medical device is given, or medical devices that are replaced as a result of or pursuant to a warranty, field action, voluntary recall, or involuntary recall, and medical devices that are provided free of charge. We indicated that conveying this information to the Medicare beneficiary could provide for a reduction in the IPPS payment if we determine that the device is replaced without cost to the provider or beneficiary or when the provider receives full credit for the cost of a replaced device.

In FY 2007 IPPS final rule, we indicated a need to develop a methodology to determine the amount of the reduction to the otherwise payable IPPS payment for medical devices furnished to Medicare beneficiaries. We believe that this policy is appropriate because, in these cases, the full cost of the replaced device is not incurred and, therefore, an adjustment to the payment is necessary to remove the cost of the device.

(2) Current and Proposed Policies

In the CY 2007 OPPS final rule (71 FR 68071 through 68077), we adopted a policy that requires a reduced payment to a hospital or ambulatory surgical center when a device is provided to them at no cost. From our experience with the OPPS, we understand that a manufacturer will often provide a credit or partial credit for the recalled device rather than a free replacement. In other situations, a manufacturer will provide either a full or partial credit for a device that needs to be replaced only during the manufacturer's warranty period. In either of these situations, the original implantation of the device was paid for either by Medicare, another third party on behalf of the beneficiary by making payment directly to the hospital, or the implantation was paid for directly by the beneficiary. Therefore, we believe that Medicare should not pay the hospital for the full cost of the replacement if the hospital is receiving a partial or full credit, either due to a recall or service during the warranty period. The device was already paid for at the time of initial implantation, and Medicare should retain the credit that is being provided to the hospital for service to a Medicare beneficiary.

Moreover, we also believe that a proposed adjustment is consistent with section 1862(a)(2) of the Act, which excludes from Medicare coverage an item or service for which neither the beneficiary, nor anyone on his or her behalf, has an obligation to pay.

Payment of the full IPPS payment amount in cases in which the device was replaced under warranty or in which there was a full or partial credit for the price of the recalled or failed device effectively results in Medicare payment for a noncovered item. Therefore, in the FY 2008 IPPS proposed rule, we proposed to adjust the IPPS payment amount in these circumstances under the authority of section 1886(d)(5)(I) of the Act, which permits the Secretary to make ''exceptions and adjustments to such payment amounts * * * as the Secretary deems appropriate.''

Under the OPPS, we currently only apply the reduced payment amount in situations where the hospital received a replacement device at no cost or at full credit for the replacement device. Unlike the current OPPS policy, we proposed for purposes of the IPPS to apply the policy for partial as well as full credit for a replacement device. As we indicated above, our experience with the OPPS suggests that the policy should be applied beyond full replacement of a recalled device. We proposed to reduce the amount of the Medicare IPPS payment when a full or partial credit towards a replacement device is made or the device is replaced without cost to the hospital or with full credit for the removed device. However, we do not believe that the IPPS policy should apply to all DRGs and all situations in which a device is replaced without cost to the hospital for the device or with full or partial credit for the removed device. We recognize that, in many cases, the cost of the device is a relatively modest part of the IPPS payment. In other situations, we believe the amount of the credit will also be nominal. In these cases, we believe that the averaging nature of payments under the IPPS would incorporate any significant savings from a warranty replacement, field action, or recall into the payment rate for the associated DRG, and that no specific adjustment would be necessary or appropriate. For this reason, we proposed to apply the policy only to those DRGs under the IPPS where the implantation of the device determines the base DRG assignment and situations where the hospital received a credit equal to 20 percent or more of the cost of the device. We believe a credit that is equal to or more than this percentage is substantial, and Medicare should not pay for the full cost of these replacement devices because hospitals have received significant savings from the manufacturer for its replacement costs. In the proposed rule, we sought comment on the application of this percentage amount. We further believe that it is appropriate to limit application of the policy only to those DRGs where implantation of the device determines the DRG assignment. In making a decision to assign a case based on whether a device was implanted, we recognized that the device cost was a significant portion of the overall costs faced by the hospital that treats the case. Therefore, we believe that Medicare should not make full payment for those DRGs where the assignment of the case is made based on implantation of the device when the hospital is receiving either a full or significant partial credit for the device. In the proposed rule, we included a listing of the CMS DRGs (including the proposed new MS-DRG title) that would be subject to this policy.

CMS has requested and received new condition codes from the National Uniform Billing Committee (NUBC) to describe claims where a provider has received a device or product without cost. We will use these condition codes to reduce payment when the hospital used a device for which full or partial credit is given, or the item was replaced as a result of or under a warranty, field action, voluntary recall, involuntary recall, or otherwise provided free of charge. On November 4, 2005, we issued Change Request 4058, Transmittal 741, in the Medicare Claims Processing Manual. The effective date of this transmittal was April 1, 2006, and the implementation date was April 3, 2006. This transmittal specifies that the following two new condition codes have been created. They are defined below:

- Condition Code 49—Product Replacement within Product Lifecycle. Replacement of a product earlier than the anticipated lifecycle due to an indication that the product is not functioning properly.
- Condition Code 50—Product Replacement for Known Recall of a Product. The manufacturer or the FDA has identified the product for recall and therefore replacement.

This transmittal can be accessed at the following Web site: *http://www.cms.hhs.gov/Transmittals/downloads/R741CP.pdf.*

Hospitals must report these codes on any claim for IPPS services that includes a replacement device or product for which they received full or partial credit. Hospital billing offices would report one of these condition codes in addition to the specific code for the type of procedure performed (for example, replacement of a defibrillator). We proposed to require the hospital to provide invoices or other information indicating its normal cost of the device and the amount of the credit it received.

Under our policy, the fiscal intermediary (or, if applicable, the MAC) would process claims involving DRGs that are subject to this policy that include a device that is replaced without cost to the hospital for the device or with full or partial credit for the removed device as identified by condition codes 49 or 50. For a device provided to the hospital without cost, the fiscal intermediary (or, if applicable, the MAC) would subtract the cost of the device from the DRG payment. For a device for which the hospital received a full or partial credit, the fiscal intermediary (or, if applicable, the MAC) would subtract the amount credited from the DRG payment. CMS will issue specific claims processing instructions to Medicare contractors and hospitals on implementing this policy. We proposed to require the hospital to provide invoices or other information indicating the cost of the device and the amount of credit it received. In the proposed rule, we sought comment on the best approach to making this payment adjustment and what types of documentation hospitals should provide to the fiscal intermediary or MAC.

We proposed to invoke our special exceptions and adjustment authority under section 1886(d)(5)(I)(i) of the Act to make this adjustment. The special exceptions and adjustment authority authorizes us to provide ''for such other exceptions and adjustments to [IPPS] payment amountsm * * * as the Secretary deems appropriate.'' We believe it would be appropriate to adjust payments for surgical procedures to replace certain devices by providing payments to hospitals only for the non-device-related procedural costs when such a device is replaced without cost to the hospital for the device or with full credit for the removed device.

Comment: Many commenters addressed this proposal. Some commenters suggested that CMS rescind the implementation of the proposed policy. Other commenters supported ''the goal of accurate payment for services provided and * * * the concept of a payment offset for devices that are replaced without cost or where a credit is furnished to the hospital for a replaced device.'' However, most commenters also suggested that, if CMS were to implement the policy, CMS reconsider the process.

The commenters believed that blanket implementation of the proposal ignores the underlying concept of the DRG payment system. They stated that DRG payments are fundamentally based on averages of historical costs and charges.

They added that to reduce the payment for cases involving replacement of a medical device assumes that either these types of cases have not occurred in the past or are occurring at such a dramatic increase as to materially skew the averages used to develop the DRG weights. The commenters reiterated that CMS has stated that we believe device failures that are covered by manufacturers' warranties occur routinely. The commenter noted that this statement acknowledges that incidental device failure has occurred in the past and was likely covered by the manufacturer warranty. The commenter stated that, if so, this practice is part of the historical cost and charge data used to develop the current DRG weights for cases involving implantation, and that reduction of payment of certain cases involving a reimplantation would ignore the average DRG weight for those cases that already implicitly include this reduction.

Another commenter suggested that CMS develop a proxy to the full cost of the device by using a percentage of the DRG, based on historical data because Medicare does not reimburse providers at full cost. One commenter recommended that, if adopted, CMS include in this policy that these claims will not be included in the calculation of relative weights, as this will reduce payment of services for procedures with non-replacement devices.

Several commenters suggested that CMS should consider raising the proposed threshold from 20 percent to greater than 50 percent of the cost of the device. Given the administrative burden of manually processing these claims, the commenters believed that it is not worth the burden on the hospitals' or fiscal intermediaries' part if only a nominal portion of the cost of the device is at issue. Commenters further suggested that if CMS implements this policy, estimated costs should be calculated from the charges on the claims and the DRG payment only reduced by the device cost if the payment is greater than the cost of the case less the cost of the device.

Several commenters cited the administrative burden that would result with implementation of this policy. One commenter stated that the proposal would result in significant operational burden and would essentially delay payment for otherwise clean claims. The commenter encouraged CMS to obtain invoice cost information from hospitals by having the hospitals report returned devices with a specific code similar to the use of HCPCS code C9399 (outpatient reporting for new drugs without HCPCS codes). The commenter indicated that hospitals are able to report the HCPCS code and the NCD number for drugs in the remarks section of the claim form in form locator field 84. The commenter believed a similar approach can be used in the inpatient setting when either Condition Code 49 or 50 is present on the claim. This would trigger the hospital to report the percentage of the device credit in the remarks field. The commenter suggested that this approach would provide CMS with the data it needs while eliminating the need for hard copy invoices, which will significantly reduce the hospital reporting burden. Another commenter suggested using a similar approach—applying an average adjustment based on the previous year's experience with credits to arrive at an aggregate method for making payment adjustments rather than a claim-by-claim approach.

Some commenters raised concerns about the use of condition code 49 with devices that are returned within the warranty period. These commenters explained that the time from explant of a device, receipt of the device by the manufacturer, subsequent device analysis and issuance of the warranty results can often be eight weeks or longer. According to the commenters, a hospital will be unaware during this time whether a full, partial, or even zero credit will be made. The commenter suggested that hospitals be either: (1) Allowed to submit the claims immediately without condition code 49 and submit a claim adjustment with condition code 49 at a later date once the credit determination is made; or (2) allow hospitals to hold the claim until a determination is made on the level of the credit. Another commenter who suggested that CMS adopt this approach raised a concern about ''unintended consequences.'' The commenter expressed a concern that hospitals may not return a nonworking device to avoid the payment offset resulting in the manufacturer being unable to identify defects that need to be corrected. This commenter suggested that ''discouraging device return from hospitals'' would be ''detrimental to industry efforts at identifying trends and improving the long-term reliability of current and future products.'' The commenter suggested that allowing hospitals to submit a bill without Condition Code 49 and later submitting an adjustment claim with the code could avoid discouraging hospitals from returning devices that are replaced.

Other commenters raised concerns about the nomenclature that is used to describe Condition Code 49. These commenters were concerned that Condition Code 49 describes ''replacement of a product earlier than the anticipated lifecycle due to an indication that the product is not functioning properly.'' One commenter was concerned that submitting a bill immediately with Condition Code 49 would indicate a premature determination that a device was replaced due to improper functioning. Like the commenter above, this commenter was concerned that the manufacturer may make a later determination that the device was functioning properly or the warranty period had expired and hospital will have already billed using Condition Code 49. Another commenter suggested that a device may be replaced during a warranty period even though it is functioning properly (for example, the patient depleted a battery prematurely because of higher than normal energy needs). In this case, the commenter was concerned that Condition Code 49 will label the replacement as being due to a malfunction when it actually results from higher than normal use but proper functioning of the device. The commenter suggested alternative nomenclature for Condition Code 49 that focuses on the product being replaced earlier than its anticipated lifecycle as a result of either a product malfunction or higher than normal use.

Finally, some commenters raised concerns about the use of invoices to determine the level of the reduction in Medicare's payment. One commenter indicated that credits are derived using the original and current contract prices for the device being explained and the product price for the replacement device. According to this commenter, manufacturers can provide hospitals with the credit dollar amount and the percentage the credit represents of the full cost of the device. Based on that information, hospitals will easily be able to determine whether they need to submit a claim with Condition Code 49 (that is, the credit is equal to or greater than the threshold reduction where the policy applies) and can furnish Medicare without the dollar amount of the credit that is due.

Response: We disagree with the commenters who suggested that our proposal assumes that either device recalls or replacements have not occurred in the past or are occurring at such a dramatic increase as to materially skew the averages used to develop the DRG weights. Our policy assumes that hospital charges include the full cost of the device. Although the relative weights are based on estimated costs, charges are an important element of the relative weight methodology. We apply hospital cost-to-charge ratios to hospital

charges to determine the DRG relative weight. If hospitals have uniform charging practices for all cases irrespective of whether they receive a device at no cost or with a partial credit, the CCR will be applied to a hospital charge that does not reflect that the hospital did not pay the full cost of the device. Under these circumstances, we believe it is appropriate that Medicare's payment should recognize a hospital's reduced cost for a device that it receives either at no or a substantially reduced cost.

We agree with the commenters who suggested that the proposed threshold should be raised from 20 percent to 50 percent or greater of the cost of the device. The commenters have raised valid issues about potential administrative burden and delays that could occur when determining whether a device was replaced due to a malfunction or due to higher than normal use. We agree that the policy should not apply if only a nominal portion of the cost of the device is at issue.

With respect to the suggestion that the policy should only apply if Medicare's payment is greater than estimated costs of the case (less the device) calculated from the charges on the claims, we believe the policy we have adopted to recognize the lower costs of replaced devices that are either replaced at no cost or partial cost is reasonable. However, we may consider this idea in the future as we continue to make refinements to our policy for full or partial credit devices.

We understand the commenters' concerns about potential delays that could occur while a returned device is being evaluated during a warranty service period. Of the suggestions we received to address this concern, we agree that hospitals should have the options of either: (1) Submitting the claims immediately without Condition Code 49 and a claim adjustment with Condition Code 49 at a later date once the credit determination is made or (2) holding the claim until a determination is made on the level of the credit. We believe that giving hospitals these options would address the concern of the commenter that hospitals may not return a non-working device for a replacement. Further, these ideas would facilitate more efficient administration of the policy by allowing the hospital to be provided with all of the information it needs to be paid correctly by Medicare without the need to suspend claims or delay payment. However, hospitals should note that if choosing option 1 above, the rules for submitting adjustment claims still apply and can be found at: *http://www.cms.hhs.gov/manuals/downloads/clm104c01.pdf*, section 130.2.

The commenters raise a valid point concerning the nomenclature for Condition Code 49 that only describes device malfunctions when the policy may apply to other situations. We will bring the concerns of the commenter to the National Uniform Billing Committee (NUBC) for further consideration. The NUBC is a committee brought together by the American Hospital Association and includes the participation of all major national provider and payer organizations. Their major role is to maintain the integrity of the UB 92 and (now UB 04) data set and to be a forum for discussions that lead to mutually agreed data elements for the claim as well as the data elements for other claim-related transactions.

With respect to the comments about using invoice information as documentation for the credit due to Medicare, we provided invoices as an example of the type of documentation a fiscal intermediary or MAC may require to determine the percentage credit. Our fiscal intermediaries (or MAC if applicable) are in the best position to evaluate and determine matters regarding the adequacy of documentation to determine Medicare payment. In this final rule with comment period, we are not requiring any specific documentation to determine whether the percentage credit will apply. Invoices or the documentation (including those suggested in the public comments) would be at the discretion of the fiscal intermediary or MAC.

Therefore, after consideration of the public comments received, for FY 2008, we are implementing the following decisions regarding returned devices. We are applying the policy to the MS–DRGs listed in the chart below; those cases being MS–DRGs where the implantation of the device determines the base DRG assignment. Further, we are applying the policy in situations where the hospital received a credit equal to 50 percent or more of the cost of the device. Hospitals have the option of either: (1) Submitting the claims immediately without condition code 49 and a claim adjustment with condition code 49 at a later date once the credit determination is made or (2) holding the claim until a determination is made on the level of the credit. Should hospitals choose option 1, we note that the rules for submitting adjustment claims do apply, and can be found at the Web site noted above. CMS will issue specific claims processing instructions to Medicare contractors and hospitals on implementing this policy.

DRGs Subject to Final Policy

MDC	MS-DRG	Narrative description of DRG
PRE	1 and 2	Heart Transplant or Implant of Heart Assist System with and without MCC, respectively (former CMS–DRG 103, Heart Transplant or Implant of Heart Assist System).
1	25 and 26	Craniotomy and Endovascular Intracranial Procedure with MCC or with CC, respectively (former CMS–DRG 1, Craniotomy Age > 17 with CC).
1	26 and 27	Craniotomy and Endovascular Intracranial Procedure with CC or without CC/MCC, respectively (former CMS–DRGs 2, Craniotomy Age > 17 without CC).
1	40 and 41	Peripheral & Cranial Nerve & Other Nervous System Procedure with MCC; or with CC or Peripheral Neurostimulator, respectively (former CMS–DRG, 7 Peripheral & Cranial Nerve & Other Nervous System Procedures with CC).
1	42	Peripheral & Cranial Nerve & Other Nervous System Procedure without CC/MCC (former CMS–DRG 8, Peripheral & Cranial Nerve & Other Nervous System Procedures without CC).
1	23 and 24	Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC or Chemotherapy Implant; and without MCC [or Chemotherapy Implant], respectively (former CMS–DRG 543, Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis).
3	129 and 130	Major Head & Neck Procedures with CC/MCC or Major Device; or without CC/MCC, respectively (former CMS–DRG 49, Major Head & Neck Procedures).

DRGs SUBJECT TO FINAL POLICY—Continued

MDC	MS-DRG	Narrative description of DRG
5	216, 217, and 218	Cardiac Valve & Other Major Cardiothoracic Procedure with Cardiac Catheterization With MCC; or with CC; or without CC/MCC, respectively (former CMS–DRG 104, Cardiac Valve & Other Major Cardiothoracic Procedures with Cardiac Catheterization).
5	219, 220, and 221	Cardiac Valve & Other Major Cardiothoracic Procedure without Cardiac Catheterization with MCC; or with CC, or without CC/MCC, respectively (former CMS–DRG 105, Cardiac Valve & Other Major Cardiothoracic Procedures without Cardiac Catheterization).
5	237	Major Cardiovascular Procedures with MCC or Thoracic Aortic Aneurysm Repair (former CMS–DRG 110, Major Cardiovascular Procedures with CC).
5	238	Major Cardiovascular Procedures without MCC (former CMS–DRG 111, Major Cardiovascular Procedures without CC).
5	260, 261, and 262	Cardiac Pacemaker Revision Except Device Replacement with MCC, or with CC, or without CC/MCC, respectively (former CMS-DRGs 117, Cardiac Pacemaker Revision Except Device Replacement).
5	258 and 259	Cardiac Pacemaker Device Replacement with MCC, and Without MCC, respectively (former CMS–DRG 118, Cardiac Pacemaker Device Replacement).
5	226 and 227	Cardiac Defibrillator Implant without Cardiac Catheterization with MCC and without MCC, respectively (former CMS–DRG 515, Cardiac Defibrillator Implant without Cardiac Catheterization).
5	215	Other Heart Assist System Implant (former CMS–DRG 525, Other Heart Assist System Implant).
5	222 and 223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction/Heart Failure/Shock with MCC and without MCC, respectively (former CMS–DRGs 535, Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction/Heart Failure/Shock).
5	224 and 225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction/Heart Failure/Shock with MCC and without MCC, respectively (former CMS–DRG 536, Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction/Heart Failure/Shock).
5	242, 243, and 244	Permanent Cardiac Pacemaker Implant with MCC, with CC, and without CC/MCC, respectively (MS–DRG 551, Permanent Cardiac Pacemaker Implant with Major Cardiovascular Diagnosis or AICD Lead or Generator.
5	242, 243, and 244	Permanent Cardiac Pacemaker Implant with MCC, with CC, and without CC/MCC, respectively (former CMS–DRG 552, Other Permanent Cardiac Pacemaker Implant without Major Cardiovascular Diagnosis).
8	461 and 462	Bilateral or Multiple Major Joint Procedures of Lower Extremity with MCC, or without MCC, respectively (former CMS–DRG 471, Bilateral or Multiple Major Joint Procedures of Lower Extremity).
8	469 and 470	Major Joint Replacement or Reattachment of Lower Extremity with MCC or without MCC, respectively (former CMS–DRG 544, Major Joint Replacement or Reattachment of Lower Extremity).
8	466, 467, and 468	Revision of Hip or Knee Replacement with MCC, with CC, or without CC/MCC, respectively (former CMS–DRG 545, Revision of Hip or Knee Replacement).

To codify in regulations the policies for the IPPS discussed above, we are adding a new paragraph (g) to § 412.2 and a new § 412.89 to 42 CFR part 412, Subpart F. We are also making a technical, conforming change to the heading of Subpart F and adding an uncoded center heading before the proposed new § 412.89.

12. Other MS–DRG Issues Raised in the Public Comments on the Proposed Rule

a. Heart Transplants or Implants of Heart Assist System and Liver Transplants (Pre-MDC)

In our analysis of heart transplant or implant of heart assist system base DRGs and liver transplant base DRGs, we found that each warranted two subdivisions based on our five criteria for establishing the MS–DRGs discussed in section II.D. of this final rule with comment period. We proposed two MS–DRGs for heart transplant or implant of heart assist system: MS–DRG 001 (Heart Transplant or Implant of Heart Assist System with MCC) and MS–DRG 002 (Heart Transplant or Implant of Heart Assist System without MCC). We also proposed two MS–DRGs for liver transplant: MS DRG 005 (Liver Transplant with MCC or Intestinal Transplant) and MS–DRG 006 (Liver Transplant without MCC).

Comment: Two commenters responded to our proposal on the subdivision of heart transplant or implant of heart assist system. One commenter representing one of the manufacturers of left ventricular assist devices (LVAD) stated that this change seems to appropriately identify severity of illness based upon mean length of stay days and charges associated with implantable LVADs as long as hospitals accurately report and document complications.

Another commenter representing transplant surgeons recommended that CMS defer implementation of separate severity levels for heart transplant and liver transplants pending further study. The commenter stated that payment for the uncomplicated procedures—the without MCC group—are too low, resulting in financial instability for many centers and the creation of inappropriate patient selection incentives. The commenter submitted an analysis showing that of the 37 heart transplant centers for which data were available, 10 (27 percent) would undergo DRG payment reductions of more than 10 percent while, of the 52 liver transplant centers, 11 (19 percent) would experience reductions of more than 10 percent, with many experiencing reductions over 20 percent. The commenter indicated that transplant cases are relatively low volume which makes these DRGs more vulnerable to fluctuations.

The commenter stated that while the concept of dividing DRGs based on severity is conceptually sound in the context of admissions for many medical conditions and perhaps for certain surgical admissions, transplantation as a whole is an extremely complex process that generally involves patients with life threatening conditions. The commenter stated that the presence or absence of a condition on the MCC list is not a good predictor of inpatient hospital costs for liver and heart transplants. The commenter stated that one factor that

influences hospital costs and lengths of stay is the characteristics of the donor organ. The commenter stated that the donor risk index and the model for end-stage liver disease (MELD) system which prioritizes patients waiting for liver transplants by severity of illness are two important factors for any severity index for transplant DRGs. This information is not identified in the MedPAR data.

Several commenters also stated that the use of certain donor organs increase in hospital costs for transplantation. A category of donor called DCD (donor after cardiac death) generally represents a donor with a severe brain injury who is taken to the operating room, removed from the ventilator, and who dies a cardiac, rather than a brain, death. Another category of donor called ECD (extended or expanded criteria donor) is generally older and sicker than a standard donor. Use of organs from DCD or ECD donors permits transplantations that may be more expensive, as the organs may not be optimal. The commenters suggested that we take these issues into consideration when making DRG assignments.

In addition, two commenters stated that a separate DRG may be needed to address the significantly higher costs associated with combined liver/kidney transplants. One of the commenters stated that the recent increases in volume justify creation of a separate DRG. Another commenter stated that the Milliman 2005 U.S. Organ and Tissue Transplant Cost Estimates and Discussion Research Report indicates a separate MS–DRG is warranted at a higher level. However, the commenter did not provide data on combined liver/kidney transplants from the report.

Response: We cannot use the factors suggested in the commenters to subdivide the transplant DRGs because they are not distinctly identified in the current ICD–9–CM coding system. The National Center for Health Statistics is responsible for the maintenance of the diagnosis codes. We have advised representatives from the transplant industry to approach the National Center for Health Statistics in order to request unique codes to identify cases that include factors such as a DCD or ECD donor or the patient's MELD score. Without specific data that show how these factors affect patient costs, we cannot use them to subdivide the transplant DRGs. Suggestions on coding issues involving diagnosis codes should be directed to: Donna Pickett, Co-chairperson, ICD–9–CM Coordination and Maintenance Committee, NCHS, Room 2402, 3311 Toledo Road, Hyattsville, MD 20782. Comments may be sent by E-mail to: *dfp4@CDC.gov*.

The table below illustrates our findings on heart and liver transplant MS–DRGs:

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 001 (Heart transplant or implant of heart assist system with MCC)	572	41.03	$442, 339
MS–DRG 002 (Heart transplant or implant of heart assist system without MCC)	304	22.81	250,693
MS–DRG 005 (Liver transplant with MCC or intestinal transplant)	762	22.25	243, 271
MS–DRG 006 (Liver transplant without MCC)	446	10.05	129,519

The data support the current MCC split for heart and liver transplants. Therefore, we disagree with the commenter who suggested that diagnosis codes do not explain patient resource cost for these DRGs. In addition, the MCC split was supported by another commenter that manufactures LVADs. In response to the comments about the impact on transplant centers, we note that the change to the MS–DRGs is redistributive within each base DRG. Payment for the high severity cases will increase, and it will decrease for other cases. In total, Medicare payments for transplants likely will be unchanged. Rather, Medicare's payment will be better directed to reflect patient severity of illness. In response to the comment about combined liver/kidney transplants, we believe these patients would have a secondary diagnosis that is an MCC that would result in the patient being assigned to MS–DRG 005. For instance, a common cause of combined liver and kidney failure is hepatorenal syndrome, in which the liver failure actually causes the kidney failure. In this case, the principal diagnosis is liver failure. The second diagnosis—kidney failure—is an MCC. Patients with combined liver/kidney failure are very sick patients, and we believe it is highly likely that if they are properly coded, all patients would be assigned to MS–DRG 005 and be paid the maximum amount for a patient receiving a liver transplant. At this time, we do not believe that a separate MS–DRG is needed for combined liver-kidney transplants.

With respect to the Milliman 2005 US Organ and Tissue Transplant Cost Estimates and Discussion Research Report discussed by the commenter, we are open to considering, to the extent feasible, reliable, validated data other than MedPAR data in annually recalibrating and reclassifying the DRGs. Because the commenter did not provide data on combined liver/kidney transplants from the report, we could not fully evaluate the commenter's claims.

b. Gliadel® Wafer (MDC 1)

Gliadel® Wafer is the only implantable chemotherapy agent approved by FDA for the treatment of malignant brain tumors. This treatment is approved for newly diagnosed patients with high-grade malignant glioma and for patients with recurrent glioblastoma multiforme, which is the most fatal form of primary brain tumor. ICD–9–CM procedure code 00.10 (Implantation of chemotherapeutic agent) was created October 1, 2002 to uniquely identify this technology. In the FY 2008 IPPS proposed rule, we proposed to assign the technology to MS–DRG 23 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC) and MS–DRG 24 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis without MCC).

Comment: One commenter, the manufacturer of the Gliadel® Wafer technology, recommended that CMS recognize the complexity and costs associated with implantation of Gliadel® Wafer and reassign all cases that use it to MS–DRG 23. The commenter also recommended that the MS–DRG titles for MS–DRG 23 and 24 be revised to:

- MS–DRG 023, ''Craniotomy with Acute Complex Central Nervous System Principal Diagnosis with MCC or Major Device Implant''; and
- MS–DRG 024, ''Craniotomy with Acute Complex Central Nervous System Principal Diagnosis without MCC.''

The commenter provided data showing a total of 502 cases receiving the Gliadel® Wafer. The majority of the patients, 84 percent (423 cases), were assigned to MS–DRG 24. For MS–DRG

24, the commenter reported that the standardized average charges for Gliadel® cases were approximately $74,069, which is 27 percent greater than the average charges for non-Gliadel cases in MS–DRG 24 of approximately $58,181. Many commenters encouraged CMS to reassign these cases to MS–DRG 23.

Response: Based on our review on the FY 2006 MedPAR data, we found 73 Gliadel® cases assigned to MS–DRG 23 and 398 cases assigned to MS–DRG 24. The following table displays our results:

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 23—All cases	2,950	13.63	$91,518
MS–DRG 23—Gliadel cases	73	12.44	104,975
MS–DRG 24—All cases	2,432	8.63	61,865
MS–DRG 24—Gliadel cases	398	7.03	75,482

Under the MS–DRGs, 73 out of 471 Gliadel® cases are assigned to MS–DRG 023. The 398 remaining Gliadel® cases do not have an MCC and would be assigned to MS–DRG 024, absent further changes to the DRG logic.

The average charges of approximately $75,482 for Gliadel® cases are higher than the average charges of approximately $61,865 for the overall cases in MS–DRG 024 and are approximately midway between the with and without MCC severity levels. In this final rule with comment period, we are assigning all Gliadel® cases to MS–DRG 23. The title for MS–DRG 023 is changed to ''Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC or Chemo Agent Implant''. The presence of craniotomy with major device implant or acute complex central nervous system principal diagnosis with MCC or implantation of chemotherapeutic agent would assign a case to the higher severity level.

c. Myasthenia Gravis and Acute and Chronic Inflammatory Demyelinating Neuropathies (AIDP–CIDP) (MDC 1)

Comment: One comment, a national association that represents neurologists and neuroscience professionals, was concerned that there are no separate DRGs for Myasthenia Gravis and Acute and Chronic Inflammatory Demyelinating Neuropathies (AIDP–CIDP). Myasthenia gravis is an autoimmune disease caused by antibodies that block receptors at the neuromuscular junction resulting in decreased activation of muscles by nerves, leading to varying degrees of muscle weakness. Acute inflammatory demyelinating neuropathy, also known as Guillain-Barre Syndrome, is caused by an autoimmune process that attacks the myelin sheaths around nerves, causing defective nerve transmission that leads to sensory loss and muscle weakness. Chronic inflammatory demyelinating neuropathy is a chronic, relapsing form of the acute syndrome.

We proposed to assign these conditions to MS–DRGs 56 and 57 (Degenerative Nervous System Disorders With and Without MCC, respectively). According to the commenter, cases with these conditions should not be assigned to an MS–DRG for degenerative nervous system disorders.

The commenter stated that a separate DRG needs to be established to recognize the substantially higher costs of treating patients with an acute exacerbation of myasthenia gravis. There are two ICD–9–CM diagnosis codes for myasthenia gravis: code 358.00 (Myasthenia gravis without (acute) exacerbation) and code 358.01 (Myasthenia gravis with exacerbation). According to the commenter, in addition to plasmapheresis, acute myasthenia gravis patients often require respiratory support, intensive care unit stays, and IVIG administration. The commenter requested that CMS review cost data for admissions under this diagnosis and determine whether these cases had costs that were substantially higher than other cases assigned to the same DRG.

The commenter stated that, similar to myasthenia gravis, AIDP and CIDP are highly likely to require respiratory support and intensive care unit stays with plasmapheresis or IVIG administration, or both, when presenting acutely or in acute exacerbation. The ICD–9–CM diagnosis code that is reported for AIDP is code 357.0 (Acute infective polyneuritis), and the appropriate diagnosis code for CIDP is code 357.81 (Chronic inflammatory demyelinatng polyneuritis). The commenter stated that the data on AIDP and CIDP are unavailable at this time. Therefore, the commenter requested that CMS track these cases in consideration of a separate DRG for AIDP/CIDP for next year.

Response: The commenter raised a concern that myasthenia gravis cases are being assigned to the degenerative nervous system disorders DRG, and did not believe that the condition should be assigned to that DRG. However, we would point out that myasthenia gravis cases are currently assigned to CMS–DRG 12 (Degenerative Nervous System Disorders). Moving to the MS–DRGs did not alter this DRG logic. We simply subdivided this DRG into two severity levels. Given the extensive changes we are making in moving to MS–DRGs we believe it is premature to consider refinements to this base DRG for myasthenia gravis cases. Rather, we will wait to gain experience under the MS–DRGs and determine whether further refinements are needed to the base DRGs.

d. Peripheral and Spinal Neurostimulators (MDC 1 and MDC 8)

In our analysis of spinal procedures and peripheral and cranial nerve and other nervous system procedures based DRGs in MDC 1, we found that each warranted three subdivisions based on our five criteria. There are three MS–DRGs for spinal procedures: MS–DRG 28 (Spinal Procedures with MCC), MS–DRG 29 (Spinal Procedures with CC), and MS–DRG 30 (Spinal Procedures without CC). There are three MS–DRGs for peripheral and cranial nerve and other nervous system procedures: MS–DRG 40 (Peripheral and Cranial Nerve and Other Nervous System Procedures with MCC), MS–DRG 41 (Peripheral and Cranial Nerve and Other Nervous System Procedures with CC), and MS–DRG 42 (Peripheral and Cranial Nerve and Other Nervous System Procedures without CC).

For back and neck procedures based DRGs in MDC 8, we found that the base DRG warranted two subdivisions based on our five criteria. There are two MS–DRGs for back and neck procedures except spinal fusion: MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC/MCC or Disc Devices) and MS–DRG 491 (Back and Neck Procedures Except Spinal Fusion without CC/MCC).

Comment: Several commenters analyzed the effects of the MS–DRGs and contended that the payment levels for cases with implantable

neurostimulator devices are, in many instances, inadequate to cover the cost of the device and the hospital procedure to implant it. The commenters stated that most neurostimulator cases are assigned to the lowest severity level in these DRGs and concluded that the average charges of these cases are more similar to the higher severity levels. The commenters recommended that CMS:

- For spinal cord nonrechargeable stimulator cases in MDC 1: Reassign all full system implants which includes cases reported with ICD–9–CM procedure codes 03.93 (Implantation or replacement of spinal neurostimulator lead(s)) and 86.94 (Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable), or 86.95 (Insertion or replacement of dual array neurostimulator pulse generator, not specified as rechargeable), to MS–DRG 29 and revise the title to ''Spinal Procedure with CC or Major Device Implant.''
- For spinal cord rechargeable neurostimulator cases in MDC 1: Reassign all full-system implant cases reported with ICD–9–CM procedure codes 03.93 and 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator) or 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator) to MS–DRG 28, and revise the title to ''Spinal Procedure with MCC or Major Device Implant.''
- For spinal cord rechargeable neurostimulator cases in MDC 8: Reassign all full-system implant cases reported with ICD–9–CM procedure codes 03.93 and 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator) or 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator) to MS–DRG 490.
- For peripheral nonrechargeable neurostimulator cases in MDC 1: Reassign all full-system implant cases reported with ICD–9–CM procedure codes 04.92 (Implantation or replacement of peripheral neurostimulator lead(s)) and 86.94 or 86.95 to MS–DRG 041 and revise the title to ''Peripheral and Cranial Nerve and Other Nervous System Procedures with CC or Major Device Implant.''
- For peripheral rechargeable neurostimulator cases in MDC 01: Reassign all full-system implant cases reported with ICD–9–CM procedure codes 04.92 and 86.97 or 86.98 to MS–DRG 040 and revise the title to ''Peripheral and Cranial Nerve and Other Nervous System Procedures with MCC or Major Device Implant.''

Two commenters recommended device-dependent surgical DRGs for these cases. Several commenters also provided an alternative option to the recommendations listed above:

- Assign all full-system spinal cord stimulator cases (rechargeable and non-rechargeable) in MDC 1 to MS–DRG 029.
- Assign all full-system Spinal cord stimulator cases (rechargeable and non-rechargeable) in MDC 8 to MS–DRG 490.
- Assign all full-system peripheral neurostimulator cases (rechargeable and non-rechargeable) in MDC 1 to MS–DRG 041.
- Maintain the new-technology add-on payment for rechargeable neurostimulators for one additional year because of limited data.

Response: We analyzed the FY 2006 MedPAR data for full system spinal and peripheral neurostimulators, both nonrechargeable and rechargeable, using the procedure codes listed above. We found that the majority of spinal neurostimulator cases in MDC 1 (113 cases) were assigned to MS–DRG 030. The majority of the peripheral neurostimulator cases (44 cases) were assigned to MS–DRG 042. The majority of the spinal neurostimulator cases (253 cases) in MDC 8 were assigned to MS–DRG 491. The following table displays our results:

MS–DRG	Number of cases	Average length of stay	Average charges
Spinal Procedures			
MS–DRG 028—With MCC	1,531	14.67	$88,392.05
MS–DRG 029—With CC	2,699	7.63	46,223.20
MS–DRG 030—Without MCC or CC	3,540	3.67	27,081.14
Spinal Neurostimulators			
MS–DRG 028—With MCC	7	2.57	81,208.14
MS–DRG 029—With CC	29	3.10	68,090.03
MS–DRG 030—Without MCC/CC	113	1.81	57,399.84

The average charges for the 113 spinal neurostimulator cases assigned to MS DRG 030 of approximately $57,400 are much higher than the average charges of approximately $27,081 for the overall charges in MS–DRG 030. The charges for these cases more closely approximate the charges for the other cases in the CC level, MS–DRG 029.

MS–DRG	Number of cases	Average length of stay	Average charges
Peripheral and Cranial Nerve Procedures			
MS—DRG 040–With MCC	4,300	13.59	$64,354.13
MS–DRG 041—With CC	7,388	7.53	37,421.99
MS–DRG 042—Without MCC/CC	5,112	3.65	30,600.18
Peripheral Neurostimulators			
MS–DRG 040—With MCC	12	8.92	63,170.42
MS–DRG 041—With CC	24	4.96	45,118.04
MS–DRG 042—Without MCC/CC	44	1.71	50,716.25

The average charges for the 44 peripheral neurostimulator cases assigned to MS–DRG 042 of approximately $50,716 are much higher than the average charges of approximately $30,600 for the overall charges in MS–DRG 042. Further, they are even higher than the 24 MS–DRG 041 cases with a peripheral neurostimulator and a CC. The relationship between average charges for neurostimulator cases and the MS–DRG where they are assigned does not appear to be monotonic in this case. We believe the low volume of cases for this technology may explain this unusual pattern in average charges. One or a few cases with aberrant charges could potentially be skewing the data. Nevertheless, we do believe the data for the MS–DRG 042 peripheral neurostimulator cases does illustrate that their average charges should be reassigned to a higher severity level. Although average charges for peripheral neurostimulator cases without an MCC or CC appear to be midway between average charges for cases in MS–DRGs 040 and 041, we do not believe these cases should be assigned to the ''with MCC'' MS–DRG at this time. Before deciding whether further MS–DRG assignment is warranted, we prefer to have more data that demonstrates monotonicity in the average charges.

MS–DRG in MDC 8	Number of cases	Average length of stay	Average charges
MS–DRG 490—All cases	17,493	5.13	$29,656.66
MS–DRG 490—Spinal neurostimulator cases	49	3.69	62,385.33
MS–DRG 491—All cases	57,496	2.27	17,788.59
MS–DRG 491—Spinal neurostimulator cases	253	1.62	56,238.72

The average charges for the 253 spinal neurostimulator cases assigned to MS–DRG 491 in MDC 8 of approximately $56,239 are much higher than the average charges of approximately $17,789 for the overall charges in MS–DRG 491. The charges for these cases are also higher than the average charges of $29,656 for MS–DRG 490. We believe these cases should be assigned to MS–DRG 490 at this time.

In this final rule with comment period, we are assigning full system spinal cord nonrechargeable and rechargeable neurostimulator cases in MS–DRG 030 to MS–DRG 029 in MDC 1. ICD 9 CM procedure codes 03.93 and 86.94 or 86.95 or 86.97 or 86.98 must be reported in order for the spinal neurostimulator cases to be assigned to MS–DRG 029. We are defining MS–DRG 029 as ''Spinal Procedures with CC or Neurostimulator.'' The presence of a spinal procedure with CC or neurostimulator would assign the case to the second severity level.

We are also assigning full system peripheral nonrechargeable and rechargeable neurostimulator cases in MS–DRG 042 to MS–DRG 041 in MDC 1. ICD–9–CM procedure codes 04.92 and 86.94 or 86.95 or 86.97 or 86.98 must be reported in order for the peripheral neurostimulator cases to be assigned to MS–DRG 041. We are defining MS–DRG 041 as ''Peripheral and Cranial Nerve and Other Nervous System Procedures with CC or Neurostimulator.'' The presence of a peripheral and cranial nerve procedure with CC or neurostimulator would assign the case to the second severity level.

The full system spinal cord nonrechargeable and rechargeable neurostimulator cases in MS–DRG 491 are being assigned to MS–DRG 490. ICD–9–CM procedure codes 03.93 and 86.94 or 86.95 or 86.97 or 86.98 must be reported in order for the spinal neurostimulator cases to be assigned to MS–DRG 490. We are defining MS–DRG 490 as ''Back and Neck Procedures Except Spinal Fusion with CC/MCC or Disc Devices or Neurostimulator.'' The presence of a back and neck except spinal fusion procedure with CC/MCC or disc devices or neurostimulator would assign the case to the second severity level.

We refer readers to section II.J. of the preamble to this final rule with comment period for new technology discussions about rechargeable neurostimulators. We will continue to monitor these low volume full system neurostimulator cases for further refinements if warranted.

e. Stroke and Administration of Tissue Plasminogen Activator (tPA) (MDC 1)

In FY 2006, CMS created CMS DRG 559 (Acute Ischemic Stroke with Use of Thrombolytic Agent) by assigning diagnosis codes for embolic stroke codes plus procedure code 99.10 (Injection or infusion of thrombolytic agent) to this new CMS DRG. The coding content of CMS DRGs 14 (Intracranial Hemorrhage or Cerebral Infarction) was not modified—cases that included a diagnosis code for embolic stroke but the patient was not administered a thrombolytic agent continued to be assigned to this DRG. CMS DRG 15 (Nonspecific CVA and Precerebral Occlusion without Infarct) also remained unchanged. Under the new MS–DRGs, the former CMS DRG 559 will have three severity levels: MS–DRG 061 (Acute Ischemic Stroke with Use of Thrombolytic Agent with MCC), MS–DRG 062 (Acute Ischemic Stroke with Use of Thrombolytic Agent with CC), and MS–DRG 063 (Acute Ischemic Stroke with Use of Thrombolytic Agent w/o CC/MCC).

Comment: One commenter agreed with CMS' proposal to take the severity of a patient's illness into account when establishing payment rates. The commenter noted that severely ill or complex patients require more intensive evaluation, treatment, and monitoring, resulting in higher costs. The commenter added that it is logical to reimburse hospitals at a higher rate for those patients who require more care.

However, the commenter expressed some concerns with the proposed payment rates for stroke patients with a CC or without a CC/MCC who are treated with tPA, noting that according to its calculations, reimbursement rates for MS–DRGs 062 and 063 will decrease. The commenter believed that this decrease could create a financial disincentive for hospitals if payment for MS–DRGs 062 and 063 fails to provide adequate reimbursement for those costs incurred by facilities that administer tPA.

Response: The cost of treating patients with tPA continues to be represented in MS–DRGs 061, 062, and 063, but the cases have been distributed according to the presence of an MCC, or a CC, or the lack of either an MCC or CC in MS–DRG 063 according to the historical data represented by MedPAR. Medicare likely will continue to pay the same amount for all patients treated with tPA. However, our payments will better reflect patient severity of illness by paying higher amounts for those cases where the patient has an MCC or CC than if they do not.

Comment: One commenter urged CMS to create a process that allows for periodic evaluation and updating of the MCC and CC lists, noting that CMS must

institute a process that allows for the addition of other conditions that create a special concern for one set of patients, including stroke patients, to the MCC and CC lists.

Response: As described in section II.D.3. of this preamble, we reviewed more than 13,000 diagnosis codes in order to establish the MCC and CC lists. This review activity is an ongoing, annual process, as CMS has reviewed portions of the diagnosis codes every year with regard to placement on the CC list. The difference is that this year more than 13,000 diagnosis codes were reviewed, and the designation has changed from simply ''CC'' to major comorbidity or complication (MCC) or comorbidity or complication (CC). We believe these lists to be comprehensive and we will continue to evaluate their content with regard to all patients.

Comment: One commenter expressed concern about the so-called ''drip and ship'' cases where tPA is administered in the emergency department at Hospital A, but the patient is immediately transferred to Hospital B, which has a stroke center. The commenter pointed out that many community hospitals do not have the necessary resources, including neurology expertise, to care for the critically ill stroke patient. However, the commenter added, with the support of a nearby stroke center, they are able to diagnose ischemic stroke and institute reperfusion (tPA) treatment within the critical three hour window. The commenter stated that transfer after administration of tPA is required by the need to closely monitor patients after reperfusion treatment. Given the critical need to minimize brain damage by immediately administering the tPA when indicated, the commenter stated that the original hospital where the patient presented with stroke symptoms must not delay treatment until after the patient is transferred.

When a patient is treated with reperfusion therapy in a local emergency department, but transferred and admitted to another hospital with the necessary stroke services, it is the understanding of the commenter that CMS' current policy, as implemented through the DRG GROUPER, requires that those cases be assigned to a stroke DRG that does not recognize the reperfusion therapy. The hospital to which the patient was ultimately admitted did not administer the reperfusion therapy, and the hospital which administered the thrombolytic drug did not admit the patient. The commenter noted that these patients are in the severely ill category and require the same high level of resources as any other patient who receives reperfusion therapy and who would normally be assigned to CMS DRG 559.

The commenter made the following suggestion: ''When a patient has been started on reperfusion therapy [tPA] at another hospital, as an outpatient, and is transferred to a hospital with a stroke center, the case should be assigned to one of the ''stroke-with-thrombolytic agent DRGs'' (MS–DRGs 061, 062, or 063).

Response: We previously considered this situation in 2005 when we created DRG 559 that separately distinguished stroke patients administered a thrombolytic agent. The commenter is suggesting that it is not the thrombolytic agent itself that raises the hospital's costs (although in our view, it is certainly an element of higher costs) but all of the other services that are provided by the receiving hospital to such a patient. Although we recognize the concerns of the commenter, the emergency room is already being compensated for the administration of the tPA. Therefore, we do not believe it would be appropriate for Medicare to pay for the same service at another facility.

f. Gliasite ® Radiation Therapy System (RTS) (MDC 1)

Comment: One commenter, the manufacturer of Gliasite ® Radiation Therapy System (RTS), wrote that this technology is used in the treatment of malignant brain cancer. The commenter indicated that patients who undergo this treatment require two admissions. The first admission includes tumor debulking and a special catheter is implanted. The following ICD–9–CM procedures are assigned to report the procedures performed: Code 01.59 (Other excision or destruction of lesion or tissue of brain) and code 01.27 (Insertion of catheter(s) into cranial cavity or tissue). Under the proposed MS–DRGs, the case for this admission with a principal diagnosis of glioblastoma and procedure codes 01.59 and 01.27 would be assigned to MS–DRGs 26 and 27 (Craniotomy and Endovascular Intracranial Procedures with and without MCC/CC, respectively).

The commenter added that the second admission usually occurs in a week or 10 days and entails liquid radioisotope infused into the special catheter. The patient is monitored for a few days and then the radioisotope is removed. ICD–9–CM procedure code 92.20 (Infusion of liquid brachytherapy radioisotope) and code 01.27 (Removal of catheter(s) from cranial cavity or tissue) would be assigned to identify the procedures performed in the second admission. Under the proposed MS–DRGs, for the second admission, the case with a principal diagnosis of glioblastoma and procedure codes 92.20 and 01.27 would be assigned to medical MS–DRGs 54 and 55 (Nervous System Neoplasm with and without MCC, respectively).

The commenter requested that CMS recognize the resources associated with infusion of radioisotope and establish two new surgical MS–DRGs for these admissions/treatments:

- Liquid radiotherapy infusion for glioblastoma without tumor debulking.
- Liquid radiotherapy infusion for glioblastoma with craniotomy, tumor debulking, and implantation of infusion catheter.

The commenter stated that the costs of the implant can be considered equivalent to the cost of an MCC and should be recognized in a surgical MS–DRG descriptor.

Response: The refinement of the DRGs is not based on the creation of any new logic under the MS–DRGs. We believe that it is not appropriate to make DRG revisions of this nature as part of the final rule since the base DRG has not changed for these cases. However, we will examine the need for further DRG refinements as we gain experience under the MS DRGs.

g. Noninvasive Ventilation (MDC 4)

Comment: One commenter representing a national association requested the creation of a new DRG for noninvasive positive pressure ventilation (NPPV). According to the commenter, NPPV is an effective and preferred treatment in the management of patients with acute exacerbations of chronic obstructive pulmonary disease and other forms of respiratory failure.

Currently, this treatment is identified in ICD–9–CM by procedure code 93.90 (Continuous positive airway pressure (CPAP)) and does not require the use of mechanical ventilation via an endotracheal tube or tracheotomy. The commenter indicated that NPPV is a valuable and clinically appropriate option for patients who may require short term (<96 hours) ventilatory support when presenting with an acute respiratory failure condition. The commenter noted that results have demonstrated improved outcomes and less risk associated with less invasive devices. Therefore, the commenter stated, the selection of treatment for ventilatory support does not solely rely on patient acuity. To better recognize NPPV as an appropriate treatment in acute respiratory conditions and ensure proper reimbursement, the commenter also proposed that CMS consider

including NPPV (code 93.90) in proposed MS–DRG 207 (Respiratory System Diagnosis with Ventilatory Support 96+hours) if the creation of a new MS–DRG was not a viable option.

Response: We met with the commenter on June 13, 2007, regarding the above requests to create a new MS-DRG for patients who receive NPPV or reassign cases to a different MS-DRG. After discussing the clinical and coding issues surrounding NPPV, we advised the commenter to request a new procedure code to distinguish between the various treatments that are currently included in code 93.90. We informed the commenter about the ICD–9–CM Coordination and Maintenance Committee and the process for requesting a new procedure code.

h. Heart Assist Devices (MDC 5)

Comment: One commenter requested that CMS create an additional severity level in MS-DRG 215 that would be titled ''Other Heart Assist Implant without Major Complications.'' The commenter indicated that CMS should have a consistent number of severity levels between this MS-DRG and MS-DRGs 001 or 002 (Heart Transplant or Implant of Heart Assist System with MCC or without MCC, respectively). In the proposed rule, MS-DRG 215 (formerly CMS DRG 525, and still titled ''Other Heart Assist System Implant'') had no severity levels. The commenter stated that, by capturing the severity of the cases with devices coded to 37.65 (Implant of external heart assist system), hospitals will be more appropriately reimbursed and CMS will be consistent in its policy.

The commenter added that without a severity breakdown in MS-DRG 215, it feared the integrity of the MS-DRG will be distorted, causing an unwarranted financial windfall for some cases. The commenter indicated that Medicare will be overpaying less severe cases and underpaying cases with major complications if MS-DRG 215 is not subdivided into with MCC and without MCC severity levels.

Response: We reviewed the following data specifically in light of this comment. Our findings are represented in the table below.

MS-DRG	Number of cases	Average length of stay	Average charges
MS-DRG 215—All cases	142	11.32	$204,885.12
MS-DRG 215—Cases with insertion of nonimplantable heart assist system (code 37.62)	63	10.95	134,669.43
MS-DRG 215—Cases with repaid heart assist and system (code 37.63)	29	14.07	225,962.07
MS-DRG 215—Cases with implant of external heart assist (VAD) (code 37.65)	59	11.80	286,953.90

In the proposed rule (72 FR 24705), we explained that we developed a set of criteria to facilitate the decision-making process surrounding the subdivision of a DRG into subgroups based on the presence of a CC or MCC. We specified that in order to warrant creation of a CC or MCC subgroup within a base MS-DRG, the subgroup had to meet all of the five criteria listed. One of the criteria was that the subgroup contained at least 500 cases. In this instance, there are only 142 cases in the MedPAR data. Therefore, there are too few cases to warrant a subdivision of the base DRG into severity levels. We will continue to monitor this DRG, and should future data prove that a subdivision of MS-DRG 215 is warranted, we will consider revision of its structure.

i. Automatic Implantable Cardioverter-Defibrillators (ACID) Lead and Generator Procedures (MDC 5)

Comment: One commenter commended CMS for creating a separate, stand alone DRG for automatic implantable cardioverter-defibrillator (AICD) generator replacements and defibrillator lead replacements. The new DRG is MS–DRG 245 (AICD lead and generator procedures). The MS–DRG contains the following codes:

- 00.52, Implantation or replacement of transvenous lead [electrode] into left ventricular coronary venous system.
- 00.54, Implantation or replacement of cardiac resynchronization defibrillator pulse generator device only [CRT–D].
- 37.95, Implantation of automatic cardioverter/defibrillator leads(s) only.
- 37.96, Implantation of automatic cardioverter/defibrillator pulse generator only.
- 37.97, Replacement of automatic cardioverter/defibrillator leads(s) only.
- 37.98, Replacement of automatic cardioverter/defibrillator pulse generator only.

The commenter indicated that under the current CMS DRGs, the defibrillator generator and defibrillator lead replacements were included in DRG 551 with pacemaker implants. The commenter supported this new MS–DRG, which recognizes the distinct differences in resource utilization between pacemaker and defibrillator generators and leads. The commenter stated that CMS should consider additional refinements for the defibrillator generator and leads. In reviewing the standardized charges for the AICD leads, the commenter believed that the leads may be more appropriately assigned to another DRG such as MS–DRG 243 (Permanent Cardiac Pacemaker Implant with CC) or MS–DRG 258 (Cardiac Pacemaker Device Replacement with MCC). The commenter recommended that CMS consider moving the defibrillator leads back into a pacemaker DRG, either MS–DRG 243 or MS–DRG 258.

Response: We appreciate the commenter's support for the refinements made through the MS–DRGs to better identify differences in patient care costs associated with pacemakers and defibrillators. In our view, the data support separate DRGs for these very different devices. The commenter supported the proposed DRG change we made that removed both the defibrillator generators and leads from the pacemaker MS DRG and then recommended that we move the defibrillator leads only back into a pacemaker DRG. The commenter, as stated, had supported this change because the commenter believed that it better identified devices that were quite different. We proposed separating defibrillator and pacemaker devices because they are such different devices. Moving the defibrillator leads back into a pacemaker MS–DRG defeats the purpose of creating separate MS–DRGs for defibrillators and pacemakers. Therefore, we are finalizing MS DRG 245 as proposed with the leads and generator codes listed above.

j. Artificial Heart (MDC 5)

Comment: One commenter requested that ICD–9–CM code 37.52 (Implantation of total replacement heart system) [which includes artificial heart] be moved from CMS DRG 525 (Other Heart Assist System Implant) to CMS DRG 103 (Heart Transplant or Implant of Heart Assist System). These CMS DRGs would be renumbered and renamed in the proposed MS–DRG system, with CMS DRG 525 becoming

MS–DRG 215 (Other Heart Assist System Implant) and CMS DRG 103 becoming MS–DRGs 001 (Heart Transplant or Implant of Heart Assist System with MCC) and 002 (Heart Transplant or Implant of Heart Assist System without MCC). The commenter stated that the change of MS–DRG assignment from MS–DRG 215 to MS–DRGs 001 or 002 will more accurately reflect the grouping of procedures for the implantation of a total replacement heart system with heart transplantation and other heart assist systems intended as destination therapy to more accurately recognize hospital resources for the treatment of end-stage heart failure. We received a similar comment from another manufacturer.

Response: Medicare does not currently cover artificial heart implants. ICD–9–CM procedure code 37.52 (Implantation of total replacement heart system) was created for potential use for discharges on or after October 1, 2003. However, code 37.52 was immediately put on the noncovered procedure list of the MCE as no device then existed that was deemed safe and effective as an artificial heart. The technology remains noncovered by Medicare. For this reason, we currently have no data to suggest that the DRG assignment for procedure code 37.52 needs to be changed.

Our review of the second manufacturer's product shows it to be a bi-ventricular device, not an artificial heart as described in their marketing literature. This commenter also is currently in the process of requesting coverage for its device. We recommend that the manufacturer of this device request to be added to the agenda of the ICD–9–CM Coordination and Maintenance Committee meeting of September 27, 2007. An ICD–9–CM procedure code will help us to determine whether a Medicare patient treated with this new technology should be assigned to a DRG other than the one that includes the predecessor code used to describe the service.

Comment: One commenter suggested that CMS reevaluate the appropriateness of including ICD–9–CM procedure code 37.62 (Insertion of nonimplantable heart assist system) in CMS DRG 525 (Other Heart Assist System Implant), which will become MS–DRG 215 (Other Heart Assist System Implant), and reassign code 37.62 to more accurately reflect hospital resource consumption of services involving mechanical support for cardiovascular failure. The commenter suggested that patients treated with a nonimplantable heart assist system are less costly than other patients in MS–DRG 215 and should be reassigned to a different DRG that would reflect its lower costs. Further, the commenter suggested that hospitals may not be using code 37.62 consistent with its intended purpose.

Response: The commenter has not provided a compelling justification for changing the placement of code 37.62. Our understanding is that this code describes use of a nonimplantable heart assist system to temporarily replace the heart's function. The function of the device to replace the heart means that there are only three potential MS–DRGs where code 37.62 could be assigned: MS–DRG 215 (Other Heart Assist System Implant) and MS–DRGs 001 and 002 (Heart Transplant or Implant of Heart Assist System with and without MCC, respectively). The commenter suggested that the code should be assigned to a lower paying MS–DRG than MS–DRG 215. However, the only other MS–DRGs to which the code could be assigned have even higher payment weights. Therefore, we are making no changes to the DRG assignment for code 37.62 for FY 2008. Although the commenter suggested potential problems with use of the code, the commenter did not suggest any potential solutions for how to address this problem. Therefore, we have no information upon which to take further action to address the commenter's concern.

k. Vascular Procedures (MDC 5)

We proposed three MS–DRGs for vascular procedures: MS–DRG 252 (Other Vascular Procedures with MCC), MS–DRG 253 (Other Vascular Procedures with CC) and MS–DRG 254 (Other Vascular Procedures without CC/MCC).

Comment: One commenter evaluated the diagnoses associated with MS–DRGs 252, 253, and 254 to assess whether patients with diagnoses not on the CC or MCC lists were more costly to treat. The commenter selected the following 30 diagnosis codes:

250.70, Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled.
263.9, Unspecified protein-calorie malnutrition.
276.1, Hyposmolality and/or hyponatremia.
276.2, Acidosis.
276.51, Dehydration.
276.7, Hyperpotassemia.
276.8, Hypopotassemia.
280.0, Secondary to blood loss (chronic).
285.1, Acute posthemorrhagic anemia.
287.5, Thrombocytopenia, unspecified.
410.71, Subendocardial infarction, initial episode of care.
427.1, Paroxysmal ventricular tachycardia.
427.31, Atrial fibrillation.
440.1, Atherosclerosis of renal artery.
440.24, Atherosclerosis of the extremities with gangrene.
444.22, Arterial embolism and thrombosis, lower extremity.
458.9, Hypotension, unspecified.
491.21, Obstructive chronic bronchitis with (acute) exacerbation.
496, Chronic airway obstruction, not elsewhere classified.
511.9, Unspecified pleural effusion.
518.0, Pulmonary collapse.
599.0, Urinary tract infection, site not specified.
682.6, Other cellulitis and abscess, leg, except foot.
682.7, Other cellulitis and abscess, foot, except toes.
707.15, Ulcer of other part of foot.
785.4, Gangrene.
790.7, Bacteremia.
996.62, Infection and inflammatory reaction due to vascular device, implant and graft.
997.1, Cardiac complications.
998.11, Hemorrhage complicating a procedure.

The commenter recommended that CMS should:

- Reassign vascular procedure cases containing two or more of the identified diagnosis codes from MS–DRG 253 to MS–DRG 252.
- Reassign vascular procedure cases containing two or more of the identified diagnosis codes from MS–DRG 254 to MS–DRG 253.

Response: In our proposed rule analysis, we found that the vascular procedures DRG warranted three subdivisions according to our five criteria. Nineteen of the 30 diagnosis codes suggested by the commenter already appear on the CC or MCC list and will result in a patient being assigned to either MS–DRG 252 or MS–DRG 253. The remaining 11 diagnosis codes do not appear on either list. These codes are: 250.70, 276.51, 276.7, 276.8, 280.0, 287.5, 427.31, 440.1, 458.9, 496, and 707.15.

Although the commenter has identified common diagnoses in this patient population, our medical advisors reviewed the clinical issues and claims data for cases reporting each of the conditions not on the MCC or CC list as a secondary diagnosis. After evaluating the claims data and analyzing the clinical issues, our medical advisors recommend that we not change the CC status for the codes mentioned above. They do not believe there is sufficient justification for making these codes CCs. We do not believe that we should make further changes to the MS–DRG assignments based on combinations of selected diagnoses. These types of analyses could be done with virtually any MS–DRG and would add significant complexity to the DRG system that we do not believe is warranted at this time. We reiterate that the MS–DRGs—like the predecessor CMS–DRGs—are intended to establish an average payment based on groups of patients that are similar in costs and clinical characteristics. Over time, we found that the CMS DRGs did not sufficiently recognize differences in patient severity of illness, and we proposed to adopt the MS–DRGs as an alternative to achieve this objective. While we acknowledge that further potential improvements may be warranted as we have more experience with the new system, we have significant concerns about selectively analyzing specific diagnoses within a given MS–DRG to change their DRG assignment. Although we have increased the assigned severity level for a limited number of cases, these decisions recognize that the patient was more complex than was suggested by their secondary diagnosis either because of a specific procedure (in the case of intestinal transplants) or the type of technology used to treat their condition (in the case of cochlear implants and spinal stabilization devices).

We refer readers to section II.D.2.a. of this preamble for complete information on the CC list.

l. Coronary Artery Stents (MDC 5)

Effective for cases discharged on or after October 1, 2005 (FY 2006), the ICD–9–CM Coordination and Maintenance Committee created a series of adjunct codes further describing procedures on the vascular system. These codes were at the 00.4 subcategory (Adjunct vascular system procedures), with codes 00.40 through 00.43 describing the number of vessels upon which a procedure was performed, and codes 00.45 through 00.48 describing the number of stents which were inserted. As these codes were deemed to be adjunct codes that supplemented the information describing a patient's hospital treatment, they were not considered procedure codes that would affect DRG assignment. However, coders were encouraged to thoroughly and completely code all hospital stays, in case this information would be used for future DRG determination. We received comments on the proposed MS–DRGs concerning the DRG assignment for procedures on multiple coronary vessels and insertion of multiple stents in coronary arteries.

Comment: Commenters have analyzed standardized charges in the FY 2006 MedPAR data for percutaneous transluminal coronary angioplasty (PTCA) in conjunction with codes indicating insertion of drug-eluting or non-drug-eluting coronary artery stent(s) and the use of codes indicating procedures on multiple vessels and/or insertion of multiple stents. These commenters believe that mean standardized charges for these combination codes vary substantially from the mean standardized charges associated with the DRGs to which they are proposed to be assigned. The DRGs under consideration in this section for drug-eluting stents are MS–DRG 246 (Percutaneous Cardiovascular Procedure with Drug-Eluting Stent with MCC) (formerly CMS DRG 557 (Percutaneous Cardiovascular Procedure with Drug-Eluting Stent with Major Cardiovascular Diagnosis)) and MS–DRG 247 (Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without MCC) (formerly CMS DRG 558 (Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without Major Cardiovascular Diagnosis)). The DRGs under consideration in this section for non-drug-eluting stents are MS–DRG 248 (Percutaneous Cardiovascular Procedure with Non-Drug-Eluting Stent with MCC) and MS–DRG 249 (Percutaneous Cardiovascular Procedure with Non-Drug-Eluting Stent with MCC). (These were either formerly CMS DRG 555 (Percutaneous Cardiovascular Procedures with Major Cardiovascular Diagnosis) or CMS DRG 556 (Percutaneous Cardiovascular Procedure with Non-Drug-Eluting Stent without Major Cardiovascular Diagnosis), respectively.)

The commenters recommended that PTCA code 00.66 (Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy) in combination with a code for insertion of a drug-eluting or non-drug-eluting stent, plus adjunct codes indicating procedures on multiple vessels and insertion of multiple stents be assigned to MS–DRGs 246 and 248 as described above. They stated that their analysis of standardized charges for PTCA with insertion of a drug-eluting or non-drug-eluting stent(s) in multiple vessels or with insertion of multiple stents vary substantially from the mean standardized charges associated with the DRGs to which they are proposed to be assigned. The commenters found that the variation in charges between the subgroups and the overall DRG average meet CMS' criteria for moving cases between DRGs, and suggested that cases with multiple vessels and multiple stents be moved up to the first DRG in the series. That is, cases with insertion of drug-eluting stents in MS–DRG 247 would be assigned to MS–DRG 246, and cases with non-drug-eluting stents in MS–DRG 249 would be assigned to MS–DRG 248. In each of the MS–DRGs, cases where multiple vessels are treated or multiple stents are placed would be assigned to the ''with MCC'' MS–DRG rather than the ''without MCC'' MS–DRG.

Response: We reviewed the MedPAR data in response to these comments and found that PTCAs with four or more vessels or four or more stents were more comparable in average charges to the higher weighted DRG in the group. These data are summarized in the following tables.

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 246—All cases	31,204	6.34	$64,009.36
MS–DRG 246—Cases with codes 00.66 and 36.07 with 4 or more vessels (code 00.43) and 4 or more stents (code 000.48)	1,425	5.68	78,02.93
MS–DRG 247—All cases	267,684	2.24	40,857.34
MS–DRG 247—Cases with codes 00.66 and 36.07 with 4 or more vessels (code 00.43) and 4 or more stents (code 000.48)	8,095	2.33	61,666.34
MS–DRG 248—All cases	4,710	6.53	56,671.61
MS–DRG 248—Cases with codes 00.66 and 36.06 with 4 or more vessels (code 00.43) and 4 or more stents (code 000.48)	112	6.38	69,431.81
MS–DRG 249—All cases	27,914	2.55	35,577.22
MS–DRG 249—Cases with codes 00.66 and 36.06 with 4 or more vessels (code 00.43) and 4 or more stents (code 000.48)	232	3.76	54,203.87

In both cases, we believe that the average charges for cases where four or more vessels are treated or four or more stents are placed more closely approximate average charges in the higher weighted MS–DRG. Therefore, we are assigning these cases to the higher weighted MS–DRG according to the following logic.

Claims containing code 00.66 for PTCA, and code 36.07 (Insertion of drug-eluting coronary artery stent(s)), and code 00.43 (Procedure on four or more vessels) or code 00.48 (Insertion of four or more vascular stents) are assigned to MS–DRG 246. In addition, claims containing code 00.66 for PTCA, and code 36.06 (Insertion of non-drug-eluting coronary artery stent(s)), and code 00.43 or code 00.48 are assigned to MS–DRG 248.

We are also making conforming changes to the MS–DRG titles as follows: MS–DRG 246 is titled ''Percutaneous Cardiovascular Procedures with Drug-Eluting Stent(s) with MCC or 4 or more Vessels/Stents''. The title for MS–DRG 247 will remain unchanged. MS–DRG 248 is titled ''Percutaneous Cardiovascular Procedures with Non Drug-Eluting Stent(s) with MCC or 4 or more Vessels/Stents''. The title for MS–DRG 249 will remain unchanged. This DRG modification is based on newly created codes that were developed to provide additional detail on the number of vessels treated and the number of stents inserted. The DRG combines two distinct concepts: the insertion of four or more stents or the performance of a vascular procedure on four or more vessels, in order to determine the DRG assignment. Although we are adopting this DRG change for FY 2008, we plan to continue examining whether this revision of the DRG definition captures a relatively homogeneous group of cases. We currently only have one year of data on these new codes. Therefore, we plan to revisit this issue further in next year's proposed rule when we have a second year of data to better distinguish the different types of cases that are treated with this technology.

m. Endovascular Repair of Aortic and Thoracic Aneurysms (MDC 5)

Comment: Several commenters expressed concern that the relative weights for MS–DRGs 237 and 238 (Major Cardiovascular Procedures with MCC and without MCC, respectively), formerly CMS–DRGs 110 and 111 (Major Cardiovascular Procedures with CC and without CC, respectively) do not reflect the severity of illness and the resource use required for such complex care. One commenter noted that regardless of the DRG assignment, the cost of the endovascular graft or device does not change, nor is it insignificant. The commenter further stated that MS–DRGs 237 and 238 do not adequately factor into the relative weights that the device is not incidental to treatment; it is a major component of the treatment.

Response: New MS–DRGs 237 and 238 are exactly the same as their predecessor CMS DRGs 110 and 111 in content. Using historic Medicare charges and hospital cost report data submitted to us by hospitals, we have included the cost of the device into the MS–DRG relative weights.

Comment: Several commenters suggested that MS–DRGs 237 and 238 should be divided into three levels of severity: ''with MCC'', ''with CC'', and ''without CC/MCC'' and noted that it is important that CMS be consistent and not create inequities with regard to major surgical procedures. One commenter stated that patients with aortic aneurysm fall naturally into three clinical categories, with patients who are genetically predisposed to an aneurysm are likely to be younger (between 50 and 60 years of age, not between 70 and 80 years of age) and are more likely to be healthier than the typical aneurysm patient. Those cases are suggested for an MS–DRG without CC/MCC. The commenter added that the other cases would fall into the ''with MCC'' or ''with CC'' MS–DRGs based on the severity of their CCs.

Response: When we consolidated all existing DRGs into the base DRGs, we removed all demarcations that had been added over the years, including considerations for age, gender, and discharge disposition, as well as elimination of the current split based on the presence or absence of a CC, burns, trauma, AMI, major cardiovascular condition, among others. We then applied the severity criteria described elsewhere in this preamble, and stated that in order to warrant creation of a CC or major CC subgroup within a base MS–DRG, the subgroup had to meet all five criteria. The commenter states that genetically predisposed patients tend to be younger. Although age is a variable that would be available in the Medicare claims data, genetic predisposition to a certain class of diseases generally cannot be identified in the ICD–9–CM coding system. Therefore, as we are not able to identify those patients, we cannot subdivide these MS–DRGs using genetic predisposition as criterion.

We considered subdividing MS–DRGs 237 and 238 into three DRGs for the proposed rule. However, MS–DRGs 237 and 238 did not meet the criteria for a 3-way split.

Comment: Two commenters suggested that instead of ''with MCC'' in the surgical DRGs, CMS should establish a list of devices that would be equivalent to the MCC categorization and further subdivide the MS–DRGs based on the presence of ''with Major Device.'' Specifically, they suggested that endovascular devices or grafts used during cardiovascular procedures should be considered major devices. Therefore, they added, when a major device or implantable graft is used in a cardiovascular repair procedure, such as those performed to repair an abdominal or thoracic aortic aneurysm, CMS should assign those cases to MS–DRGs where the DRG title has been changed to reflect that the costs of the device are similar to the costs of an MCC.

Response: We believe the commenter is suggesting that we establish a list of major devices and use them as a proxy for MCCs. We will take this suggestion under consideration in future reviews of the MS–DRGs.

We looked at data to review the differences between endovascular graft repair of abdominal aortic aneurysm (code 39.71) and endovascular graft repair of thoracic aortic aneurysm (code 39.73). Our findings are represented in the table below.

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 237—All cases	20,789	11.47	$93,824.52
MS–DRG 237—Cases with code 39.71 (abdominal)	1,484	8.95	89,929.39
MS–DRG 237—ases with code 39.73 (thoracic)	277	10.98	119,120.51
MS–DRG 238—All cases	42,797	4.88	51,410.12
MS–DRG 238—Cases with code 39.71 (abdominal)	14,091	2.58	55,798.25
MS–DRG 238—Cases with code 39.73 (thoracic)	877	4.95	72,426.29

Review of these data shows that the 887 thoracic cases in MS–DRG 238 have average charges that are between both groups. We believe that the data indicate that endovascular repair of the thoracic aorta cases should be assigned to MS–DRG 237.

Therefore, we are assigning procedure code 39.73 (Endovascular implantation of graft in thoracic aorta) to MS–DRG 237 in FY 2008.

n. O.R. Procedures for Obesity (MDC 10)

Comment: One commenter was concerned with the conditions that are classified as MCCs and CCs for MS–DRGs 619, 620, 621 (O.R. Procedures for Obesity with MCC, with CC, and without CC/MCC, respectively), previously CMS DRG 288. The commenter fully supported efforts to base payments on patient severity, but states that some of the proposed changes do not appear to achieve that goal. The commenter acknowledged the three severity levels added to former CMS DRG 288 (O.R. Procedures for Obesity). However, the commenter stated that all of the morbidly obese Medicare patients will have one or more serious comorbidities. The commenter was concerned about the application of the complete MCC and CC list to MS–DRGs 619, 620, and 621. The commenter stated that the following codes, which are on the MCC and CC lists, should not be considered MCCs or CCs for these bariatric DRGs because these conditions are ''contraindications'' to performing bariatric surgery:

- Diabetes codes 250.10 through 250.13; 250.20 through 250.23; and 250.30 through 250.33 (all MCCs).
- Coronary atherosclerosis codes 414.02 through 414.04; and 414.06 and 414.07 (all CCs).
- Aneurysm and dissection of heart codes 414.10 (CC), 414.12 (MCC), and 414.19 (CC).

The commenter also requested that the following codes be classified as CCs for these bariatric DRGs:

- Diabetes codes—250.00 through 250.93.
- Obstructive sleep apnea—327.23.
- Hypertensive disease—401.0 through 405.99.
- Cirrhosis of liver without mention of alcohol—571.5.
- Biliary cirrhosis—571.6.
- Other chronic nonalcoholic liver disease—571.8.
- Unspecified chronic liver disease without mention of alcohol—571.9.

Response: Our clinical advisors disagree with the recommendations to change the diabetes, coronary atherosclerosis, and aneurysm and dissection codes from MCCs and CCs to non-CCs for the bariatric MS–DRGs. They believe these conditions represent significant CCs in the general patient population and the data we used to perform this analysis support their judgment. Although we do have secondary diagnosis codes that are ''exclusions'' (not counted as an MCC or a CC if they are related to the principal diagnosis), we have not analyzed whether to classify a particular diagnosis as an MCC or a CC for purposes of determining if a particular type of surgery should be performed. However, we believe the commenter indicates that our decision to classify these conditions as MCCs or CCs is correct by suggesting that the presence of these conditions is so significant in increasing severity of illness that it is a contraindication to surgery. We expect that physicians will not order surgical procedures that are contraindicated merely because the case would be assigned to a higher-paying DRG.

Our medical advisors evaluated the request to make the codes specified above CCs. Our medical advisors reviewed claims data and clinical issues for cases reporting codes 250.00 through 250.93; 327.23; 401.0 through 405.99; and 571.5 as secondary diagnoses. After evaluating the claims data and analyzing the clinical issues, our medical advisors recommend that we not change the CC status for codes 250.00 through 250.93; 327.23; 401.0 through 405.99; and 571.5. They do not believe there is sufficient justification for making these codes CCs at this time.

o. Penile Restorative Procedures (MDC 12)

Comment: One commenter, a national organization representing the prosthetic urology community applauded CMS for moving forward to ensure that Medicare payments for inpatient services are appropriate and accurately reflect the severity and resources required for patient care. The commenter supported the proposal to implement MS–DRGs on October 1, 2007. However, the commenter indicated that the cost of implants and prosthetics used in penile implant procedures are comparable to the resources utilized in a patient with a MCC or CC diagnosis. Generally, the commenter suggested that in surgical MS–DRGs where implants and prostheses are part of the ICD–9–CM procedure code title that CMS should consider revising the MS–DRG titles to account for the costs associated with surgical procedures that use an implant or prosthesis. As an example, the commenter expressed support for the proposed modification to MS–DRG 129 (Major Head and Neck Procedure with CC/MCC or Major Device). The commenter believed that, when a major implant/prosthesis/device demonstrates costs that are greater than or similar to the difference between the relative weights of a CC/MCC DRG versus a without CC/MCC DRG pair, CMS should recognize the device or implant in the MS–DRG titles and reassign these cases. Specifically, the commenter recommended that the title for proposed MS–DRG 709 (Penis Procedures with CC or MCC) be revised to add the phrase ''or major device or implant'' and include all cases where an implantable prosthesis is used in a penile restorative procedure.

Response: We appreciate the commenter's support for MS–DRGs and

its general suggestions for future refinements. The commenter did not provide specific examples of types of implants and prosthesis which they want to have evaluated for possible DRG reassignment. We are not clear as to whether or not there will be ICD– 9–CM procedure codes for these specific implants. It is premature to modify the MS–DRG titles at this time without more specific information and analysis.

Comment: This same commenter also urged CMS to review clinically significant conditions for penile restorative procedures on the proposed MCC and CC lists.

Response: We refer readers to section II.D.3. of this final rule with comment period for a complete discussion on the public comments received on the MCC and CC lists. We welcome any specific recommendations for future revisions and refinements to the MCC and CC lists.

p. Female Reproductive System Reconstruction Procedures (MDC 13)

Comment: Two commenters requested that CMS establish levels within MS–DRG 748 (Female Reproductive System Reconstruction Procedures). The commenters noted that all of the other proposed MS–DRGs for surgical male and female reproductive system procedures have either ''MCC or CC'' subdivisions. The commenters believed that CMS may have made an oversight by not establishing severity levels within this MS–DRG.

Response: As stated in the FY 2008 proposed rule, in order to warrant creation of a CC or MCC subgroup within a base MS–DRG, the subgroup has to meet all five criteria. In developing the proposed MS–DRGs, this base DRG did not meet three of the five criteria required to subdivide a DRG into additional severity subgroups. MS–DRG 748 failed the following three criteria:

- At least 5 percent of the patients in the MS–DRG fall within the MCC or CC subgroup.
- At least 500 cases are in the MCC or CC subgroup.
- There is a $4,000 difference in average charge between subgroups.

We refer readers to section II.D.3 of the FY 2008 proposed rule (72 FR 24705) for a complete listing of the criteria.

As such, effective October 1, 2007, we are adopting the MS–DRGs as final policy and MS–DRG 748 will remain as proposed with the following title: MS–DRG 748 (Female Reproductive System Reconstruction Procedures).

q. Urological and Gynecological Disorders With Grafts or Prosthesis (MDCs 13 and 14)

Comment: We received comments commending CMS for the creation of new ICD–9–CM procedure codes that identify the use of grafts or prosthetics in female pelvic prolapse repair procedures. The commenters acknowledged that the use of these new codes will result in better data collection, outcomes research, and improve the quality of health care for women. However, the commenters indicated that the cost of implants and prosthetics used in treating various urological and gynecological conditions are comparable to the resources utilized in a patient with an MCC or CC diagnosis. Specifically, the commenters recommended that the titles for the following proposed MS–DRGs be revised to add the term, ''or major device'' to account for cases where a graft or prosthesis is used.

- MS–DRG 333 (Rectal Resection with CC).
- MS–DRG 662 (Minor Bladder Procedures with Major CC).
- MS–DRG 707 (Major Male Pelvic Procedures with CC or Major CC).
- MS–DRG 709 (Penis Procedures with CC or Major CC).
- MS–DRG 746 (Vagina, Cervix & Vulva Procedures with CC or Major CC).

Response: We appreciate the commenter's support of the new procedure codes and the suggestion to revise the proposed MS–DRG titles. The newly created codes describing the use of grafts or prosthetics are restricted to female pelvic prolapse repair procedures and are not effective until October 1, 2007. As a result, there is no data available for analysis at this time. We will evaluate these recommendations as we obtain additional data using the MS–DRGs to determine if future changes to the above mentioned MS–DRGs are warranted.

r. High Dose Interleukin-2 (HD–IL–2) (MDC 17)

We received comments concerning the appropriate assignment within the MS–DRGs of patients receiving High-dose Interleukin-2 (IL–2).

In the FY 2004 final rule (68 FR 45360, August 1, 2003), we discussed the creation of a specific code to identify IL–2 (procedure code 00.15, High-dose infusion of Interleukin-2 (IL–2)) and the subsequent modification of existing CMS DRG 492 (Chemotherapy with Acute Leukemia as Secondary Diagnosis) by adding code 00.15 to the DRG logic and changing the title to ''Chemotherapy with Acute Leukemia or with use of High Dose Chemotherapy Agent''. This drug is marketed as Proleukin©. Under the proposed MS–DRGs, CMS DRG 492 would be replaced by MS–DRG 837 (Chemotherapy with Acute Leukemia as Secondary Diagnosis or with High Dose Chemotherapeutic Agent with MCC), MS–DRG 838 (Chemotherapy with Acute Leukemia as Secondary Diagnosis with CC or High Dose Chemotherapeutic Agent), or MS–DRG 839 (Chemotherapy with Acute Leukemia as Secondary Diagnosis without CC/MCC).

Administration of high-dose Interleukin-2 (HD–IL–2) is a hospital inpatient-based regimen that can produce durable remissions of metastatic renal cell cancer and metastatic melanoma in a subset of patients. In contrast to traditional cytotoxic chemotherapies which target cancer cells directly, HD–IL–2 enhances the body's natural cancer defenses by stimulating the growth and activity of cancer-killing white blood cells. HD–IL–2 therapy is associated with severe complications that can include: hypotension, metabolic acidosis, acute renal failure, arrhythmia, myocardial inflammation, coagulation defects, hyperthyroidism, psychosis, respiratory distress syndrome, catheter related septicemia, hyperbilirubinemia and thrombocytopenia.

To safely administer HD–IL–2, the FDA-approved label states that HD–IL–2 ''should be administered in a hospital setting under the supervision of a qualified physician experienced in the use of anticancer agents. An intensive care facility and specialists skilled in cardiopulmonary or intensive care medicine must be available.'' Strict nursing protocols must be followed in order to minimize adverse events such as cardiac arrhythmias as well as severe hypotension.

Because it is associated with such severe side effects, HD–IL–2 therapy requires substantially greater resource utilization, including longer hospital stays and additional nursing support, than conventional chemotherapy. Conventional chemotherapy may be administered to patients either on an outpatient basis or through a series of short (that is, 1 to 3 day) inpatient stays. By contrast, FDA approval for high-dose IL–2 refers specifically to the following protocol:

''Each course of high-dose IL–2 therapy is administered during two separate hospital admissions, with an average length of stay of six to seven days each. For the first cycle, Interleukin-2 is administered every 8 hours over a 5-day period. Patients are then discharged to rest at home for

several days, and then readmitted for a second cycle consisting of an identical dosing regimen. These two cycles comprise the first course of high-dose IL–2 therapy, which may be repeated after 8 to 12 weeks if the patient is responding.''

Based on data from peer reviewed publications, some centers may administer IL–2 ''off-label'' in low- or intermediate-dose regimens. For such off-label uses, IL–2 is either not administered as a bolus, or in a much lower-dose bolus. Because low- or intermediate-dose IL–2 therapy poses a lower risk of serious side effects, its administration is less resource intensive in terms of patient monitoring, nursing support, and length of stay.

A specific code was created for the administration of High-dose Interleukin-2 beginning with cases discharged on or after October 1, 2003. Code 00.15 (High-dose infusion interleukin-2 (IL–2)) came from existing code 99.28 (Injection or infusion of biological response modified [BMR] as an antineoplastic agent), which had been created for use on or after October 1, 1994. However, as there may be some confusion in the industry concerning the differentiation and correct coding of ''high-dose'' IL–2 therapy from less resource intensive uses, some non-high-dose cases have probably been incorrectly billed under 00.15 as high-dose cases when they should have been classified to code 99.28. Code 00.15 is specifically titled ''High-dose infusion Interleukin-2'' and contains inclusion terms specifying ''Infusion (IV Bolus, CIV) interleukin.'' A specifically written ''excludes note'' in the Tabular section of the Procedure Manual sends Coders to code 99.28 to correctly describe the administration of low-dose infusion Interleukin-2. This confusion has possibly caused Medicare to overpay for some non-high-dose cases as if they were high dose cases, and may have reduced the reported average charges and costs of true high-dose IL–2 therapy [in the MedPAR data files]. If reported average charges do not reflect true high-dose IL–2 therapy, the result of this coding inaccuracy may be causing the IPPS relative weight to reflect a blend of the costs of patient treated with high-dose and low-dose administration of IL–2.

To address this incorrect coding issue, CMS will clarify the ICD–9–CM coding system by making additional entries in both the Index and Tabular portions of the Procedure section of the code book. Procedure code 00.15 should only be billed for ''bolus, high-dose IL–2.'' Cases must satisfy the following four criteria, as documented in the medical record, to qualify for use of code 00.15 as ''bolus, high-dose IL–2'':

- Bolus infusions given over no more than 30 minutes at a dose of no less than 600,000 IU/kg (weight adjusted);
- Placement and utilization of a central line;
- Administration in a hospital setting under the supervision of a qualified physician experienced in the use of anticancer agent with an intensive care facility and specialists skilled in cardiopulmonary or intensive care medicine available, and
- A planned 5-day treatment protocol.

Comment: Commenters indicated that the administration of High-dose IL–2 is an extremely complicated and advanced therapy, requiring much stricter nursing protocols to prevent or manage the expected complications which accompany this type of cytotoxic therapy. The commenters also noted that HD–IL–2 cases are assigned to a CMS DRG for chemotherapy that, in their view, is clinically inappropriate. The commenters stated that technologies should be assigned to clinically consistent DRGs. Therefore, the commenters added, when a therapy differs clinically and in resource allocation from the other cases assigned to the same base DRG, adoption of a new DRG for that technology is warranted. Commenters urged CMS to reassess whether cases using HD–IL–2 and other treatments involving advanced technologies are assigned to appropriate DRGs and to create new, clinically appropriate DRGs for all advanced therapies.

Response: The cost of treating patients with HD–IL–2 continues to be represented in MS–DRGs 837, 838, and 839, but the cases have been distributed according to the presence or absence of an MCC, a CC, or the lack of either a comorbidity or complication according to the historical data represented by MedPAR. Medicare likely will continue to pay the same amount for all patients in these MS–DRGs. However, our payments will better reflect patient severity of illness by paying higher amounts for those cases where the patient has an MCC or CC than if they do not. The data suggest that it is appropriate to divide CMS DRG 492 based on severity levels, so for the MS–DRG system, new MS–DRGs 837, 838, and 839 were created, as described above. Our findings are represented in the following table.

MS–DRG	Number of cases	Average length of stay	Average charges
MS–DRG 837—All cases	1,525	22.62	$107,269.93
MS–DRG 837—Cases with IL–2 Infusion (Code 00.15)	56	8.11	73,104.34
MS–DRG 837—Cases without IL–2 Infusion (Code 00.15)	1,469	23.17	108,600.39
MS–DRG 838—All cases	855	9.15	46,596.45
MS–DRG 838—Cases with IL–2 Infusion (Code 00.15)	555	4.78	44,008.54
MS–DRG 838—Cases without IL–2 Infusion (Code 00.15)	522	11.94	48,247.36
MS–DRG 839—All cases	1,307	6.04	22,693.30
MS–DRG 839—Cases with IL–2 Infusion (Code 00.15)	20	4.40	38,002.15
MS–DRG 839—Cases without IL–2 Infusion (Code 00.15)	1,287	6.07	22,455.40

These data suggest that average charges for patients receiving HD–IL–2 are either comparable or lower than other patients within assigned MS–DRGs 837 and 838. For this reason, we believe most cases treated with HD–IL–2 will be paid adequately under the MS–DRGs. The remaining 20 cases in MS–DRG 839 have average charges that are more than $15,000 higher than other cases within this MS–DRG. The average charges for these cases are closer to those for MS–DRG 838.

In spite of the possibility of erroneous coding of low-dose IL–2 cases to procedure code 00.15 instead of the more appropriate code 99.28 as discussed above, the data do not currently suggest a problem with Medicare payment for most of the HD–IL–2 cases assigned to MS–DRGs 837, 838, and 839. However, the data do suggest that the costs of cases of IL–2 coded with 00.15 currently assigned to MS–DRG 839 are closer to MS–DRG 838. Therefore, for FY 2008, we are assigning procedure code 00.15 (High-dose infusion of Interleukin–2 (IL–2)) to MS–DRG 837 (Chemotherapy with Acute Leukemia as Secondary Diagnosis

or with High Dose Chemotherapeutic Agent with MCC) and MS–DRG 838 (Chemotherapy with Acute Leukemia as Secondary Diagnosis with CC or High Dose Chemotherapeutic Agent).

s. Computer Assisted Surgery

Comment: We received one comment from a manufacturer requesting that CMS recognize improved clinical outcomes resulting from computer assisted surgery and develop new MS–DRGs to group patients together who receive this technology. The commenter noted that effective October 1, 2004, CMS created codes to describe specific forms of computer assisted surgery. The commenter further noted that clinical outcomes are superior when computer assisted surgery is utilized; however, assigning the computer assisted surgery codes does not affect the DRG assignment. The commenter encouraged CMS to consider this issue as it continues to refine the DRG system.

Response: We appreciate the commenter's recommendation that CMS evaluate how to better recognize the clinical outcomes associated with computer-assisted surgical procedures. It is unclear which procedures the commenter is proposing we specifically examine at this time. Currently, the procedure codes that identify the use of computer assisted surgery are as follows:

- 00.31, Computer assisted surgery with CT/CTA.
- 00.32, Computer assisted surgery with MR/MRA.
- 00.33, Computer assisted surgery with fluoroscopy.
- 00.34, Imageless computer assisted.
- 00.35, Computer assisted surgery with multiple datasets.
- 00.39, Other computer assisted surgery.

We will continue to study this issue as we obtain additional data under the MS–DRGs and determine if it is appropriate to make further modifications.

13. Changes to MS–DRG Logic As a Result of Public Comments

To assist the readers in identifying all changes that were made to the MS–DRGs as a result of public comments received on the FY 2008 IPPS proposed rule, we have developed the following summary chart of those changes.

MS–DRG SUMMARY CHART

MDC/MS–DRG	Proposed title	Final title	Procedure code reassignments
		Pre-MDC **Intestinal Transplant**	
MS–DRG 005 ..	Liver transplant and/or intestinal transplant w MCC.	Liver transplant w MCC or intestinal transplant.	Cases with procedure code 46.97 (Transplant of intestine) are reassigned from MS–DRG 006 to MS–DRG 005.
MS–DRG 006 ..	Liver transplant and/or Intestinal Transplant w/o MCC.	Liver transplant w/o MCC.	
		MDC 1 (Diseases and Disorders of the Nervous System) **Implantation of Chemotherapeutic Agent** **Intracranial Stents**	
MS–DRG 023 ..	Craniotomy with major device implant or acute complex central nervous system principal diagnosis with MCC.	Cranio w major dev iImpl/ acute complex CNS PDX with MCC or chemo implant.	Cases with procedure code 00.10 (Implantation of chemotherapeutic agent) are reassigned from MS–DRG 024 to MS–DRG 023.
MS–DRG 024 ..	Craniotomy with major device implant or acute complex central nervous system principal diagnosis without MCC.	Cranio w major dev impl/acute complex CNS PDX w/o MCC.	Cases with procedure code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s)) are reassigned from MS–DRGs 037–039 to MS–DRGs 023–024.
		Intracranial Stents	
MS–DRG 025 ..	Craniotomy & endovascular intracranial procedures w MCC.	Craniotomy & endovascular intracranial procedures w MCC.	Cases with procedure code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s)) are reassigned from MS–DRGs 037 039 to MS–DRGS 025–027.
MS–DRG 026 ..	Craniotomy & endovascular intracranial procedures w CC.	Craniotomy &endovascular intracranial procedures w CC.	
MS–DRG 027 ..	Craniotomy & endovascular intracranial procedures w/o CC/MCC.	Craniotomy & endovascular intracranial procedures w/o CC/MCC.	

MS–DRG SUMMARY CHART—Continued

MDC/MS–DRG	Proposed title	Final title	Procedure code reassignments
		Spinal Neurostimulators	
MS–DRG 028 ..	Spinal procedures w MCC	Spinal procedures w MCC	Full system spinal cord non-rechargeable and rechargeable neurostimulator cases in MS–DRG 030 are reassigned to MS–DRG 029 in MDC 1. ICD–9–CM procedure codes 03.93 (Implantation or replacement of spinal neurostimulator lead(s)), and 86.94 (Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable), or 86.95 (Insertion or replacement of dual array neurostimulator pulse generator, not specified as rechargeable), or 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator), or 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator) must be reported in order for the spinal neurostimulator cases to be assigned to MS–DRG 029.
MS–DRG 029 ..	Spinal procedures w CC	Spinal procedures w CC or spinal neurostimulators.	
MS–DRG 030 ..	Spinal procedures w/o CC/MCC.	Spinal procedures w/o CC/MCC.	
		Intracranial Stents	
MS–DRG 037 ..	Extracranial procedures w MCC.	Extracranial procedures w MCC.	Cases with procedure code 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessel(s)) are reassigned from MS–DRGs 037 to MS–DRGs 023–027.
MS–DRG 038 ..	Extracranial procedures w CC	Extracranial procedures w CC.	
MS–DRG 039 ..	Extracranial procedures w/o CC/MCC.	Extracranial procedures w/o CC/MCC.	
		Peripheral Neurostimulators	
MS–DRG 040 ..	Periph & cranial nerve & other nerv syst proc w MCC.	Periph & cranial nerve & other nerv syst proc with MCC.	Full system peripheral non-rechargeable and rechargeable neurostimulator cases in MS–DRG 042 are reassigned to MS–DRG 041. ICD 9 CM procedure codes 04.92 (Implantation or replacement of peripheral neurostimulator lead(s)), and 86.94 (Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable), or 86.95 (Insertion or replacement of dual array neurostimlator pulse generator, not specified as rechargeable), or 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator), or 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator) must be reported in order for the peripheral neurostimulator cases to be assigned to MS–DRG 041.
MS–DRG 041 ..	Peripheral/Cranial nerve & other nerv syst proc with CC.	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim.	
MS–DRG 042 ..	Peripheral/cranial nerve & other nerv syst proc w/o CC/MCC.	Periph/cranial nerve & other nerv syst proc w/o CC/MCC.	
		Pain Codes	
MS–DRG 091 ..	Other disorders of nervous system w MCC.	Other disorders of nervous system w MCC.	Cases with a principal diagnosis of code 338.0 (Central pain syndrome) or code 338.21 (Chronic pain due to trauma) or code 338.22 (Chronic post-thoracotomy pain) or code 338.28 (Other chronic postoperative pain) or code 338.29 (Other chronic pain) or code 338.4 (Chronic pain syndrome) are reassigned from MDC 23, MS–DRGs 947–948 to MS–DRGs 091–093.
MS–DRG 092 ..	Other disorders of nervous system w CC.	Other disorders of nervous system w CC.	
MS–DRG 093 ..	Other disorders of nervous system w/o CC/MCC.	Other disorders of nervous system w/o CC/MCC.	
		MDC 3 (Disease and Disorders of the Ear, Nose, Mouth, and Throat)	
		Cochlear Implants	
MS–DRG 129 ..	Major head & neck procedures w CC/MCC.	Major head & neck procedures w CC/MCC or Major Device.	Cochlear implant cases are reassigned from MS–DRG 130 to MS–DRG 129. The ICD 9 CM procedure codes for cochlear implants are: 20.96 (Implantation or replacement of cochlear prosthetic device, not otherwise specified), or 20.97 (Implantation or replacement of cochlear prosthetic device, single channel), or 20.98 (Implantation or replacement of cochlear prosthetic device, multiple channel).
MS–DRG 130 ..	Major head & neck procedures w/o CC/MCC.	Major head & neck procedures w/o CC/MCC.	

MS–DRG SUMMARY CHART—Continued

MDC/MS–DRG	Proposed title	Final title	Procedure code reassignments
MDC 5 (Disease and Disorders of the Circulatory System) Endovascular Implantation of Graft in Thoracic Aorta			
MS–DRG 237 ..	Major cardiovascular procedures w MCC.	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair.	Cases with procedure code 39.73 (Endovascular implantation of graft in thoracic aorta) are reassigned from MS–DRG 238 to MS–DRG 237.
MS–DRG 238 ..	Major cardiovascular procedures w/o MCC.	Major cardiovascular procedures w/o MCC.	
Multiple Vessels, Multiple Coronary Stents			
MS–DRG 246 ..	Percutaneous cardiovascular pro w drug-eluting stent w Major CC.	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ Vessels/Stents.	Cases in MS–DRG 247 with procedure code 00.66 (Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy), and code 36.07 (Insertion of drug-eluting coronary artery stent(s)), and code 00.43 (Procedure on four or more vessels), or code 00.48 (Insertion of four or more vascular stents) are reassigned to MS–DRG 246.
MS–DRG 247 ..	Percutaneous cardiovascular proc w drug-eluting stent w/o Major CC.	Perc cardiovasc proc w drug-eluting stent w/o MCC.	
MS–DRG 248 ..	Percutaneous cardiovascular proc w non-drug-eluting stent w Major CC.	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ Ves/stents.	Cases in MS–DRG 249 with procedure codes 00.66 (Percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy), and code 36.06 (Insertion of non-drug-eluting coronary artery stent(s)), and code 00.43 (Procedure on four or more vessels), or code 00.48 (Insertion of four or more vascular stents) are reassigned to MS–DRG 248.
MS–DRG 249	Percutaneous cardiovascular proc w non-drug-eluting stent w/o Major CC.	Perc cardiovasc proc w non-drug-eluting stent w/o MCC.	
MDC 8 (Diseases and Disorders of the Musculoskeletal System and Connective Tissue) Spinal Fusion			
MS–DRG 456 ..	Spinal fusion exc cerv w spinal curv, malig or 9+ fusions w MCC.	Spinal fusion exc cerv w spinal curv/malig/infec or 9+ fusions w MCC.	The following diagnoses are added to the principal diagnosis list for MS–DRGs 456–458: 015.02 (Tuberculosis of bones and joints, vertebral column, bacteriological or histological examination unknown (at present)); 015.04 (Tuberculosis of bones and joints, vertebral column, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture); 015.05 (Tuberculosis of bones and joints, vertebral column, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically); 730.08 (Acute osteomyelitis of other specified sites); 730.18 (Chronic osteomyelitis of other specified sites); and 730.28 (Unspecified oteomyelitis of other specified sites). Procedure code 81.64 (Fusion or refusion of 9 or more vertebrae) is added to the list of procedures for MS–DRGs 456–458.
MS–DRG 457 ..	Spinal fusion exc w spinal curv, malig or 9+ fusions w CC.	Spinal fusion exc cerv w spinal curv/malig/infec or 9+ fusions w CC.	
MS–DRG 458 ..	Spinal fusion exc w spinal curv, malig or 9+ fusions w/o CC/MCC.	Spinal fusion exc cerv w spinal curv/malig/infec or 9+ fusions w/o CC/MCC.	
Hip and Knee Replacements			
MS–DRG 466 ..	Revision of hip or knee replacement w MCC.	Revision of hip or knee replacement w MCC.	Cases with procedure code 00.83 (Revision of knee replacement, patellar component), or code 00.84 (Revision of total knee replacement, tibial insert (liner)) are reassigned from MS–DRGs 466–468 to MS–DRGs 485–489.
MS–DRG 467 ..	Revision of hip or knee replacement w CC.	Revision of hip or knee replacement w CC.	
MS–DRG 468 ..	Revision of hip or knee replacement w/o CC/MCC.	Revision of hip or knee replacement w/o CC/MCC.	
MS–DRG 485 ..	Knee procedures w pdx of infection w MCC.	Knee procedures w pdx of infection w MCC.	
MS–DRG 486 ..	Knee procedures w pdx of infection w CC.	Knee procedures w pdx of infection w CC.	
MS–DRG 487 ..	Knee procedures w pdx of infection w/o CC/MCC.	Knee procedures w pdx of infection w/o CC/MCC.	
MS–DRG 488 ..	Knee procedures w/o pdx of infection w CC/MCC.	Knee Procedures without Principal Diagnosis of Infection with CC/MCC.	
MS–DRG 489 ..	Knee procedures w/o pdx of infection w/o CC/MCC.	Knee Procedures without Principal Diagnosis of Infection without CC/MCC.	

MS–DRG SUMMARY CHART—Continued

MDC/MS–DRG	Proposed title	Final title	Procedure code reassignments
		Spinal Procedures Spinal Neurostimulators	
MS–DRG 490 ..	Back & neck procedures except spinal fusion w CC/MCC or disc devices.	Back & neck proc exc spinal fusion with CC/MCC or disc device/neurostim.	Cases with procedure codes 84.59 (Insertion of other spinal devices), or 84.62 (Insertion of total spinal disc prosthesis, cervical), or 84.65 (Insertion of total spinal disc prosthesis, lumbosacral), or 84.80 (Insertion or replacement of interspinous process device(s)), or 84.82 (Insertion or replacement of pedicle-based dynamic stabilization device(s)), or 84.84 (Insertion or replacement of facet replacement devices) are reassigned from MS–DRG 491 to MS–DRG 490. Reassign full system spinal cord non-rechargeable and rechargeable neurostimulator cases in MS–DRG 491 to MS–DRG 490 in MDC 8. ICD–9–CM procedure codes 03.93 (Implantation or replacement of spinal neurostimulator lead(s)), and 86.94 (Insertion or replacement of single array neurostimulator pulse generator, not specified as rechargeable), or 86.95 (Insertion or replacement of dual array neurostimulator pulse generator, not specified as rechargeable), or 86.97 (Insertion or replacement of single array rechargeable neurostimulator pulse generator), or 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator) must be reported in order for the spinal neurostimulator cases to be assigned to MS–DRG 490.
MS–DRG 491 ..	Back & neck procedures except spinal fusion w/o CC/MCC.	Back & neck proc exc spinal fusion w/o CC/MCC.	
		MDC 17 (MYELOPROLIFERATIVE DISEASES AND DISORDERS, POORLY DIFFERENTIATED NEOPLASM High-dose infusion interleukin-2 [IL-2])	
MS–DRG 837 ..	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC.	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC.	Cases with procedure code 00.15 (High-Dose Infusion Interleukin-2 [IL-2]) are reassigned from MS–DRG 839 to MS–DRG 838.
MS–DRG 838 ..	Chemo w acute leukemia as sdx or w high dose chemo agent w CC.	Chemo w acute leukemia as sdx w CC or high dose chemo agent.	
MS–DRG 839 ..	Chemo w acute leukemia as sdx or w high dose chemo agent w/o CC/MCC.	Chemo w acute leukemia as sdx w/o CC/MCC.	
		MDC 23 (Factors Influencing Health Status and Other Contacts with Health Status)	
MS–DRG 947 ..	Signs & symptoms w MCC	Signs & symptoms w MCC	Cases with a principal diagnosis of code 338.0 (Central pain syndrome), 338.21 (Chronic pain due to trauma), or 338.22 (Chronic post-thoracotomy pain), or 338.28 (Other chronic postoperative pain), or 338.29 (Other chronic pain), or 338.4 (Chronic pain syndrome) are reassigned from MDC 23, MS–DRGs 947–948 to MS–DRGs 091–093 in MDC 1.
MS–DRG 948 ..	Signs & symptoms w/o MCC.	Signs & symptoms w/o MCC.	

H. Recalibration of DRG Weights

In section II.E. of the preamble of this final rule with comment period, we stated that we are continuing to implement the cost-based DRG relative weights under a 3-year transition period such that, in FY 2008 (year two of the transition), the relative weights will be recalibrated using a blend of 67 percent of the cost-based relative weight and 33 percent of the charge-based relative weight. For FY 2009, the relative weights will be 100 percent cost-based. We are making a few minor changes to the cost-based relative weighting methodology that we adopted in the FY 2007 IPPS final rule (71 FR 47962 through 47971). However, in section II.E.2. of the preamble of the FY 2008 IPPS proposed rule, we requested public comments about whether to adopt any of the short-term recommendations to the cost-based relative weighting methodology for FY 2008 made by RTI. In response to those comments, we state in section II.E.2. of the preamble of this final rule with comment period that we are not adopting RTI's recommended regression-based CCRs for medical supplies and devices, IV drugs, and CT Scans and MRIs for FY 2008. However, as recommended by RTI, for FY 2008, we are adding two new CCRs for a total of 15 CCRs: One for ''Emergency Room'' and one for ''Blood and Blood Products,'' both of which can be derived directly from the Medicare cost report.

As we proposed, in developing the FY 2008 system of weights, we used two data sources: Claims data and cost report data. As in previous years, the claims data source is the MedPAR file. This file is based on fully coded diagnostic and procedure data for all Medicare inpatient hospital bills. The FY 2006 MedPAR data used in this final rule with comment period include discharges occurring on October 1, 2005, through September 30, 2006, based on bills received by CMS through March 2007, from all hospitals subject to the IPPS and short-term, acute care hospitals in Maryland (which are under

a waiver from the IPPS under section 1814(b)(3) of the Act). The FY 2006 MedPAR file used in calculating the relative weights includes data for approximately 11,782,098 Medicare discharges from IPPS providers. Discharges for Medicare beneficiaries enrolled in a Medicare Advantage managed care plan are excluded from this analysis. The data exclude CAHs, including hospitals that subsequently became CAHs after the period from which the data were taken. The second data source used in the cost-based relative weighting methodology is the FY 2005 Medicare cost report data files from HCRIS, which represents the most recent full set of cost report data available. We used the March 31, 2007 update of the HCRIS cost report files for FY 2005 in setting the relative cost-based weights.

Because we are implementing the relative weights on a transitional basis, it is necessary to calculate both charge-based and cost-based relative weights. The charge-based methodology used to calculate the DRG relative weights from the MedPAR data is the same methodology that was in place for FY 2006 and FY 2007 and was applied as follows:

- To the extent possible, all the claims were regrouped using the MS–DRGs being adopted for FY 2008, as discussed in section II.D. of the preamble of this final rule with comment period.
- The transplant cases that were used to establish the relative weights for heart and heart-lung, liver and/or intestinal, and lung transplants (MS–DRGs 001, 002, 005, 006, and 007, respectively; previously CMS DRGs 103, 480, and 495) were limited to those Medicare-approved transplant centers that have cases in the FY 2006 MedPAR file. (Medicare coverage for heart, heart-lung, liver and/or intestinal, and lung transplants is limited to those facilities that have received approval from CMS as transplant centers.)
- Organ acquisition costs for kidney, heart, heart-lung, liver, lung, pancreas, and intestinal (or multivisceral organs) transplants continue to be paid on a reasonable cost basis. Because these acquisition costs are paid separately from the IPPS rates, it was necessary to subtract the acquisition charges from the total charges on each transplant bill that showed acquisition charges before computing the average charge for the DRG and before eliminating statistical outliers.
- Total charges were standardized to remove the effects of differences in area wage levels, IME and DSH payments, and, for hospitals in Alaska and Hawaii, the cost-of-living adjustment was applied. Beginning with FY 2008, because hospital charges include charges for both operating and capital costs, we are standardizing total charges to remove the effects of differences in geographic adjustment factors, large urban add-on payments, cost-of-living adjustments, DSH payments, and IME adjustments under the capital IPPS as well.
- Statistical outliers were eliminated by removing all cases that were beyond 3.0 standard deviations from the mean of the log distribution of both the standardized charges per case and the standardized charges per day for each DRG.
- The average charge for each DRG was then recomputed (excluding the statistical outliers). To compute the average DRG charge, we sum the standardized charges by DRG and divide by the transfer adjusted case count. A transfer case is counted as a fraction of a case based on the ratio of its transfer payment under the per diem payment methodology to the full DRG payment for nontransfer cases. That is, a transfer case receiving payment under the transfer methodology equal to half of what the case would receive as a nontransfer would be counted as 0.5 of a total case. The average charge per DRG is then divided by the national average standardized charge per case to determine the relative weight.

The new charge-based weights were then normalized by an adjustment factor of 1.50850 so that the average case weight after recalibration was equal to the average case weight before recalibration. This normalization adjustment is intended to ensure that recalibration by itself neither increases nor decreases total payments under the IPPS as required by section 1886(d)(4)(C)(iii) of the Act.

The methodology we used to calculate the DRG cost-based relative weights from the FY 2006 MedPAR claims data and FY 2005 Medicare cost report data is as follows:

- To the extent possible, all the claims were regrouped using the FY 2008 MS–DRG classifications discussed in section II.D. of the preamble of this final rule with comment period.
- The transplant cases that were used to establish the relative weights for heart and heart-lung, liver and/or intestinal, and lung transplants (MS–DRGs 001, 002, 005, 006, and 007, respectively; previously CMS DRGs 103, 480, and 495) were limited to those Medicare-approved transplant centers that have cases in the FY 2006 MedPAR file. (Medicare coverage for heart, heart-lung, liver and/or intestinal, and lung transplants is limited to those facilities that have received approval from CMS as transplant centers.)
- Organ acquisition costs for kidney, heart, heart-lung, liver, lung, pancreas, and intestinal (or multivisceral organs) transplants continue to be paid on a reasonable cost basis. Because these acquisition costs are paid separately from the prospective payment rate, it is necessary to subtract the acquisition charges from the total charges on each transplant bill that showed acquisition charges before computing the average cost for each DRG and before eliminating statistical outliers.
- Claims with total charges or total length of stay less than or equal to zero were deleted. Claims that had an amount in the total charge field that differed by more than $10.00 from the sum of the routine day charges, intensive care charges, pharmacy charges, special equipment charges, therapy services charges, operating room charges, cardiology charges, laboratory charges, radiology charges, other service charges, labor and delivery charges, inhalation therapy charges, and anesthesia charges were also deleted.
- At least 96.1 percent of the providers in the MedPAR file had charges for 10 of the 15 cost centers. Claims for providers that did not have charges greater than zero for at least 10 of the 15 cost centers were deleted.
- Statistical outliers were eliminated by removing all cases that were beyond 3.0 standard deviations from the mean of the log distribution of both the total charges per case and the total charges per day for each DRG.

Once the MedPAR data were trimmed and the statistical outliers were removed, the charges for each of the 15 cost groups for each claim were standardized to remove the effects of differences in area wage levels, IME and DSH payments, and for hospitals in Alaska and Hawaii, the applicable cost of living adjustment. Beginning with FY 2008, because hospital charges include charges for both operating and capital costs, we are standardizing total charges to remove the effects of differences in geographic adjustment factors, large urban add-on payments, cost-of-living adjustments, DSH payments, and IME adjustments under the capital IPPS as well. Charges were then summed by DRG for each of the 15 cost groups so that each DRG had 15 standardized charge totals. These charges were then adjusted to cost by applying the national average CCRs developed from the FY 2005 cost report data.

The 15 cost centers that we used in the relative weight calculation are shown in the following table. Included

in the 15 CCRs are two distinct CCRs for FY 2008 for ''Emergency Room'' and ''Blood and Blood Products.'' The costs and charges for these two additional CCRs are removed from the ''Other Services'' CCR. The table shows the lines on the cost report that we used to create the 15 national cost center CCRs that we used to adjust the DRG charges to cost. For FY 2008, we are making minor revisions to the Cardiology, Laboratory, Radiology, and Other Services CCRs we are using to calculate the DRG relative weights, as follows:

• The costs for cases involving Electroencephalography (EEG), cost report line 54, are currently in the Cardiology cost center group. However, MedPAR categorizes the claims data for EEG under Laboratory Charges (revenue codes 0740 and 0749). In order to maintain consistency with matching costs on the cost report to charges on MedPAR claims, we are moving cost report line 54 for EEG out of the Cardiology cost center group into the Laboratory cost center group.

• In the FY 2007 IPPS proposed rule, we originally included the costs for Radioisotopes, cost report line 43, in the Radiology cost center group. However, in response to comments, we moved Radioisotopes to the Other Services cost center group. After researching this issue further over the past year, we believe that Radioisotopes is a radiology-related service that more appropriately belongs in the Radiology cost center group. Accordingly, for FY 2008, as we proposed, we are moving the cost report line item for line 43, Radioisotopes, out of the Other Services cost center group and into the Radiology cost center group. The version of the 15 cost center groupings are in the table below:

BILLING CODE 4120–01–P

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field		Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
Routine Days	Private Room Charges	011X and 014X		Adults & Pediatrics (General Routine Care)	C_1_C5_25	C_1_C6_25	D4_HOS_C2_25
	Semi-Private Room Charges	010X, 012X, 013X and 016X-019X				C_1_C7_25	D4_HOS_C2_26
	Ward Charges	015X					
Intensive Days	Intensive Care Charges	020X		Intensive Care Unit	C_1_C5_26	C_1_C6_26	D4_HOS_C2_26

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field	Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
					C_1_C7_26	
	Coronary Care Charges	021X	Coronary Care Unit	C_1_C5_27	C_1_C6_27	D4_HOS_C2_27
					C_1_C7_27	
			Burn Intensive Care Unit	C_1_C5_28	C_1_C6_28	D4_HOS_C2_28
					C_1_C7_28	
			Surgical Intensive Care Unit	C_1_C5_29	C_1_C6_29	D4_HOS_C2_29
					C_1_C7_29	
			Other Special Care Unit	C_1_C5_30	C_1_C6_30	D4_HOS_C2_30
					C_1_C7_30	
Drugs	Pharmacy Charges	025X, 026X and 063X	Intravenous Therapy	C_1_C5_48	C_1_C6_48	D4_HOS_C2_48
					C_1_C7_48	
			Drugs Charged To Patient	C_1_C5_56	C_1_C6_56	D4_HOS_C2_56
					C_1_C7_56	
Supplies and Equipment	Medical/Surgical Supply Charges	027X and 062X	Medical Supplies Charged to Patients	C_1_C5_55	C_1_C6_55	D4_HOS_C2_55
					C_1_C7_55	

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field		Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
	Durable Medical Equipment Charges	0290, 0291, 0292 and 0294-0299		DME-Rented	C_1_C5_66	C_1_C6_66 C_1_C7_66	D4_HOS_C2_66
	Used Durable Medical Charges	0293		DME-Sold	C_1_C5_67	C_1_C6_67 C_1_C7_67	D4_HOS_C2_67
Therapy Services	Physical Therapy Charges	042X		Physical Therapy	C_1_C5_50	C_1_C6_50 C_1_C7_50	D4_HOS_C2_50
	Occupational Therapy Charges	043X		Occupational Therapy	C_1_C5_51	C_1_C6_51 C_1_C7_51	D4_HOS_C2_51
	Speech Pathology Charges	044X and 047X		Speech Pathology	C_1_C5_52	C_1_C6_52 C_1_C7_52	D4_HOS_C2_52
Inhalation Therapy	Inhalation Therapy Charges	041X and 046X		Respiratory Therapy	C_1_C5_49	C_1_C6_49 C_1_C7_49	D4_HOS_C2_49
Operating Room For all DRGs but Labor &	Operating Room Charges	036X, 071X and 072X		Operating Room	C_1_C5_37	C_1_C6_37 C_1_C7_37	D4_HOS_C2_37

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field	Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
Delivery			Recovery Room	C_1_C5_38	C_1_C6_38 C_1_C7_38	D4_HOS_C2_38
Labor & Delivery **ONLY FOR THE 6 Labor & Delivery DRGs 370, 371, 372, 373, 374, 375**	Operating Room Charges	036X, 071X and 072X	Delivery Room and Labor Room	C_1_C5_39	C_1_C6_39 C_1_C7_39	D4_HOS_C2_39
	Clinic Charges	051X	Obstetrics Clinic	C_1_C5_63	C_1_C6_63 C_1_C7_63	D4_HOS_C2_63
Anesthesia	Anesthesia Charges	037X	Anesthesi-ology	C_1_C5_40	C_1_C6_40 C_1_C7_40	D4_HOS_C2_40
Cardiology	Cardiology Charges	048X and 073X	Electro-cardiology	C_1_C5_53	C_1_C6_53 C_1_C7_53	D4_HOS_C2_53
Laboratory	Laboratory Charges	030X, 031X, 074X and 075X	Laboratory	C_1_C5_44	C_1_C6_44	D4_HOS_C2_44

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field		Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
						C_1_C7_44	
				PBP Clinic Laboratory Services	C_1_C5_45	C_1_C6_45	D4_HOS_C2_45
						C_1_C7_45	
				Electro-encep halography	C_1_C5_54	C_1_C6_54	D4_HOS_C2_54
						C_1_C7_54	
Radiology	Radiology Charges	028X, 032X, 033X, 034X, 035X and 040X		Radiology - Di agnostic	C_1_C5_41	C_1_C6_41	D4_HOS_C2_41
						C_1_C7_41	
	MRI Charges	061X		Radiology - Th erapeutic	C_1_C5_42	C_1_C6_42	D4_HOS_C2_42
				Radioisotope	C_1_C5_43	C_1_C6_43	D4_HOS_C2_43
						C_1_C7_43	
Emergency Room	Emergency Room Charges	045x		Emergency	C_1_C5_61	C_1_C6_61	D4_HOS_C2_61
						C_1_C7_61	
Blood and Blood Products	Blood Charges	038x		Whole Blood & Packed Red Blood Cells	C_1_C5_46	C_1_C6_46	D4_HOS_C2_46
						C_1_C7_46	

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field	Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
Other Services	Blood Storage / Processing	039x	Blood Storing, Processing, & Transfusing	C_1_C5_47	C_1_C6_47 C_1_C7_47	D4_HOS_C2_47
	Lithotripsy Charge	079X				
	Other Service Charge	0002-0099, 022X, 023X, 024X,052X,053X 055X-060X, 064X-070X, 076X-078X, 090X-095X and 099X				
			ASC (Non Distinct Part)	C_1_C5_58	C_1_C6_58 C_1_C7_58	D4_HOS_C2_58
	Outpatient Service Charges	049X and 050X	Other Ancillary	C_1_C5_59	C_1_C6_59 C_1_C7_59	D4_HOS_C2_59
			Clinic	C_1_C5_60	C_1_C6_60 C_1_C7_60	D4_HOS_C2_60
	Ambulance Charges	054X				
	ESRD Revenue Setting Charges	080X and 082X-088X	Observation beds	C_1_C5_62	C_1_C6_62 C_1_C7_62	D4_HOS_C2_62

Cost Center Group Name (15 total)	MedPAR Charge Field	Revenue Codes contained in MedPAR Charge Field		Cost Report Line Description (Wksheet C Part 1 & Wksheet D-4)	Cost from HCRIS (Wksheet C, Part 1, Column 5 and line number)	Charges from HCRIS (Wksheet C, Part 1, Column 6 & 7 and line number)	Medicare Charges from HCRIS (Wksheet D-4, Column & line number)
	Clinic Visit Charges (excluding Labor & Delivery DRGs)	051X		Observation beds	C_1_C5_6201	C_1_C6_6201 C_1_C7_6201	D4_HOS_C2_6201
				Rural Health Clinic	C_1_C5_6350	C_1_C6_6350 C_1_C7_6350	D4_HOS_C2_6350
	Professional Fees Charges	096X, 097X, and 098X		FQHC	C_1_C5_6360	C_1_C6_6360 C_1_C7_6360	D4_HOS_C2_6360
				Home Program Dialysis	C_1_C5_64	C_1_C6_64 C_1_C7_64	D4_HOS_C2_64
				Ambulance	C_1_C5_65	C_1_C6_65 C_1_C7_65	D4_HOS_C2_65
				Other Reimbursable	C_1_C5_68	C_1_C6_68 C_1_C7_68	D4_HOS_C2_68

BILLING CODE 4120–01–C

We developed the national average CCRs as follows:

Taking the FY 2005 cost report data, we removed CAHs, Indian Health Service hospitals, all inclusive rate hospitals, and cost reports that represented time periods of less than 1 year (365 days). We included hospitals located in Maryland as we are including their charges in our claims database. We then created CCRs for each provider for each cost center (see prior table for line items used in the calculations) and removed any CCRs that were greater than 10 or less than 0.01. We normalized the departmental CCRs by dividing the CCR for each department by the total CCR for the hospital for the purpose of trimming the data. We then took the logs of the normalized cost center CCRs and removed any cost center CCRs where the log of the cost center CCR was greater or less than the mean log plus/minus 3 times the standard deviation for the log of that cost center CCR. Once the cost report data were trimmed, we calculated a Medicare specific CCR. The Medicare specific CCR was determined by taking the Medicare charges for each line item from Worksheet D, Part 4 and deriving the Medicare specific costs by applying the hospital specific departmental CCRs to the Medicare specific charges for each line item from Worksheet D, Part 4. Once each hospital's Medicare specific costs were established, we summed the total Medicare specific costs and divided by the sum of the total Medicare specific charges to produce national average, charge weighted CCRs.

After we multiplied the total charges for each DRG in each of the 15 cost centers by the corresponding national average CCR, we summed the 15 ''costs'' across each DRG to produce a total standardized cost for the DRG. The average standardized cost for each DRG was then computed as the total standardized cost for the DRG divided by the transfer adjusted case count for the DRG. The average cost for each DRG was then divided by the national average standardized cost per case to determine the relative weight.

The new cost-based relative weights were then normalized by an adjustment factor of 1.50957 so that the average case weight after recalibration was equal to the average case weight before recalibration. Since more trims were applied to the data under the cost-based weighting methodology than under the charge-based methodology, a smaller universe of claims was used in the cost-based weighting methodology. In this instance, the different universe of claims also resulted in a slightly higher cost-based normalization factor than the normalization factor derived for charge-based weights. The normalization adjustment is intended to ensure that recalibration by itself neither increases nor decreases total payments under the IPPS, as required by section 1886(d)(4)(C)(iii) of the Act.

The 15 national average CCRs for FY 2008 are as follows:

Group	CCR
Routine Days	0.553
Intensive Days	0.490
Drugs	0.209
Supplies & Equipment	0.345
Therapy Services	0.428
Laboratory	0.177
Operating Room	0.303
Cardiology	0.196
Radiology	0.181
Emergency Room	0.309
Blood and Blood Products	0.455
Other Services	0.451
Labor & Delivery	0.501
Inhalation Therapy	0.198
Anesthesia	0.146

As we explained in section II.D. of the preamble of this final rule with comment period, in response to comments, we are implementing the MS–DRGs with a 2-year transition period beginning in FY 2008. For FY 2008, the first year of the transition, 50 percent of the relative weight for a DRG is based on the two-thirds cost-based weight/one-third charge-based weight calculated using FY 2006 MedPAR data grouped to the Version 24.0 (FY 2007) DRGs. The remaining 50 percent of the FY 2008 relative weight for a DRG is based on the two-thirds cost-based weight/one-third charge based weight calculated using FY 2006 MedPAR grouped to the Version 25.0 (FY 2008) MS–DRGs. In FY 2009, the relative weights will be based on 100 percent cost weights computed using the Version 26.0 (FY 2009) MS–DRGs. Specifically, the blended relative weights for FY 2008 are computed as follows:

First, using the Version 24.0 GROUPER, relative weights are calculated based on 100 percent cost-based and 100 percent charge-based, respectively. These weights are then blended using two-thirds of the cost-based weights and one-third of the charge-based weights to establish the CMS DRG portion of the transition weights.

Second, using the Version 25.0 FY 2008 (MS–DRG) GROUPER, relative weights are calculated based on 100 percent cost-based weights and 100 percent charge-based weights, respectively. These weights are then blended using two-thirds of the cost-based weights and one-third of the charge-based weights to establish the MS–DRG portion of the transition weights.

Under the transition blend we are adopting in this final rule with comment period, we will group cases to MS–DRGs (using the Version 25.0 GROUPER), but the payment weight for each DRG will be a 50/50 blend of the MS–DRG weight and CMS DRG weight. Thus, we had to determine a blended weight for each DRG. Using the claims in the FY 2006 MedPAR database that we used to compute cost based weights under the Version 24.0 GROUPER, we grouped each case to a CMS–DRG (using the Version 24.0 GROUPER) and an MS–DRG (using the Version 25.0 GROUPER). Commonly, a set of cases that grouped to a single MS–DRG grouped to two or more CMS DRGs. Therefore, we determined an average CMS DRG weight for all cases that grouped to each MS–DRG. Specifically, we summed the CMS DRG weights of all the cases that grouped to each MS–DRG and then divided that number by the transfer-adjusted case count. To establish the final blended weight for each DRG, we added 50 percent of the MS–DRG weight to 50 percent of the average CMS DRG weight for that MS–DRG. These final blended relative weights are listed in Table 5 of this final rule with comment period.

When we recalibrated the DRG weights for previous years, we set a threshold of 10 cases as the minimum number of cases required to compute a reasonable weight. We used that same case threshold in recalibrating the DRG weights for FY 2008. Using the FY 2006 MedPAR data set, there are 7 MS–DRGs that contain fewer than 10 cases. Under the MS–DRGs, we have fewer low-volume DRGs than under the CMS DRGs because we no longer have separate DRGs for patients age 0 to 17 years. With the exception of newborns, we previously separated some DRGs based on whether the patient was age 0 to 17 years or age 17 years and older. Other than the age split, cases grouping to these DRGs are identical. The DRGs for patients age 0 to 17 years generally have very low volumes because children are typically ineligible for Medicare. In the past, we have found that the low volume of cases for the pediatric DRGs could lead to significant year-to-year instability in their relative weights. Although we have always encouraged non-Medicare payers to develop weights applicable to their own patient populations, we have heard frequent complaints from providers about the use of the Medicare relative weights in the pediatric population. We believe that

eliminating this age split in the MS–DRGs will provide more stable payment for pediatric cases by determining their payment using adult cases that are much higher in total volume. All of the low volume DRGs listed below are for newborns. Newborns are unique and require separate DRGs that are not mirrored in the adult population. Therefore, it remains necessary to retain separate DRGs for newborns. In FY 2008, because we do not have sufficient MedPAR data to set accurate and stable cost weights for these low-volume DRGs, we are computing weights for the low-volume DRGs by adjusting their FY 2007 weights by the percentage change in the average weight of the cases in other DRGs. The crosswalk table is shown below:

Low Volume DRG	DRG title	Crosswalk to DRG
789	Neonates, Died or Transferred to Another Acute Care Facility.	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
790	Extreme Immaturity or Respiratory Distress Syndrome, Neonate.	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
791	Prematurity With Major Problems	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
792	Prematurity Without Major Problems	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
793	Full-Term Neonate With Major Problems	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
794	Neonate With Other Significant Problems	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).
795	Normal Newborn	FY 2007 FR weight (adjusted by percent change in average weight of the cases in other DRGs).

I. MS–LTC–DRG Reclassifications and Relative Weights for LTCHs for FY 2008

1. Background

In the June 6, 2003 LTCH PPS final rule (68 FR 34122), we changed the LTCH PPS annual payment rate update cycle to be effective July 1 through June 30 instead of October 1 through September 30. In addition, because the patient classification system utilized under the LTCH PPS uses the same CMS DRGs as those currently used under the IPPS for acute care hospitals, in that same final rule, we explained that the annual update of the long term care diagnosis related group (LTC–DRG) classifications and relative weights will continue to remain linked to the annual reclassification and recalibration of the CMS DRGs used under the IPPS. Therefore, we specified that we will continue to update the LTC–DRG classifications and relative weights to be effective for discharges occurring on or after October 1 through September 30 each year. We further stated that we will publish the annual proposed and final update of the LTC–DRGs in same notice as the proposed and final update for the IPPS (69 FR 34125).

Comment: Several commenters strongly recommended that we establish one rulemaking cycle that would encompass the update of the LTCH PPS payment rates (July 1) as well as the development of the LTC–DRG weights (October 1). One commenter also suggests that this change should begin for RY 2009 and, for that year, CMS should implement a 3-month update to the standardized amount (July 1, 2008 through September 30, 2008 with no other policy changes. The commenters also have stated that there should only be one rulemaking cycle because of interactive effects of adjustments made at two different times.

Response: In the RY 2008 LTCH PPS final rule (72 FR 26874), we responded to a similar comment by stating that we would ''evaluate whether such a consolidation is a workable alternative to the present schedule.'' While we appreciate the continued interest of commenters on this issue, we note that we did not propose a change to the LTCH PPS update cycle in the FY 2008 IPPS proposed rule. Therefore, we do not believe that the IPPS final rule is the appropriate vehicle for addressing these concerns. Rather, we believe that exploring the possibility of the consolidation of the LTCH PPS rulemaking cycles would be better addressed in the LTCH PPS rate year regulations since those rules are the primary vehicle for proposing and finalizing policy changes to the LTCH PPS. Therefore, we will continue our evaluation of this suggestion for the time being.

In the FY 2008 IPPS proposed rule, we did not address the issue concerning changing the present update cycle for the LTCH PPS, and therefore, we are not making any changes to the LTCH PPS update cycle in this final rule with comment period. However, we will take all comments and suggestions concerning the RY 2009 update into consideration when preparing the RY 2009 LTCH PPS proposed rule. Commenters' concerns regarding any changes to the present rulemaking cycle will be considered when we evaluate the possibility of making changes to the present update cycle as well as any options that may be available. To this end, any proposed changes to the present update cycle would be included in the RY 2009 LTCH PPS proposed rule for public comment.

In the past, the annual update to the IPPS CMS DRGs has been based on the annual revisions to the ICD–9–CM codes and was effective each October 1. As discussed in the FY 2008 IPPS proposed rule (72 FR 24755 through 24757), with the implementation of section 503(a) of Pub. L. 108–173, there is the possibility that one feature of the GROUPER software program may be updated twice during a Federal fiscal year (October 1 and April 1) as required by the statute for the IPPS. Section 503(a) of Pub. L. 108–173 amended section 1886(d)(5)(K) of the Act by adding a new clause (vii) which states that ''the Secretary shall provide for the addition of new diagnosis and procedure codes in [sic] April 1 of each year, but the addition of such codes shall not require the Secretary to adjust the payment (or diagnosis related group classification) * * * until the fiscal year that begins after such date.'' This requirement improves the recognition of new technologies under the IPPS by accounting for those ICD–9–CM codes in the MedPAR claims data earlier than the agency had accounted for new technology in the past. In implementing the statutory change, the agency has provided that ICD–9–CM diagnosis and procedure codes for new medical technology may be created and assigned to existing DRGs in the middle of the Federal fiscal year, on April 1. However,

this policy change will not impact the DRG relative weights in effect for that year, which will continue to be updated only once a year (October 1), nor will it have any impact on Medicare payments in that year. The use of the ICD–9–CM code set is also compliant with the current requirements of the Transactions and Code Sets Standards regulations at 45 CFR Parts 160 and 162, promulgated in accordance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Pub. L. 104–191.

As noted above, the patient classification system used under the LTCH PPS is the same patient classification system that is used under the IPPS. Therefore, the ICD–9–CM codes currently used under both the IPPS and LTCH PPS may be updated as often as twice a year. This requirement is included as part of the amendments to the Act relating to recognition of new medical technology under the IPPS.

Because we do not publish a midyear IPPS rule, any April 1 ICD–9–CM coding update will not be published midyear. Rather, we will assign any new diagnosis or procedure codes to the same DRG in which its predecessor code was assigned, so that there will be no impact on the DRG assignments (as also discussed in section II.G.10. of the preamble of this final rule with comment period). Any coding updates will be available through the Web sites provided in section II.G.10. of the preamble of this final rule with comment period and through the *Coding Clinic for ICD 9–CM,* a product of the American Hospital Association. Publishers and software vendors currently obtain code changes through these sources in order to update their code books and software system. If new codes are implemented on April 1, revised code books and software systems, including the GROUPER software program, will be necessary because we must use current ICD–9–CM codes. Therefore, for purposes of the LTCH PPS, because each ICD 9–CM code must be included in the GROUPER algorithm to classify each case under the LTCH PPS, the GROUPER software program used under the LTCH PPS would need to be revised to accommodate any new codes.

In implementing section 503(a) of Pub. L. 108–173, there will only be an April 1 update if new technology codes are requested and approved. We note that any new codes created for April 1 implementation will be limited to those diagnosis and procedure code revisions primarily needed to describe new technologies and medical services. However, we reiterate that the process of discussing updates to the ICD–9–CM is an open process through the ICD–9–CM Coordination and Maintenance Committee. Requestors will be given the opportunity to present the merits for a new code and to make a clear and convincing case for the need to update ICD–9–CM codes for purposes of the IPPS new technology add-on payment process through an April 1 update (as also discussed in section II.G.10. of the preamble of this final rule with comment period).

As we discussed in the FY 2008 IPPS proposed rule (72 FR 24755), at the September 28, 2006 ICD–9–CM Coordination and Maintenance Committee meeting, there were no requests for an April 1, 2007 implementation of ICD 9–CM codes. Therefore, the next update to the ICD–9–CM coding system will not occur until October 1, 2007 (FY 2008). Because there were no coding changes suggested for an April 1, 2007 update, the ICD–9–CM coding set implemented on October 1, 2006, will continue through September 30, 2007 (FY 2008). The update to the ICD–9–CM coding system for FY 2008 is discussed above in section II.G.10. of the preamble of this final rule with comment period. Accordingly, in this final rule with comment period, as discussed in greater detail below, we are modifying and revising the LTC–DRG classifications and relative weights, to be effective October 1, 2007 through September 30, 2008 (FY 2008). In addition, we will notify LTCHs of any revisions to the GROUPER software used under the IPPS and the LTCH PPS that may be implemented on April 1, 2008. As discussed in greater detail below, the MS–LTC–DRGs for FY 2008 in this final rule with comment period are the same as the MS–DRGs adopted under the IPPS for FY 2008 (GROUPER Version 25.0) discussed in section II.B. of the preamble to this final rule with comment period.

2. Changes in the LTC DRG Classifications

a. Background

Section 123 of Pub. L. 106 113 specifically requires that the agency implement a PPS for LTCHs that is a per discharge system with a DRG-based patient classification system reflecting the differences in patient resources and costs in LTCHs. Section 307(b)(1) of Pub. L. 106–554 modified the requirements of section 123 of Pub. L. 106–113 by specifically requiring that the Secretary examine ''the feasibility and the impact of basing payment under such a system [the LTCH PPS] on the use of existing (or refined) hospital diagnosis-related groups (DRGs) that have been modified to account for different resource use of long-term care hospital patients as well as the use of the most recently available hospital discharge data.''

In accordance with section 123 of Pub. L. 106–113 as amended by section 307(b)(1) of Pub. L. 106-554 and § 412.515 of our existing regulations, the LTCH PPS uses information from LTCH patient records to classify patient cases into distinct LTC–DRGs based on clinical characteristics and expected resource needs. As described in section II.D. of the preamble of this final rule with comment period, we are adopting MS–DRGs under the IPPS because we believe that adopting this system will result in a significant improvement in the DRG system's recognition of severity of illness and resource usage. We believe these improvements in the DRG system will be equally applicable to the LTCH PPS. The changes we are currently making for the IPPS are reflected in the FY 2008 GROUPER, Version 25.0, to be effective for discharges occurring on or after October 1, 2007 through September 30, 2008. Currently, the LTC–DRGs used as the patient classification system under the LTCH PPS correspond to the current CMS DRGs applicable under the IPPS for acute care hospitals.

Consistent with our historical practice of having LTC–DRGs correspond to the DRGs applicable under the IPPS, under the broad authority of section 123(a) of Pub. L. 106–113, as modified by section 307(b) of Pub. L. 106–554, as proposed, under the LTCH PPS we are adopting the use of MS–LTC–DRGs, which correspond to the MS–DRGs we are adopting under the IPPS. In addition, as stated above, we will be using the FY 2008 GROUPER Version 25.0 to classify cases effective for LTCH discharges occurring on or after October 1, 2007 through September 30, 2008. The changes to the current CMS DRG classification system used under the IPPS for FY 2008 (GROUPER Version 25.0) are discussed in section II.D. of the preamble to this final rule with comment period.

Comment: Four commenters indicated support for the adoption of the MS–LTC–DRGs for the LTCH PPS but noted specific concerns and included policy suggestions that they believed could address these concerns.

Response: We appreciate the commenters' support. We have seriously considered the areas of concern as well as the policy suggestions. As stated above, we are adopting the use of MS–LTC–DRGs beginning in FY 2008.

Below, we explain our responses to these stated concerns.

Comment: Several commenters expressed concern about the adoption of the MS–LTC–DRGs for FY 2008 in advance of RAND's final report. These commenters envisioned that a report recommending a DRG system other than the MS–DRGs, (upon which the MS–LTC–DRGs are based) could result in a CMS decision to implement ''yet another'' patient classification system in FY 2009.

Response: As noted above in our response to similar comments focusing on the use of the MS–DRGs by the IPPS, as RAND has completed its evaluation of the alternative DRG systems, including the MS–DRGs, consistent with RAND's findings, we believe it is appropriate at this time to adopt the MS–DRG system for Medicare in FY 2008 for the IPPS and at the same time, we are also adopting the MS–LTC–DRGs for the LTCH PPS. While there will be an opportunity for the public to comment on RAND's findings, we do not think it is likely that there will be persuasive public comments suggesting that one of the alternative DRG systems being evaluated by RAND is clearly superior. We plan to use RAND's report to continue to examine ways to improve and refine Medicare inpatient payment systems and expect that any future refinements will be based on MS–DRGs. Therefore, as final policy for FY 2008, we are adopting the MS–LTC–DRGs as the new classification system for the LTCH PPS. However, since we are interested in public input on this issue, we will make RAND's final report available on the CMS Web Site at: *http://www.cms.hhs.gov/Reports/downloads/*

Interested members of the public can write to the following address:

Division of Acute Care, Center for Medicare Management, 7500 Security Boulevard, C4–08–06, Baltimore, MD 21244, Attn: Mady Hue.

Comment: Two commenters requested that CMS delay adoption of the MS–LTC–DRGs until FY 2009 in order to provide LTCHs additional time to analyze the impact of the new classification system and to provide meaningful comments. The commenters suggested that, during this time, CMS examine the interaction of MS–LTC–DRG relative weights and new policies established for RY 2008 (for example, revisions to the short-stay outlier policy resulting in the ''IPPS comparable threshold'') before implementing MS–LTC–DRGs. The commenters further stated that such a delay would allow LTCHs the opportunity to adjust to the other recent LTCH PPS changes.

Response: We do not believe that it is either appropriate or necessary to delay the adoption of the MS–LTC–DRGs until FY 2009 as the commenters suggest. We believe that we provided a comprehensive analysis of the MS–DRG classification system, upon which the MS–LTC–DRGs are based, in the proposed rule and, as discussed elsewhere in these responses, clear and specific direction, which are evidenced by the number of comments that were received, which allowed hospital stakeholders to simulate the impacts of the proposed policy change. We do not believe a full year delay in implementation of the MS–DRGs and the MS–LTC–DRGs is necessary or appropriate. We believe that implementing the severity-based DRGs will result in more appropriate Medicare payments, a goal that should not be postponed. However, although we are not delaying the adoption of the severity-based DRGs for either the IPPS or the LTCH PPS, we are providing a 2–year transition to the full adoption of both the MS–DRGs and the MS–LTC–DRGs, described elsewhere in these responses. We believe the transition will mitigate the payment impact of the new DRG system for both acute care hospitals and LTCHs as they adapt to the system. Furthermore, as we note in our discussion of a similar comment regarding the adoption of the MS–DRGs for the IPPS (see section II.E. of the preamble of this final rule with comment period), many commenters supported immediate adoption of the MS–DRGs, particularly because they are so structurally similar to the current DRGs. Therefore, we continue to maintain that a full year's delay in the adoption of the MS–LTC–DRGs under the LTCH PPS is unwarranted. While the MS–DRGs do include some consolidations of base DRGs, the major changes from the current DRGs involve adding severity levels to the base DRGs. Therefore, the move to MS–LTC–DRGs will not necessitate additional data elements. Because we do not believe that extensive preparation for implementation of the MS–DRGs is necessary, we do not believe that it is appropriate or necessary to delay adoption of the MS–DRGs until FY 2009. We continue to believe that payment adjustments that were finalized in the RY 2008 LTCH PPS final rule, among which was the revision to the short-stay outlier policy noted by the commenters, will result in more appropriate Medicare payments to LTCHs. The revised SSO policy addresses the issue of LTCH discharges that are comparable to an acute care IPPS hospital discharge based on the length of stay for that discharge. That policy is not tied to or affected by the adoption of the MS–LTC–DRGs. Nor do we believe that the extension of the 25 percent threshold adjustment that we finalized for RY 2008 at revised § 412.534 and new § 412.536, which governs Medicare payments for patients discharged from LTCHs who were admitted from specific referring hospitals, is tied to or affected by the adoption of the MS–LTC–DRGs. Furthermore, as noted above, because the MS–LTC–DRGs are so structurally similar to the LTC–DRGs, we do not believe that postponing the adoption of the severity-weighted DRGs in order to evaluate the interaction of the policy changes implemented for the LTCH PPS for RY 2008 would confer any significant advantage to stakeholders.

Comment: Four commenters urged CMS to establish a 3-year transition to the full adoption of the MS–LTC–DRGs in order to minimize the ''impact of behavioral changes in coding'' resulting from the new system. Referring to the proposed 2.4 percent downward adjustment, the commenters also maintained that a 3-year transition would allow CMS to analyze LTCH data which would indicate whether there were coding changes that could warrant the application of a prospective adjustment to LTCH PPS payment rates.

Response: We have carefully considered each comment in determining whether there should be a transition period for the relative weights computed using the MS–LTC–DRGs, the length of the transition, and how to compute the relative weights during the transition. Although we received strong general support for adopting the MS–LTC–DRGs, we agree that some transition is warranted to mitigate the magnitude of potential changes in payment to LTCHs that could occur in one year. As discussed in section II.D. of the preamble to this final rule with comment period, although MedPAC recommended that CMS fully implement MS–DRGs immediately, MedPAC suggested that, if the agency chose not to fully implement severity-adjusted DRGs in FY 2008, CMS should implement MS–DRGs over a 2–year transition. Accordingly, as we discussed earlier regarding implementation of the MS–DRGs under the IPPS, we are also implementing a 2 year transition to MS–LTC–DRGs. For FY 2008, the first year of the transition, 50 percent of the relative weight for a MS–LTC–DRG will be based on average relative weight under Version 24.0 of the LTC–DRG GROUPER. The remaining 50 percent of the FY 2008 relative weight for a MS–

LTC–DRG will be based on the MS–LTC–DRG relative weight. For a more detailed description of the calculation of the MS–LTC–DRG relative weights for FY 2008 under this transition methodology, we refer readers to section II.I.4. (step 7 of Steps for Determining the FY 2008 MS–LTC–DRG Relative Weights) of the preamble of this final rule with comment period.) In FY 2009, the MS–LTC–DRG relative weights will be based on 100 percent of MS–LTC–DRG relative weights.

As discussed in detail elsewhere in these responses, we are not finalizing the proposed 2.4 percent downward adjustment to the MS–LTC–DRG relative weights.

Comment: Some commenters maintained that they are unable to fully evaluate the impact of the proposed MS–DRG system on their member hospitals due to the lack of access to the necessary tools. The commenters note that neither an MS–LTC–DRG GROUPER nor an MS–LTC–DRG Definitions Manual has been made available to help them completely understand the proposed system. Therefore, the commenters believed they have been prevented from thoroughly and completely evaluating the proposed system and providing meaningful comments. The commenter recommended delaying implementation of the MS–LTC–DRGs until such information has been made available and providers have had the opportunity to review it and provide meaningful comments.

Response: We disagree that LTCHs have not had adequate access to information concerning the changes to the MS–DRGs and the MS–LTC–DRGs. Ample and thorough information was published in the FY 2008 IPPS proposed rule. We refer the commenters to Section II.D.2., ''Development of Proposed Medicare Severity DRGs (MS–DRGs)'' beginning on page 24697 of the May 3, 2007 **Federal Register** (72 FR 24697 through 24707), where CMS' entire process for the creation of the MS–DRGs was explained. We discussed the creation of base MS–DRGs, upon which the MS–LTC–DRGs are based, and the consolidation from the existing DRGs is summarized in Table F of the Addendum to the proposed rule (72 FR 24702). We also discussed the process for applying the severity criteria to each of the 335 base DRGs, resulting in 745 proposed MS–DRGs.

We discussed the proposed changes to the LTC–DRG classifications (72 FR 24755 through 24771), and indicated that we proposed to conform the LTC–DRG system to the IPPS DRG system by using MS–LTC–DRGs which correspond to the proposed MS–DRGs. Further specific conforming language was spelled out on pages 24756 through 24757 of the FY 2008 IPPS proposed rule.

In addition, we made other information available to the public that would allow for a detailed analysis of the MS–LTC–DRG proposal. We made available two MedPAR files (FY 2005 and FY 2006) that included the CMS DRG and MS–DRG assignment for each case. As discussed in the preamble to the proposed rule, the MS–LTC–DRGs and MS–DRGs share identical titles. Furthermore, Table 11 of the Addendum to the proposed rule listed the relative weight for each MS–LTC–DRG. With this information, the public could determine the MS–LTC–DRG assignment and relative weight for all cases in the FY 2005 and FY 2006 MedPAR files. Therefore, we believe the public had detailed information with which to perform a comprehensive analysis of our proposal to adopt MS–LTC–DRGs.

Because we believe that adequate access to proposed changes to MS–LTC–DRGs has been provided, as discussed above, we are not delaying their implementation. As stated above, we are adopting the use of MS–LTC–DRGs under the LTCH PPS, which correspond to the MS–DRGs adopted under the IPPS. Accordingly, we will be using the FY 2008 GROUPER Version 25.0 effective for LTCH discharges occurring on or after October 1, 2007 through September 30, 2008.

In conjunction with the changes to the existing CMS DRGs for the IPPS by adoption of the MS–DRGs, as discussed above, we are adopting the MS–LTC–DRGs for the LTCH PPS, as both sets of DRGs are determined from the same DRG structure. Although the structure of the DRGs used under the IPPS and the LTCH PPS are identical, we refer to the DRGs under the LTCH PPS as MS–LTC–DRGs. This conforming change, that is, to replicate the MS–LTC–DRG structure after the MS–DRG structure, is appropriate in order to maintain consistency and uniformity among a number of stakeholders, such as acute care hospitals, LTCHs, epidemiologists, rate setting organizations, and payors, among others. Notwithstanding the value of consistency, however, we also emphasize, that the adoption of the MS–LTC–DRGs as the patient classification system for the LTCH PPS will improve identification of severity of illness and hospital resource use which will result in more appropriate Medicare payments for LTCHs. As noted above, the patient classification system used under the LTCH PPS is the same patient classification system used under the IPPS, which historically has been updated annually as required by section 1886(d)(4)(C) of the Act and is effective for discharges occurring on or after October 1 through September 30 of each year. As such, the updates to the MS–DRG classification system used under the IPPS for FY 2008 (GROUPER Version 25.0), discussed in section II.D. of the preamble of this final rule with comment period, will be applicable to updates under the LTCH PPS (that is, the MS–LTC–DRGs).

As discussed above, we proposed to adopt the MS–LTC–DRGs as the patient classification system under the LTCH PPS, beginning with discharges occurring on or after October 1, 2007. However, in the proposed rule, we omitted proposed changes to the regulation text reflecting the proposed change from LTC–DRGs to MS–LTC–DRGs. As discussed previously in this preamble, in this final rule with comment period, we are adopting MS–LTC–DRGs for use in the LTCH PPS beginning with discharges on or after October 1, 2007. In this final rule with comment period, we are revising the regulation text to conform to our proposed and final policy. Consequently, we are revising the regulation text at § 412.503 where we define terms associated with the LTCH PPS in order to indicate the adoption of the MS–LTC–DRGs as the patient classification system under the LTCH PPS beginning with FY 2008 for discharges occurring on or after October 1, 2007. First, we are adding language to the definition of ''LTC–DRG'' indicating that effective, October 1, 2007, the MS–LTC–DRGs are used to classify patient discharges occurring on or after October 1, 2007, from a long-term care hospital and that for patient discharges occurring on or after October 1, 2007 and that references to LTC–DRGs in 42 CFR Part 412, Subpart O for policy descriptions and/or payment calculations shall be considered to be references to the MS–LTC–DRGs. Secondly, we are adding a definition of ''MS–LTC–DRGs'' as ''* * * the severity-adjusted diagnosis-related group used to classify patient discharges from a long-term care hospital based on clinical characteristics and average resource use, for prospective payment purposes for discharges from a long-term care hospital occurring on or after October 1, 2007.''

Under the LTCH PPS, as described in greater detail below, we determine relative weights for each of the MS–LTC–DRGs to account for the difference in resource use by patients exhibiting the case complexity and multiple

medical problems characteristic of LTCH patients. (Unless otherwise noted in this final rule with comment period, our MS–LTC–DRG analysis is based on LTCH data from the March 2007 update of the FY 2006 MedPAR file, which contains hospital bills received through March 31, 2007, for discharges occurring in FY 2006.)

LTCHs do not typically treat the full range of diagnoses as do acute care hospitals. Therefore, as we discussed in the August 30, 2002 LTCH PPS final rule (67 FR 55985), which implemented the LTCH PPS, and the FY 2006 IPPS final rule (70 FR 47324), we use low-volume quintiles in determining the DRG relative weights for DRGs with less than 25 LTCH cases (low-volume LTC–DRGs). Specifically, we group those low-volume DRGs into 5 quintiles based on average charges per discharge. (A listing of the composition of low-volume quintiles for the FY 2007 LTC–DRGs (based on FY 2005 MedPAR data) appears in section II.I.2. of the FY 2007 IPPS final rule (71 FR 47975 through 47978).) We also adjust for cases in which the stay at the LTCH is less than or equal to five sixths of the geometric average length of stay; that is, short stay outlier cases, as discussed below in section II.I.4. of the preamble of this final rule with comment period.

b. Patient Classifications into DRGs

Generally, under the LTCH–PPS, Medicare payment is made at a predetermined specific rate for each discharge; that is, payment varies by the DRG to which a beneficiary's stay is assigned. Just as cases have been classified into the MS–DRGs for acute care hospitals under the IPPS (section II.B. of the preamble of this final rule with comment period), cases have been classified into MS–LTC–DRGs for payment under the LTCH–PPS based on the principal diagnosis, up to eight additional diagnoses, and up to six procedures performed during the stay, as well as demographic information about the patient. The diagnosis and procedure information is reported by the hospital using the ICD–9–CM coding system. Under the MS–DRGs for the IPPS and the MS–LTC–DRGs for the LTCH–PPS, these factors will not change.

Section II.B. of the preamble of this final rule with comment period discusses the organization of the existing CMS DRGs, which we are maintaining under the MS–DRG and MS–LTC–DRG systems. As noted above, the patient classification system for the LTCH–PPS is derived from the IPPS DRGs and is similarly organized into 25 major diagnostic categories (MDCs). Most of these MDCs are based on a particular organ system of the body and the remainder involves multiple organ systems (such as MDC 22, Burns). Accordingly, the principal diagnosis determines MDC assignment. Within most MDCs, cases are then divided into surgical DRGs and medical DRGs. Under the present CMS DRGs, some surgical and medical DRGs are further differentiated based on the presence or absence of CCs. The existing LTC–DRGs are similarly categorized. (See section II.B. of the preamble of this final rule with comment period for further discussion of surgical DRGs and medical DRGs.)

The MS–DRGs and the MS–LTC–DRGs contain base DRGs that have been subdivided into one, two, or three severity levels. The most severe level has cases with at least one code that is a major CC, referred to as ''with MCC''. The next lower severity level contains cases with at least one CC, referred to as ''with CC''. Those DRGs without an MCC or a CC are referred to as ''without CC/MCC''. When data did not support the creation of three severity levels, the base DRG was divided into either two levels or the base was not subdivided. The two-level subdivisions consist of one of the following subdivisions:

- With CC/MCC.
- Without CC/MCC.

In this type of subdivision, cases with at least one code that is on the CC or MCC list are assigned to the ''with CC/MCC'' DRG. Cases without a CC or an MCC are assigned to the ''without CC/MCC'' DRG.

The other type of two-level subdivision is as follows:

- With MCC.
- Without MCC.

In this type of subdivision, cases with at least one code that is on the MCC list are assigned to the ''with MCC'' DRG. Cases that do not have an MCC are assigned to the ''without MCC'' DRG. This type of subdivision could include cases with a CC code, but no MCC.

3. Development of the FY 2008 MS–LTC–DRG Relative Weights

a. General Overview of Development of the MS–LTC–DRG Relative Weights

As we stated in the August 30, 2002 LTCH–PPS final rule (67 FR 55981), one of the primary goals for the implementation of the LTCH–PPS is to pay each LTCH an appropriate amount for the efficient delivery of medical care to Medicare patients. The system must be able to account adequately for each LTCH's case-mix in order to ensure both fair distribution of Medicare payments and access to adequate care for those Medicare patients whose care is more costly. To accomplish these goals, we have annually adjusted the LTCH–PPS standard Federal prospective payment system rate by the applicable relative weight in determining payment to LTCHs for each case. (As we have noted above, as proposed, we are adopting the MS–LTC–DRGs for the LTCH–PPS for FY 2008. However, this change in the patient classification system does not affect the basic principles of the development of relative weights under a DRG-based prospective payment system. For purposes of clarity, in the general discussion below in which we describe the basic methodology of the patient classification system, in use since the start of the LTCH–PPS (that is, LTC–DRGs), we use ''MS–LTC–DRG'' to specify the DRG system that will be used by the LTCH prospective payment system beginning in FY 2008.)

Although the adoption of the MS–LTC–DRGs will result in some modifications of existing procedures for assigning weights in cases of zero volume and/or nonmonotonicity, discussed in detail in the following sections, as we proposed, the basic methodology for developing the FY 2008 MS–LTC–DRG relative weights in this final rule with comment period continue to be determined in accordance with the general methodology established in the August 30, 2002 LTCH–PPS final rule (67 FR 55989 through 55991). (As noted above, in this preamble, ''LTC–DRGs'' will be used in descriptions of the basic methodology established at the beginning of the LTCH–PPS that will remain unchanged with the adoption of the MS–LTC–DRGs. Use of ''MS–LTC–DRGs'' will indicate a discussion of specifics aspects of our adoption of the severity-weighted patient classification system beginning in FY 2008.)

Under the LTCH–PPS, relative weights for each MS–LTC–DRG are a primary element used to account for the variations in cost per discharge and resource utilization among the payment groups (§ 412.515). To ensure that Medicare patients classified to each MS–LTC–DRG have access to an appropriate level of services and to encourage efficiency, we calculate a relative weight for each MS–LTC–DRG that represents the resources needed by an average inpatient LTCH case in that MS–LTC–DRG. For example, cases in an MS–LTC–DRG with a relative weight of 2 will, on average, cost twice as much to treat as cases in an MS–LTC–DRG with a weight of 1.

b. Data

In the FY 2008 IPPS proposed rule (72 FR 24757), to calculate the proposed MS–LTC–DRG relative weights for FY 2008, we obtained total Medicare allowable charges from FY 2006 Medicare LTCH bill data from the December 2006 update of the MedPAR file, which were the best available data at that time, and we used the proposed Version 25.0 of the CMS GROUPER proposed for use under the IPPS to classify cases. We also proposed that if more recent data were available, we would use those data and the finalized Version 25.0 of the CMS GROUPER. Consistent with that proposal, to calculate the MS–LTC–DRG relative weights for FY 2008 in this final rule with comment period, we obtained total Medicare allowable charges from FY 2006 Medicare LTCH bill data from the March 2007 update of the MedPAR file, which are the best available data at this time, and we used the Version 25.0 of the CMS GROUPER used under the IPPS (as discussed in section II.B. of the preamble of this final rule with comment period) to classify cases.

As we discussed in the FY 2007 IPPS final rule (71 FR 47974), we have excluded the data from LTCHs that are all-inclusive rate providers and LTCHs that are reimbursed in accordance with demonstration projects authorized under section 402(a) of Pub. L. 90–248. Data from demonstration projects authorized under section 222(a) of Pub. L. 92–603 are also excluded. Therefore, in the development of the FY 2008 MS–LTC–DRG relative weights in this final rule with comment period, we have excluded the data of the 17 all inclusive rate providers and the 2 LTCHs that are paid in accordance with demonstration projects that had claims in the FY 2006 MedPAR file.

c. Hospital-Specific Relative Value Methodology

By nature, LTCHs often specialize in certain areas, such as ventilator-dependent patients and rehabilitation and wound care. Some case types (DRGs) may be treated, to a large extent, in hospitals that have, from a perspective of charges, relatively high (or low) charges. This nonarbitrary distribution of cases with relatively high (or low) charges in specific MS–LTC–DRGs has the potential to inappropriately distort the measure of average charges. To account for the fact that cases may not be randomly distributed across LTCHs, as we proposed, in this final rule with comment period, we use a hospital specific relative value (HSRV) method to calculate the MS–LTC–DRG relative weights instead of the methodology used to determine the MS–DRG relative weights under the IPPS described in section II.H. of the preamble of this final rule with comment period. We believe this method will remove this hospital specific source of bias in measuring LTCH average charges. Specifically, we reduce the impact of the variation in charges across providers on any particular MS–LTC–DRG relative weight by converting each LTCH's charge for a case to a relative value based on that LTCH's average charge.

Under the HSRV method, we standardize charges for each LTCH by converting its charges for each case to hospital-specific relative charge values and then adjusting those values for the LTCH's case-mix. The adjustment for case-mix is needed to rescale the hospital-specific relative charge values (which, by definition, average 1.0 for each LTCH). The average relative weight for a LTCH is its case-mix, so it is reasonable to scale each LTCH's average relative charge value by its case-mix. In this way, each LTCH's relative charge value is adjusted by its case- mix to an average that reflects the complexity of the cases it treats relative to the complexity of the cases treated by all other LTCHs (the average case-mix of all LTCHs).

In accordance with the methodology established under § 412.523, as implemented in the August 30, 2002 LTCH–PPS final rule (67 FR 55989 through 55991), we continue to standardize charges for each case by first dividing the adjusted charge for the case (adjusted for short-stay outliers under § 412.529 as described in section II.I.4. (step 3) of the preamble of this final rule with comment period) by the average adjusted charge for all cases at the LTCH in which the case was treated. Short stay outliers are cases with a length of stay that is less than or equal to five sixths the average length of stay of the MS–LTC (see § 412.529 and § 412.503). (As discussed above, we are revising the regulations at § 412.503 to specify that regulatory references to LTC–DRGs for policy descriptions and/or payment calculations shall be considered as references to the MS–LTCs for LTCH discharges occurring on or after October 1, 2007). The average adjusted charge reflects the average intensity of the health care services delivered by a particular LTCH and the average cost level of that LTCH. The resulting ratio is multiplied by that LTCH's case-mix index to determine the standardized charge for the case.

Multiplying by the LTCH's case-mix index accounts for the fact that the same relative charges are given greater weight at a LTCH with higher average costs than they would at a LTCH with low average costs, which is needed to adjust each LTCH's relative charge value to reflect its case-mix relative to the average case-mix for all LTCHs. Because we standardize charges in this manner, we count charges for a Medicare patient at a LTCH with high average charges as less resource intensive than they would be at a LTCH with low average charges. For example, a $10,000 charge for a case at a LTCH with an average adjusted charge of $17,500 reflects a higher level of relative resource use than a $10,000 charge for a case at a LTCH with the same case-mix, but an average adjusted charge of $35,000. We believe that the adjusted charge of an individual case more accurately reflects actual resource use for an individual LTCH because the variation in charges due to systematic differences in the markup of charges among LTCHs is taken into account.

d. Treatment of Severity Levels in Developing Relative Weights

With the implementation of the LTCH–PPS for FY 2003, we established a procedure to address setting relative weights for LTC–DRG ''pairs'' that were differentiated on the presence or absence of CCs (71 FR 47979). Beginning with FY 2008, as we proposed, we are adopting a severity-based patient classification system for the LTCH–PPS, the MS–LTC–DRGs described above, which requires us to adapt our existing procedures for dealing with setting relative weights for the severity levels within a specific base MS–LTC–DRG. As proposed, we are also modifying our existing methodology for maintaining monotonicity when setting relative weights for the MS–LTC–DRGs.

As under the existing procedure, under the MS–LTC–DRGs, for purposes of the annual setting of the relative weights, there continue to be three different categories of DRGs based on volume of cases within specific MS–LTC–DRGs. MS–LTC–DRGs with at least 25 cases are each assigned a unique relative weight; low-volume MS LTC–DRGs (that is, MS–LTCs that contain between one and 24 cases annually) are grouped into quintiles (described below) and assigned the weight of the quintile. No-volume MS–LTC–DRGs (that is, no cases in the databases were assigned to those MS LTC–DRGs) are crosswalked to other MS–LTC–DRGs based on the clinical similarities and assigned the weight of the quintile that is closest to the relative weight of the crosswalked MS–LTC–DRG. (We provide in-depth discussions of our policy regarding

weight setting for low volume MS–LTCs in section II.I.3.e. of the preamble of this final rule with comment period and for no-volume MS–LTC–DRGs, under Step 5 in section II.I.4. of the preamble of this final rule with comment period.)

As described above, in response to the need to account for severity and pay appropriately for cases, we have developed a severity-adjusted patient classification system which we are adopting for both the IPPS and the LTCH PPS. As described in greater detail above, the MS–LTC–DRG system can accommodate three severity levels: ''with MCC'' (most severe); ''with CC,'' and ''without CC/MCC'' (the least severe) with each level assigned an individual MS–LTC–DRG number. In cases with two subdivisions, the levels are either ''with CC/MCC'' and ''without CC/MCC'' or ''with MCC'' and ''without MCC''. Two parallel numbering systems have been developed to describe MS–LTC–DRGs, which are identical to the MS DRGs numbers under the IPPS. That is, while each severity level in each DRG category gets a unique MS–LTC–DRG number, in conjunction, each of the severity levels in a single DRG category are also assigned the same ''base-DRG'' number. Therefore, under the system, multiple sclerosis and cerebellar ataxia with MCC is MS–LTC–DRG 58; multiple sclerosis and cerebellar ataxia with CC is MS–LTC–DRG 59; and multiple sclerosis and cerebellar ataxia without CC/MCC is MS–LTC–DRG 60.

As noted above, beginning with FY 2008, while the LTCH PPS and the IPPS will use the same patient classification system, the methodology that is used to set the DRG weights for use in each payment system differs because the overall volume of cases in the LTCH PPS is much less than in the IPPS. As a general rule, as proposed, we are determining the relative weights for the MS–LTC–DRGs using the following steps: (1) If an MS–LTC–DRG has at least 25 cases, it is assigned its own relative weight; (2) if an MS–LTC–DRG has between 1 and 24 cases, it is assigned to a quintile to which we will assign a relative weight; and (3) if an MS–LTC–DRG has no cases, it is crosswalked to another MS–LTC–DRG based upon clinical similarities to assign an appropriate relative weight (as described in detail in Step 5 of the Steps for Determining the FY 2008 MS–LTC–DRG Relative Weights, below). Furthermore, in determining the MS–LTC–DRG relative weights, as proposed, when necessary, adjustments were made to account for nonmonotonicity, as explained below.

Theoretically, as with the existing LTC–DRG system, cases under the MS–LTC–DRG system that are more severe require greater expenditure of medical care resources and will result in higher average charges. Therefore, in the three severity levels, weights should increase with severity, from lowest to highest. If the weights do not increase (that is, if based on the relative weight calculation outlined above, an MS–LTC–DRG with MCC would have a lower relative weight than one with CC, or the MS–LTC–DRG without CC/MCC would have a higher relative weight than either of the others), there is a problem with monotonicity. Since the start of the LTCH PPS for FY 2003 (67 FR 55990), we have adjusted the setting of the LTC–DRG relative weights in order to maintain monotonicity by grouping both sets of cases together and establishing a new relative weight that is assigned to both LTC–DRGs. We continue to believe that utilizing nonmonotonic relative weights to adjust Medicare payments would result in inappropriate payments. This is because when nonmonotonicity exists, cases that are more severe and require greater expenditure of medical care resources would be paid based on a lower relative weight than cases that are less severe and require lower resource use. Similarly, as proposed, we are establishing a procedure for dealing with nonmonotonicity under the MS–LTC–DRG classification system, which is discussed in greater detail below in section II.I.4. (Step 6) of the preamble of this final rule with comment period.

e. Low-Volume MS–LTC–DRGs

In order to account for LTC–DRGs with low volume (that is, with fewer than 25 LTCH cases), under current policy, in accordance with the methodology established in the August 30, 2002 LTCH PPS final rule (67 FR 55984—55995), we group those ''low-volume LTC–DRGs'' (that is, DRGs that contained between 1 and 24 cases annually) into one of five categories (quintiles) based on average charges, for the purposes of determining relative weights. For this FY 2008 IPPS final rule, as we proposed, we are continuing to employ this treatment of low-volume MS–LTC–DRGs with a modification to combine MS–LTC–DRGs for the purpose of computing a relative weight in cases where necessary to maintain monotonicity in determining the FY 2008 MS–LTC–DRG relative weights using the best available LTCH data. In this final rule with comment period, using LTCH cases from the March 2007 update of the FY 2006 MedPAR file, we identified 303 MS–LTC–DRGs that contained between 1 and 24 cases. This list of MS–LTC–DRGs was then divided into one of the 5 low-volume quintiles, each containing a maximum of 61 MS–LTC–DRGs (303/5 = 60, with a remainder of 3 MS–LTC–DRGs). Consistent with our current methodology, as proposed, we are making an assignment to a specific low-volume quintile by sorting the low-volume MS–LTC DRGs in ascending order by average charge. For this final rule with comment period, this results in an assignment to a specific low-volume quintile of the sorted 303 low-volume MS–LTC–DRGs by ascending order by average charge. Because the number of low-volume MS–LTC–DRGs for FY 2008 is not evenly divisible by five, to determine the composition of the low-volume quintiles in accordance with our established methodology, the average charge of the low-volume MS–LTC–DRG was used to determine which low-volume quintile received the additional MS–LTC–DRGs. After sorting the 303 low-volume MS–LTC–DRGs in ascending order, we grouped the first fifth (1st through 60th) of low volume MS–LTC–DRGs (with the lowest average charge) into Quintile 1. Because the average charge of the 61st MS–LTC–DRG in the sorted list is closer to the 60th MS–LTC–DRGs average charge (assigned to Quintile 1) than to the average charge of the 62nd MS–LTC–DRG in the sorted list (to be assigned to Quintile 2), we placed the 61st MS–LTC–DRG into Quintile 1. This process was repeated through the remaining low-volume MS–LTC–DRGs so that 3 low volume quintiles contain 61 MS–LTC–DRGs and 2 low-volume quintiles contain 60 MS–LTC–DRGs. The highest average charge cases were grouped into Quintile 5.

In order to determine the relative weights for the MS–LTC–DRGs with low-volume for FY 2008, based on the methodology established in the August 30, 2002 LTCH PPS final rule (67 FR 55984), as proposed, we are using the five low-volume quintiles described above. In addition, as proposed, in cases where the initial assignment of the low-volume MS–LTC–DRGs to quintiles results in nonmonotonicity within a base DRG, in order to ensure appropriate Medicare payments, we make adjustments to the treatment of low-volume MS–LTC–DRGs to preserve monotonicity, as discussed in detail in section II.I.4 (Step 6 of the methodology for determining the FY 2008 MS–LTC–DRG relative weights). The composition of each of the five low-volume quintiles shown in the chart below was used in determining the MS–LTC–DRG relative weights for FY 2008. We determine a

relative weight and (geometric) average length of stay for each of the five low-volume quintiles using the methodology that we apply to the regular MS–LTC–DRGs (25 or more cases), as described below in section II.I.4. of the preamble of this final rule with comment period. We are assigning the same relative weight and average length of stay to each of the MS–LTC–DRGs that make up an individual low-volume quintile. We note that, as this system is dynamic, it is possible that the number and specific type of MS–LTC–DRGs with a low volume of LTCH cases will vary in the future. We use the best available claims data in the MedPAR file to identify low-volume MS–LTC–DRGs and to calculate the relative weights based on our methodology.

COMPOSITION OF LOW-VOLUME QUINTILES FOR FY 2008

MS–LTC–DRG	MS–LTC–DRG (version 25) description
	QUINTILE 1 (Version 25 relative weight = 0.4739)
30	Spinal procedures w/o CC/MCC.
32	Ventricular shunt procedures w CC.
33	Ventricular shunt procedures w/o CC/MCC.
60	Multiple sclerosis & cerebellar ataxia w/o CC/MCC.
66	Intracranial hemorrhage or cerebral infarction w/o CC/MCC.
67	Nonspecific cva & precerebral occlusion w/o infarct w MCC.
68	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC.
69	Transient ischemia.
72	Nonspecific cerebrovascular disorders w/o CC/MCC.
76	Viral meningitis w/o CC/MCC.
79	Hypertensive encephalopathy w/o CC/MCC.
88	Concussion w MCC***.
122	Acute major eye infections w/o CC/MCC.
123	Neurological eye disorders.
133	Other ear, nose, mouth & throat O.R. procedures w CC/MCC***.
149	Dysequilibrium.
159	Dental & Oral Diseases w/o CC/MCC.
182	Respiratory neoplasms w/o CC/MCC.
183	Major chest trauma w MCC.
184	Major chest trauma w CC**.
201	Pneumothorax w/o CC/MCC.
261	Cardiac pacemaker revision except device replacement w CC.
313	Chest pain.
328	Stomach, esophageal & duodenal proc w/o CC/MCC.
331	Major small & large bowel procedures w/o CC/MCC.
349	Anal & stomal procedures w/o CC/MCC.
376	Digestive malignancy w/o CC/MCC.
379	G.I. hemorrhage w/o CC/MCC.
434	Cirrhosis & alcoholic hepatitis w/o CC/MCC.
446	Disorders of the biliary tract w/o CC/MCC.
505	Foot procedures w/o CC/MCC.
512	Shoulder,elbow or forearm proc,exc major joint proc w/o CC/MCC.
544	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC.
547	Connective tissue disorders w/o CC/MCC.
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC.
645	Endocrine disorders w/o CC/MCC.
661	Kidney & ureter procedures for non-neoplasm w/o CC/MCC.
688	Kidney & urinary tract neoplasms w/o CC/MCC.
696	Kidney & urinary tract signs & symptoms w/o MCC.
714	Transurethral prostatectomy w/o CC/MCC.
718	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC.
724	Malignancy, male reproductive system w/o CC/MCC.
726	Benign prostatic hypertrophy w/o MCC.
756	Malignancy, female reproductive system w/o CC/MCC.
759	Infections, female reproductive system w/o CC/MCC.
761	Menstrual & other female reproductive system disorders w/o CC/MCC.
825	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC.
836	Acute leukemia w/o major O.R. procedure w/o CC/MCC.
869	Other infectious & parasitic diseases diagnoses w/o CC/MCC.
880	Acute adjustment reaction & psychosocial dysfunction.
881	Depressive neuroses.
882	Neuroses except depressive.
883	Disorders of personality & impulse control.
886	Behavioral & developmental disorders.
894	Alcohol/drug abuse or dependence, left ama.
95	Alcohol/drug abuse or dependence w rehabilitation therapy.
897	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC.
906	Hand procedures for injuries.
916	Allergic reactions w/o MCC.
922	Other injury, poisoning & toxic effect diag w MCC.
923	Other injury, poisoning & toxic effect diag w/o MCC.

COMPOSITION OF LOW-VOLUME QUINTILES FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG (version 25) description
965	Other multiple significant trauma w/o CC/MCC.
	QUINTILE 2 (Version 25 relative weight = 0.6478)
42	Periph & cranial nerve & other nerv syst proc w/o CC/MCC.
58	Multiple sclerosis & cerebellar ataxia w MCC.
75	Viral meningitis w CC/MCC.
77	Hypertensive encephalopathy w MCC.
78	Hypertensive encephalopathy w CC**.
83	Traumatic stupor & coma, coma >1 hr w MCC.
84	Traumatic stupor & coma, coma >1 hr w/o CC/MCC.
99	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC.
102	Headaches w MCC***.
113	Orbital procedures w CC/MCC.
121	Acute major eye infections w CC/MCC.
133	Other ear, nose, mouth & throat O.R. procedures w CC/MCC**.
134	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC**.
148	Ear, nose, mouth & throat malignancy w/o CC/MCC.
152	Otitis media & URI w MCC.
153	Otitis media & URI w/o MCC.
156	Nasal trauma & deformity w/o CC/MCC.
157	Dental & Oral Diseases w MCC***.
184	Major chest trauma w CC***.
188	Pleural effusion w/o CC/MCC*.
200	Pneumothorax w MCC.
245	AICD lead & generator procedures.
282	Circulatory disorders w AMI, discharged alive w/o CC/MCC.
284	Circulatory disorders w AMI, expired w CC*.
311	Angina pectoris.
336	Peritoneal adhesiolysis w MCC.
382	Complicated peptic ulcer w/o CC/MMCC.
384	Uncomplicated peptic ulcer w/o MCC.
433	Cirrhosis & alcoholic hepatitis w CC*.
437	Malignancy of hepatobiliary system or pancreas w/o CC/MCC.
443	Disorders of liver except malig,cirr,alc hepa w/o CC/MCC.
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC.
514	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC.
534	Fractures of femur w/o MCC.
535	Fractures of hip & pelvis w MCC.
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC.
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC.
578	Skin graft &/or debrid exc for skin ulcer or cellulitis w/o CC/MCC.
598	Malignant breast disorders w MCC.
599	Malignant breast disorders w/o CC/MCC**.
600	Non-malignant breast disorders w CC/MCC.
601	Non-malignant breast disorders w/o CC/MCC.
630	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC.
642	Inborn errors of metabolism.
660	Kidney & ureter procedures for non-neoplasm w MCC.
687	Kidney & urinary tract neoplasms w CC.
693	Urinary stones w/o esw lithotripsy w MCC.
694	Urinary stones w/ot esw lithotripsy w/o MCC**.
723	Malignancy, male reproductive system w CC.
730	Other male reproductive system diagnoses w/o CC/MCC.
769	Postpartum & post abortion diagnoses w O.R. procedure.
803	Other O.R. proc of the blood & blood forming organs w CC.
815	Reticuloendothelial & immunity disorders w CC.
816	Reticuloendothelial & immunity disorders w/o CC/MCC**.
842	Lymphoma & non-acute leukemia w/o CC/MCC.
848	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC.
855	Infectious & parasitic diseases w O.R. procedure w/o CC/MCC.
864	Fever of unknown origin.
876	O.R. procedure w principal diagnoses of mental illness.
903	Wound debridements for injuries w/o CC/MCC.
905	Skin grafts for injuries w/o CC/MCC.
917	Poisoning & toxic effects of drugs w MCC.
918	Poisoning & toxic effects of drugs w/o MCC.
929	Full thickness burn w skin graft or inhal inj w/o CC/MCC.
956	Limb reattachment, hip & femur proc for multiple significant trauma.
964	Other multiple significant trauma w CC.
977	HIV w or w/o other related condition.

COMPOSITION OF LOW-VOLUME QUINTILES FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG (version 25) description
	QUINTILE 3 (Version 25 relative weight = 0.7790)
78	Hypertensive encephalopathy w CC***.
102	Headaches w MCC**.
103	Headaches w/o MCC**.
125	Other disorders of the eye w/o MCC.
157	Dental & Oral Diseases w MCC**.
158	Dental & Oral Diseases w CC.
199	Pneumothorax w MCC.
238	Major cardiovascular procedures w/o MCC.
246	Percutaneous cardiovascular proc w drug-eluting stent w MCC.
250	Perc cardiovasc proc w/o coronary artery stent or AMI w MCC.
254	Other vascular procedures w/o CC/MCC.
263	Vein ligation & stripping 285 Circulatory disorders w AMI, expired w/o CC/MCC*.
287	Circulatory disorders except AMI, w card cath w/o MCC.
294	Deep vein thrombophlebitis w CC/MCC.
304	Hypertension w MCC.
348	Anal & stomal procedures w CC.
352	Inguinal & femoral hernia procedures w/o CC/MCC.
354	Hernia procedures except inguinal & femoral w CC.
358	Other digestive system O.R. procedures w/o CC/MCC.
380	Complicated peptic ulcer w MCC.
381	Complicated peptic ulcer w CC.
383	Uncomplicated peptic ulcer w MCC.
387	Inflammatory bowel disease w/o CC/MCC*.
390	G.I. obstruction w/o CC/MCC*.
421	Hepatobiliary diagnostic procedures w CC.
424	Other hepatobiliary or pancreas O.R. procedures w CC.
494	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC.
502	Soft tissue procedures w/o CC/MCC.
504	Foot procedures w CC.
507	Major shoulder or elbow joint procedures w CC/MCC.
517	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC.
533	Fractures of femur w MCC.
553	Bone diseases & arthropathies w MCC.
597	Malignant breast disorders w MCC.
599	Malignant breast disorders w/o CC/MCC***.
604	Trauma to the skin, subcut tiss & breast w MCC.
618	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC.
619	O.R. procedures for obesity w MCC.
620	O.R. procedures for obesity w CC**.
624	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC.
644	Endocrine disorders w CC.
657	Kidney & ureter procedures forneoplasm w CC.
662	Minor bladder procedures w MCC.
665	Prostatectomy w MCC.
694	Urinary stones w/ot esw lithotripsy w/o MCC***.
695	Kidney & urinary tract signs & symptoms w MCC.
722	Malignancy, male reproductive system w MCC.
744	D&C, conization, laparascopy & tubal interruption w CC/MCC.
746	Vagina, cervix & vulva procedures w CC/MCC.
749	Other female reproductive system O.R. procedures w CC/MCC.
755	Malignancy, female reproductive system w CC.
809	Major hematol/immun diag exc sickle cell crisis & coagul w CC.
810	Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC.
816	Reticuloendothelial & immunity disorders w/o CC/MCC***.
821	Lymphoma & leukemia w major O.R. procedure w CC.
826	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC.
835	Acute leukemia w/o major O.R. procedure w CC.
838	Chemo w acute leukemia as sdx or w high dose chemo agent w CC.
843	Other myeloprolif dis or poorly diff neopl diag w MCC***.
844	Other myeloprolif dis or poorly diff neopl diag w CC***.
896	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC.
909	Other O.R. procedures for injuries w/o CC/MCC.
989	Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC.
	QUINTILE 4 (Version 25 relative weight = 1.0810)
28	Spinal procedures w MCC.
29	Spinal procedures w CC.
38	Extracranial procedures w CC.

COMPOSITION OF LOW-VOLUME QUINTILES FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG (version 25) description
53	Spinal disorders & injuries w/o CC/MCC*.
88	Concussion w MCC**.
89	Concussion w CC.
103	Headaches w/o MCC***.
124	Other disorders of the eye w MCC.
168	Other resp system O.R. procedures w/o CC/MCC.
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC.
242	Permanent cardiac pacemaker implant w MCC***.
244	Permanent cardiac pacemaker implant w/o CC/MCC.
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC*.
286	Circulatory disorders except AMI, w card cath w MCC.
347	Anal & stomal procedures w MCC.
351	Inguinal & femoral hernia procedures w CC.
368	Major esophageal disorders w MCC.
369	Major esophageal disorders w CC.
370	Major esophageal disorders w/o CC/MCC**.
407	Pancreas, liver & shunt procedures w/o CC/MCC.
408	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC***.
412	Cholecystectomy w c.d.e. w CC.
414	Cholecystectomy except by laparoscope w/o c.d.e. w MCC.
415	Cholecystectomy except by laparoscope w/o c.d.e. w CC.
418	Laparoscopic cholecystectomy w/o c.d.e. w CC.
420	Hepatobiliary diagnostic procedures w MCC.
423	Other hepatobiliary or pancreas O.R. procedures w MCC.
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC*.
478	Biopsies of musculoskeletal system & connective tissue w CC.
479	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC.
482	Hip & femur procedures except major joint w/o CC/MCC.
486	Knee procedures w pdx of infection w CC.
487	Knee procedures w pdx of infection w/o CC/MCC.
490	Back & neck procedures except spinal fusion w CC/MCC or disc devices
493	Lower extrem & humer proc except hip, foot, femur w CC.
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC.
503	Foot procedures w MCC.
511	Shoulder,elbow or forearm proc,exc major joint proc w CC.
516	Other musculoskelet sys & conn tiss O.R. proc w CC.
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC.
577	Skin graft &/or debrid exc for skin ulcer or cellulitis w CC.
584	Breast biopsy, local excision & other breast procedures w CC/MCC.
620	O.R. procedures for obesity w CC***.
659	Kidney & ureter procedures for non-neoplasm w MCC.
667	Prostatectomy w/o CC/MCC.
675	Other kidney & urinary tract procedures w/o CC/MCC.
709	Penis procedures w CC/MCC.
711	Testes procedures w CC/MCC.
717	Other male reproductive system O.R. proc exc malignancy w CC/MCC.
725	Benign prostatic hypertrophy w MCC.
754	Malignancy, female reproductive system w MCC.
760	Menstrual & other female reproductive system disorders w CC/MCC.
776	Postpartum & post abortion diagnoses w/o O.R. procedure.
781	Other antepartum diagnoses w medical complications.
823	Lymphoma & non-acute leukemia w other O.R. proc w MCC.
824	Lymphoma & non-acute leukemia w other O.R. proc w CC.
834	Acute leukemia w/o major O.R. procedure w MCC.
843	Other myeloprolif dis or poorly diff neopl diag w MCC**.
844	Other myeloprolif dis or poorly diff neopl diag w CC**.
845	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC**.
928	Full thickness burn w skin graft or inhal inj w CC/MCC.
958	Other O.R. procedures for multiple significant trauma w CC.
983	Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC.
985	Prostatic O.R. procedure unrelated to principal diagnosis w CC.
986	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC.
	QUINTILE 5 (Version 25 relative weight = 1.5863)
12	Tracheostomy for face,mouth & neck diagnoses w CC.
26	Craniotomy & endovascular intracranial procedures w CC.
31	Ventricular shunt procedures w MCC.
37	Extracranial procedures w MCC.
131	Cranial/facial procedures w CC/MCC.
134	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC***.

COMPOSITION OF LOW-VOLUME QUINTILES FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG (version 25) description
137	Mouth procedures w CC/MCC.
139	Salivary gland procedures 164 Major chest procedures w CC.
226	Cardiac defibrillator implant w/o cardiac cath w MCC.
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC.
237	Major cardiovascular procedures w MCC.
242	Permanent cardiac pacemaker implant w MCC**.
243	Permanent cardiac pacemaker implant w CC.
248	Percutaneous cardiovasc proc w non-drug-eluting stent w MCC.
258	Cardiac pacemaker device replacement w MCC.
260	Cardiac pacemaker revision except device replacement w MCC.
327	Stomach, esophageal & duodenal proc w CC.
329	Major small & large bowel procedures w MCC.
330	Major small & large bowel procedures w CC.
335	Peritoneal adhesiolysis w MCC.
350	Inguinal & femoral hernia procedures w MCC.
370	Major esophageal disorders w/o CC/MCC***.
405	Pancreas, liver & shunt procedures w MCC.
406	Pancreas, liver & shunt procedures w CC.
408	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC**.
409	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC.
417	Laparoscopic cholecystectomy w/o c.d.e. w MCC.
454	Combined anterior/posterior spinal fusion w CC.
456	Spinal fusion exc cerv w spinal curv, malig or 9+ fusions w MCC.
459	Spinal fusion except cervical w MCC.
460	Spinal fusion except cervical w/o MCC.
466	Revision of hip or knee replacement w MCC.
467	Revision of hip or knee replacement w CC.
469	Major joint replacement or reattachment of lower extremity w MCC.
470	Major joint replacement or reattachment of lower extremity w/o MCC.
471	Cervical spinal fusion w MCC.
472	Cervical spinal fusion w CC.
477	Biopsies of musculoskeletal system & connective tissue w MCC.
480	Hip & femur procedures except major joint w MCC.
481	Hip & femur procedures except major joint w CC.
485	Knee procedures w pdx of infection w MCC.
488	Knee procedures w/o pdx of infection w CC/MCC.
492	Lower extrem & humer proc except hip, foot, femur w MCC.
498	Local excision & removal int fix devices of hip & femur w CC/MCC.
513	Hand or wrist proc, except major thumb or joint proc w CC/MCC.
576	Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC.
582	Mastectomy for malignancy w CC/MCC.
664	Minor bladder procedures w/o CC/MCC.
668	Transurethral procedures w MCC.
669	Transurethral procedures w CC.
691	Urinary stones w esw lithotripsy w CC/MCC.
713	Transurethral prostatectomy w CC/MCC.
715	Other male reproductive system O.R. proc for malignancy w CC/MCC.
802	Other O.R. proc of the blood & blood forming organs w MCC.
829	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC.
837	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC.
845	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC***.
933	Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft.
957	Other O.R. procedures for multiple significant trauma w MCC.
963	Other multiple significant trauma w MCC.
969	HIV w extensive O.R. procedure w MCC.
984	Prostatic O.R. procedure unrelated to principal diagnosis w MCC.

*One of the original 303 low-volume MS LTC–DRGs initially assigned to this low-volume quintile; removed from this low-volume quintile in addressing nonmonotonicity (see step 6 in section II.I.4.below).

**One of the original 303 low-volume MS LTC–DRGs initially assigned to a different low-volume quintile but moved to this low-volume quintile in addressing nonmonotonicity (see step 6 in section II.I.4 below).

***One of the original 303 low-volume MS LTC–DRGs initially assigned to this low-volume quintile but moved to a different low-volume quintile in addressing nonmonotonicity (see step 6 in section II.I.4 below).

We note that we will continue to monitor the volume (that is, the number of LTCH cases) in these low-volume quintiles to ensure that our quintile assignment results in appropriate payment for such cases and does not result in an unintended financial incentive for LTCHs to inappropriately admit these types of cases.

4. Steps for Determining the FY 2008 MS–LTC–DRG Relative Weights

As we noted previously, although the adoption of the MS–LTC–DRGs with three severity levels results in some

slight modifications of existing procedures for assigning weights in cases of zero volume and/or nonmonotonicity, described in detail elsewhere in this section, as proposed, the FY 2008 MS–LTC–DRG relative weights in this final rule with comment period are based on the methodology established in the August 30, 2002 LTCH PPS final rule (67 FR 55989 through 55991). In summary, for FY 2008, LTCH cases are grouped to the appropriate MS–LTC–DRG, while taking into account the low volume MS–LTC–DRGs as described above, before the FY 2008 MS–LTC–DRG relative weights can be determined. After grouping the cases to the appropriate MS–LTC–DRG, we calculate the relative weights for FY 2008 by first removing statistical outliers and cases with a length of stay of 7 days or less, as discussed in greater detail below. Next, we adjust the number of cases in each MS–LTC–DRG for the effect of short-stay outlier cases, as also discussed in greater detail below. The short-stay adjusted discharges and corresponding charges are used to calculate ''relative adjusted weights'' in each MS–LTC–DRG using the HSRV method described above.

Below we discuss in detail the steps for calculating the FY 2008 MS–LTC–DRG relative weights. We note that, as we stated above in section II.I.3.b. of the preamble of this final rule with comment period, we have excluded the data of all-inclusive rate LTCHs and LTCHs that are paid in accordance with demonstration projects that had claims in the FY 2006 MedPAR file.

Step 1—Remove statistical outliers.

The first step in the calculation of the FY 2008 MS–LTC–DRG relative weights is to remove statistical outlier cases. We define statistical outliers as cases that are outside of 3.0 standard deviations from the mean of the log distribution of both charges per case and the charges per day for each MS–LTC–DRG. These statistical outliers are removed prior to calculating the relative weights. As noted above, we believe that they may represent aberrations in the data that distort the measure of average resource use. Including those LTCH cases in the calculation of the relative weights could result in an inaccurate relative weight that does not truly reflect relative resource use among the MS–LTC–DRGs.

Step 2—Remove cases with a length of stay of 7 days or less.

The FY 2008 MS–LTC–DRG relative weights reflect the average of resources used on representative cases of a specific type. Generally, cases with a length of stay of 7 days or less do not belong in a LTCH because these stays do not fully receive or benefit from treatment that is typical in a LTCH stay, and full resources are often not used in the earlier stages of admission to a LTCH. As explained above, if we were to include stays of 7 days or less in the computation of the FY 2008 MS–LTC–DRG relative weights, the value of many relative weights would decrease and, therefore, payments would decrease to a level that may no longer be appropriate. We do not believe that it would be appropriate to compromise the integrity of the payment determination for those LTCH cases that actually benefit from and receive a full course of treatment at a LTCH, by including data from these very short-stays. Thus, as explained above, in determining the FY 2008 MS–LTC–DRG relative weights, as we proposed, we remove LTCH cases with a length of stay of 7 days or less.

Step 3—Adjust charges for the effects of short-stay outliers.

After removing cases with a length of stay of 7 days or less, we are left with cases that have a length of stay of greater than or equal to 8 days. The next step in the calculation of the FY 2008 MS–LTC–DRG relative weights is to adjust each LTCH's charges per discharge for those remaining cases for the effects of short-stay outliers (as defined in § 412.529(a) in conjunction with § 412.503 for LTCH discharges occurring on or after October 1, 2007). (We note that even if a case was removed in Step 2 (that is, cases with a length of stay of 7 days or less), it was paid as a short-stay outlier if its length of stay was less than or equal to five-sixths of the average length of stay of the MS–LTC–DRG, in accordance with § 412.529. As discussed above, we are revising the regulations at § 412.503 to specify that regulatory references to LTC–DRGs for policy descriptions and/or payment calculations shall be considered as references to the MS–LTC–DRGs for LTCH discharges occurring on or after October 1, 2007.)

We make this adjustment by counting a short-stay outlier as a fraction of a discharge based on the ratio of the length of stay of the case to the average length of stay for the MS–LTC–DRG for non-short-stay outlier cases. This has the effect of proportionately reducing the impact of the lower charges for the short-stay outlier cases in calculating the average charge for the MS–LTC–DRG. This process produces the same result as if the actual charges per discharge of a short-stay outlier case were adjusted to what they would have been had the patient's length of stay been equal to the average length of stay of the MS–LTC–DRG.

As we explained in the FY 2008 IPPS proposed rule (72 FR 24765), counting short-stay outlier cases as full discharges with no adjustment in determining the MS–LTC–DRG relative weights would lower the MS–LTC–DRG relative weight for affected MS–LTC–DRGs because the relatively lower charges of the short-stay outlier cases would bring down the average charge for all cases within an MS–LTC–DRG. This would result in an ''underpayment'' for non-short-stay outlier cases and an ''overpayment'' for short-stay outlier cases. Therefore, as we proposed, we adjust for short-stay outlier cases under § 412.529 in this manner because it results in more appropriate payments for all LTCH cases.

Step 4—Calculate the FY 2008 MS–LTC–DRG relative weights on an iterative basis.

The process of calculating the MS–LTC–DRG relative weights using the HSRV methodology is iterative. First, for each LTCH case, we calculate a hospital-specific relative charge value by dividing the short-stay outlier adjusted charge per discharge (see step 3) of the LTCH case (after removing the statistical outliers (see step 1)) and LTCH cases with a length of stay of 7 days or less (see step 2) by the average charge per discharge for the LTCH in which the case occurred. The resulting ratio is then multiplied by the LTCH's case-mix index to produce an adjusted hospital-specific relative charge value for the case. An initial case-mix index value of 1.0 is used for each LTCH.

For each MS–LTC–DRG, as we proposed, the FY 2008 relative weight is calculated by dividing the average of the adjusted hospital-specific relative charge values (from above) for the MS–LTC–DRG by the overall average hospital-specific relative charge value across all cases for all LTCHs. Using these recalculated MS–LTC–DRG relative weights, each LTCH's average relative weight for all of its cases (case-mix) is calculated by dividing the sum of all the LTCH's MS–LTC–DRG relative weights by its total number of cases. The LTCHs' hospital-specific relative charge values above are multiplied by these hospital-specific case-mix indexes. These hospital-specific case-mix adjusted relative charge values are then used to calculate a new set of MS–LTC–DRG relative weights across all LTCHs. This iterative process is continued until there is convergence between the weights produced at adjacent steps, for example, when the maximum difference is less than 0.0001.

Step 5—Determine an FY 2008 relative weight for MS–LTC–DRGs with no LTCH cases.

As we stated above, we determine the relative weight for each MS–LTC–DRG using total Medicare allowable charges reported in the best available LTCH claims data (that is, the March 2007 update of the FY 2006 MedPAR file for this final rule with comment period). Of the FY 2008 MS–LTC–DRGs, we identified a number of MS–LTC–DRGs for which there were no LTCH cases in the database. That is, based on data from the FY 2006 MedPAR file used in this final rule with comment period, no patients who would have been classified to those MS–LTC–DRGs were treated in LTCHs during FY 2006 and, therefore, no charge data were reported for those MS–LTC–DRGs. Thus, in the process of determining the MS–LTC–DRG relative weights, we are unable to determine weights for these MS–LTC–DRGs with no LTCH cases using the methodology described in Steps 1 through 4 above. However, because patients with a number of the diagnoses under these MS–LTC–DRGs may be treated at LTCHs beginning in FY 2008, for this final rule with comment period, as we proposed, we are assigning relative weights to each of the no-volume MS–LTC–DRGs based on clinical similarity and relative costliness with the exception of ''transplant'' MS–LTC–DRGs and ''error'' MS–LTC–DRGs (as discussed below). In general, as we proposed, we determined relative weights for the MS–LTC–DRGs with no LTCH cases in the FY 2006 MedPAR file used in this final rule with comment period by crosswalking these MS–LTC–DRGs to other MS–LTC–DRGs and then assigning them the relative weight of the appropriate low-volume quintile (as described in greater detail below).

Specifically, as we stated above, we determine the relative weight for each MS–LTC–DRG using total Medicare allowable charges reported in the March 2007 update of the FY 2006 MedPAR file. Of the 745 MS–LTC–DRGs for FY 2008, we identified 185 MS–LTC–DRGs for which there were no LTCH cases in the database. For this final rule with comment period, as noted above, we are assigning relative weights to each of the 185 no volume MS–LTC–DRGs (with the exception of 8 ''transplant'' MS–LTC–DRGs and 2 ''error'' MS–LTC–DRGs, as discussed below) based on clinical similarity and relative costliness to one of the remaining 560 (745 − 185 = 560) MS–LTC–DRGs for which we are able to determine relative weights, based on FY 2006 LTCH claims data. Then we assigned them the relative weight of the appropriate low-volume quintile, as discussed below. (As explained below in Step 7, when necessary, we made adjustments to account for nonmonotonicity.)

As we proposed, our methodology for determining the relative weights for the no-volume MS–LTC–DRGs is as follows: We crosswalk the no-volume MS–LTC–DRG to an MS–LTC–DRG for which there are LTCH cases in the FY 2006 MedPAR file and to which it is similar clinically and in intensity of use of resources as determined by criteria such as care provided during the period of time surrounding surgery, surgical approach (if applicable), length of time of surgical procedure, postoperative care, and length of stay. If the MS–LTC–DRG to which it is crosswalked is grouped to one of the low-volume quintiles, we assign the relative weight for the applicable low-volume quintile to the no-volume MS–LTC–DRG. However, if the MS–LTC–DRG to which the no-volume MS–LTC–DRG is crosswalked is not one of the MS–LTC–DRGs in a low-volume quintile, we do the following: (1) Compare the relative weight of the MS–LTC–DRG to which the no-volume MS–LTC–DRG is crosswalked to the relative weights of each of the five quintiles; (2) assign the no-volume MS–LTC–DRG the relative weight of the low-volume quintile with the relative weight that is closest to the MS–LTC–DRG to which the no-volume MS–LTC–DRG is crosswalked. As stated above, assigning the relative weight of a quintile to a no-volume MS–LTC–DRG that is cross-walked to a MS–LTC–DRGs that has 25 or more cases and, therefore, is not in a low-volume quintile is consistent with our methodology used in determining relative weights for MS–LTC–DRGs that have a low-volume of LTCH cases (that is, 24 or fewer cases), which is discussed above in section II.I.e. of this preamble. (As we noted above, in the infrequent case where nonmonotonicity involving a no-volume MS–LTC–DRG results, additional measures as described in Step 6 are required in order to maintain monotonically increasing relative weights.) For this final rule with comment period, a list of the no-volume FY 2008 MS–LTC–DRGs and the FY 2008 MS–LTC–DRG to which it is crosswalked is shown in the chart below.

NO-VOLUME MS–LTC–DRG CROSSWALK FOR FY 2008

MS–LTC–DRG	MS–LTC–DRG description	Cross-walked MS–LTC–DRG
9	Bone marrow transplant	823
11	Tracheostomy for face, mouth & neck diagnoses w MCC	12
13	Tracheostomy for face, mouth & neck diagnoses w/o CC/MCC	12
20	Intracranial vascular procedures w PDX hemorrhage w MCC	31
21	Intracranial vascular procedures w PDX hemorrhage w CC	32
22	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	33
23	Craniotomy w major device implant or acute complex CNS PDX w MCC	31
24	Craniotomy w major device implant or acute complex CNS PDX w/o MCC	33
25	Craniotomy & endovascular intracranial procedures w MCC	26
27	Craniotomy & endovascular intracranial procedures w/o CC/MCC	26
34	Carotid artery stent procedure w MCC	37
35	Carotid artery stent procedure w CC	38
36	Carotid artery stent procedure w/o CC/MCC	38
39	Extracranial procedures w/o CC/MCC	38
61	Acute ischemic stroke w use of thrombolytic agent w MCC	70
62	Acute ischemic stroke w use of thrombolytic agent w CC	71
63	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	72
90	Concussion w/o CC/MCC	89
114	Orbital procedures w/o CC/MCC	113
115	Extraocular procedures except orbit	125
116	Intraocular procedures w CC/MCC	125
117	Intraocular procedures w/o CC/MCC	125
129	Major head & neck procedures w CC/MCC or major device	146

NO-VOLUME MS–LTC–DRG CROSSWALK FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG description	Cross-walked MS–LTC–DRG
130	Major head & neck procedures w/o CC/MCC	148
132	Cranial/facial procedures w/o CC/MCC	131
135	Sinus & mastoid procedures w CC/MCC	133
136	Sinus & mastoid procedures w/o CC/MCC	133
138	Mouth procedures w/o CC/MCC	137
150	Epistaxis w MCC	152
151	Epistaxis w/o MCC	153
165	Major chest procedures w/o CC/MCC	164
185	Major chest trauma w/o CC/MCC	184
215	Other heart assist system implant	238
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	237
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	238
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	250
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	237
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	238
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	250
222	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	242
223	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	243
224	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	242
225	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	243
228	Other cardiothoracic procedures w MCC	252
229	Other cardiothoracic procedures w CC	253
230	Other cardiothoracic procedures w/o CC/MCC	254
231	Coronary bypass w PTCA w MCC	237
232	Coronary bypass w PTCA w/o MCC	238
233	Coronary bypass w cardiac cath w MCC	237
234	Coronary bypass w cardiac cath w/o MCC	238
235	Coronary bypass w/o cardiac cath w MCC	237
236	Coronary bypass w/o cardiac cath w/o MCC	238
247	Percutaneous cardiovascular proc w drug-eluting stent w/o MCC	246
249	Percutaneous cardiovasc proc w non-drug-eluting stent w/o MCC	248
251	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC	250
259	Cardiac pacemaker device replacement w/o MCC	258
262	Cardiac pacemaker revision except device replacement w/o CC/MCC	261
295	Deep vein thrombophlebitis w/o CC/MCC	294
296	Cardiac arrest, unexplained w MCC	283
297	Cardiac arrest, unexplained w CC	284
298	Cardiac arrest, unexplained w/o CC/MCC	285
332	Rectal resection w MCC	356
333	Rectal resection w CC	357
334	Rectal resection w/o CC/MCC	358
337	Peritoneal adhesiolysis w/o CC/MCC	336
338	Appendectomy w complicated principal diag w MCC	371
339	Appendectomy w complicated principal diag w CC	372
340	Appendectomy w complicated principal diag w/o CC/MCC	373
341	Appendectomy w/o complicated principal diag w MCC	371
342	Appendectomy w/o complicated principal diag w CC	372
343	Appendectomy w/o complicated principal diag w/o CC/MCC	373
344	Minor small & large bowel procedures w MCC	371
345	Minor small & large bowel procedures w CC	372
346	Minor small & large bowel procedures w/o CC/MCC	373
353	Hernia procedures except inguinal & femoral w MCC	354
355	Hernia procedures except inguinal & femoral w/o CC/MCC	354
410	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	409
411	Cholecystectomy w c.d.e. w MCC	412
413	Cholecystectomy w c.d.e. w/o CC/MCC	412
416	Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC	415
419	Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	418
422	Hepatobiliary diagnostic procedures w/o CC/MCC	421
425	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	424
453	Combined anterior/posterior spinal fusion w MCC	454
455	Combined anterior/posterior spinal fusion w/o CC/MCC	454
457	Spinal fusion exc cerv w spinal curv, malig or 9+ fusions w CC	456
458	Spinal fusion exc cerv w spinal curv, malig or 9+ fusions w/o CC/MCC	456
461	Bilateral or multiple major joint procs of lower extremity w MCC	480
462	Bilateral or multiple major joint procs of lower extremity w/o MCC	482
468	Revision of hip or knee replacement w/o CC/MCC	467
473	Cervical spinal fusion w/o CC/MCC	472
483	Major joint & limb reattachment proc of upper extremity w CC/MCC	480
484	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	482
489	Knee procedures w/o pdx of infection w/o CC/MCC	488

NO-VOLUME MS–LTC–DRG CROSSWALK FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG description	Cross-walked MS–LTC–DRG
491	Back & neck procedures except spinal fusion w/o CC/MCC	490
506	Major thumb or joint procedures	514
508	Major shoulder or elbow joint procedures w/o CC/MCC	507
509	Arthroscopy	505
510	Shoulder, elbow or forearm proc, exc major joint proc w MCC	511
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	505
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	505
583	Mastectomy for malignancy w/o CC/MCC	582
585	Breast biopsy, local excision & other breast procedures w/o CC/MCC	584
614	Adrenal & pituitary procedures w CC/MCC	629
615	Adrenal & pituitary procedures w/o CC/MCC	630
621	O.R. procedures for obesity w/o CC/MCC	620
625	Thyroid, parathyroid & thyroglossal procedures w MCC	628
626	Thyroid, parathyroid & thyroglossal procedures w CC	629
627	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	630
653	Major bladder procedures w MCC	659
654	Major bladder procedures w CC	660
655	Major bladder procedures w/o CC/MCC	661
656	Kidney & ureter procedures for neoplasm w MCC	657
658	Kidney & ureter procedures for neoplasm w/o CC/MCC	657
663	Minor bladder procedures w CC	662
666	Prostatectomy w CC	665
670	Transurethral procedures w/o CC/MCC	665
671	Urethral procedures w CC/MCC	687
672	Urethral procedures w/o CC/MCC	688
692	Urinary stones w esw lithotripsy w/o CC/MCC	691
697	Urethral stricture	688
707	Major male pelvic procedures w CC/MCC	660
708	Major male pelvic procedures w/o CC/MCC	661
710	Penis procedures w/o CC/MCC	709
712	Testes procedures w/o CC/MCC	711
716	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	715
734	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	717
735	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	718
736	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	754
737	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	755
738	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	756
739	Uterine, adnexa proc for non-ovarian/adnexal malig w MCC	754
740	Uterine, adnexa proc for non-ovarian/adnexal malig w CC	755
741	Uterine, adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	756
742	Uterine & adnexa proc for non-malignancy w CC/MCC	755
743	Uterine & adnexa proc for non-malignancy w/o CC/MCC	756
745	D&C, conization, laparascopy & tubal interruption w/o CC/MCC	744
747	Vagina, cervix & vulva procedures w/o CC/MCC	746
748	Female reproductive system reconstructive procedures	749
750	Other female reproductive system O.R. procedures w/o CC/MCC	749
765	Cesarean section w CC/MCC	744
766	Cesarean section w/o CC/MCC	769
767	Vaginal delivery w sterilization &/or D&C	769
768	Vaginal delivery w O.R. proc except steril &/or D&C	769
770	Abortion w D&C, aspiration curettage or hysterotomy	769
774	Vaginal delivery w complicating diagnoses	769
775	Vaginal delivery w/o complicating diagnoses	769
777	Ectopic pregnancy	769
778	Threatened abortion	759
779	Abortion w/o D&C	759
780	False labor	759
782	Other antepartum diagnoses w/o medical complications	759
789	Neonates, died or transferred to another acute care facility	761
790	Extreme immaturity or respiratory distress syndrome, neonate	761
791	Prematurity w major problems	760
792	Prematurity w/o major problems	761
793	Full term neonate w major problems	760
794	Neonate w other significant problems	760
795	Normal newborn	761
799	Splenectomy w MCC	423
800	Splenectomy w CC	424
801	Splenectomy w/o CC/MCC	424
804	Other O.R. proc of the blood & blood forming organs w/o CC/MCC	803
820	Lymphoma & leukemia w major O.R. procedure w MCC	821
822	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	821

NO-VOLUME MS–LTC–DRG CROSSWALK FOR FY 2008—Continued

MS–LTC–DRG	MS–LTC–DRG description	Cross-walked MS–LTC–DRG
827	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	826
828	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	826
830	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC	829
839	Chemo w acute leukemia as sdx or w high dose chemo agent w/o CC/MCC	837
887	Other mental disorder diagnoses	881
915	Allergic reactions w MCC	916
927	Extensive burns or full thickness burns w MV 96+ hrs w skin graft	933
955	Craniotomy for multiple significant trauma	26
959	Other O.R. procedures for multiple significant trauma w/o CC/MCC	958
970	HIV w extensive O.R. procedure w/o MCC	969

To illustrate this methodology for determining the relative weights for the 185 MS–LTC–DRGs with no LTCH cases, we are providing the following example, which refers to the no volume MS–LTC–DRGs crosswalk information for FY 2008 provided in the chart above.

Example:

There were no cases in the FY 2006 MedPAR file used for this final rule with comment period for MS–LTC–DRG 22 (Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC). We determined that MS–LTC–DRG 33 (Ventricular shunt procedures w/o CC/MCC), which is assigned to low-volume Quintile 1 for the purpose of determining the FY 2008 MS–LTC–DRG relative weights, is similar clinically and based on resource use to MS–LTC–DRG 22. Therefore, we are assigning the same relative weight of MS–LTC–DRG 33 of 0.4739 (Quintile 1) for FY 2008 (see the Composition of Low-Volume Quintiles for FY 2008 chart above in section II.I.3.e. of this preamble) to MS–LTC–DRG 22.

Furthermore, for FY 2008 as proposed, we are establishing MS–LTC–DRG relative weights of 0.0000 for the following transplant MS–LTC–DRGs: Heart transplant or implant of heart assist system w MCC (MS–LTC–DRG 1); Heart transplant or implant of heart assist system w/o MCC (MS–LTC–DRG 2); Liver transplant w MCC or intestinal transplant (LTC–DRG 5); Liver transplant w/o MCC (MS–LTC–DRG 6); Lung transplant (MS–LTC–DRG 7); Simultaneous pancreas/kidney transplant (MS–LTC–DRG 8); Pancreas transplant (MS–LTC–DRG–10) and Kidney transplant (MS–LTC–DRG 652). (We note that in the FY 2008 IPPS proposed rule (72 FR 24768), we inadvertently neglected to include proposed MS–LTC–DRG 652 (Kidney transplant) in the list of transplant MS–LTC–DRGs for which we proposed to assign a relative weight of 0.0000 for FY 2008. However, the proposed relative weight of 0.0000 for MS–LTC–DRG 652 was correctly shown in Table 11 of the FY 2008 IPPS proposed rule and was also correctly footnoted as being one of the proposed MS–LTC–DRGs that was assigned a proposed relative weight of 0.0000 (see 72 FR 25109). We also note that this is consistent with our treatment of the current LTC–DRG for a kidney transplant (LTC–DRG 302 (see 71 FR 47984)). This is because Medicare will only cover these procedures if they are performed at a hospital that has been certified for the specific procedures by Medicare and presently no LTCH has been so certified. Based on our research, we found that most LTCHs only perform minor surgeries, such as minor small and large bowel procedures, to the extent any surgeries are performed at all. Given the extensive criteria that must be met to become certified as a transplant center for Medicare, we believe it is unlikely that any LTCHs will become certified as a transplant center. In fact, in the nearly 20 years since the implementation of the IPPS, there has never been a LTCH that even expressed an interest in becoming a transplant center.

If in the future a LTCH applies for certification as a Medicare-approved transplant center, we believe that the application and approval procedure would allow sufficient time for us to determine appropriate weights for the MS–LTC–DRGs affected. At the present time, we would only include these eight transplant MS–LTC–DRGs in the GROUPER program for administrative purposes only. Because we use the same GROUPER program for LTCHs as is used under the IPPS, removing these MS–LTC–DRGs would be administratively burdensome.

In this final rule with comment period, as we proposed in Table 11 of the FY 2008 IPPS proposed rule (72 FR 25114), we are assigning a relative weight of 0.0000 for the 2 ''error'' MS–LTC–DRGs: MS–LTC–DRG–998 (Principal diagnosis invalid as discharge diagnosis) and MS–LTC–DRG 999 (Ungroupable), (We note that in the discussion of proposed MS–LTC–DRGs with no LTCH cases in the FY 2008 IPPS proposed rule) (72 FR 24766 247769), we inadvertently neglected to include the 2 proposed ''error'' MS–LTC–DRGs (i.e., MS–LTC–DRGs 998 and 999) in the list of MS–LTC–DRGs for which we proposed to assign a relative weight of 0.0000 for FY 2008. However, as stated above, the proposed relative weight of 0.0000 for MS–LTC–DRGs 998 and 999 were correctly shown in Table 11 of the FY 2008 IPPS proposed rule and were also correctly footnoted as being one of the proposed MS–LTC–DRGs that was assigned a proposed relative weight of 0.0000 (see 72 FR 25114). We also note that this is consistent with our treatment of the current ''error'' LTC–DRGs (that is, LTC–DRG 469 (Principal Diagnosis Invalid as Discharge Diagnosis) and LTC–DRG 470 (Ungroupable)) (see 71 FR 48328)).

Again, we note that, as this system is dynamic, it is entirely possible that the number of MS–LTC–DRGs with no volume of LTCH cases based on the system will vary in the future. We used the most recent available claims data in the MedPAR file to identify no volume MS–LTC–DRGs and to determine the relative weights in this final rule with comment period.

Step 6—Adjust the FY 2008 MS–LTC–DRG relative weights to account for nonmonotonically increasing relative weights.

As explained in section II.B. of the preamble of this final rule with comment period, the IPPS FY 2008 MS–DRGs, on which the FY 2008 MS–LTC–DRGs are based, provide a significant improvement in the DRG system's recognition of severity of illness and resource usage. The MS–DRGs contain base DRGs that have been subdivided into one, two, or three severity levels. Where there are three severity levels, the most severe level has at least one code that is referred to as an MCC. The next lower severity level contains cases with at least one code that is a CC.

Those cases without a MCC or a CC are referred to as without CC/MCC. When data did not support the creation of three severity levels, the base was divided into either two levels or the base was not subdivided. The two-level subdivisions could consist of the CC/MCC and without the CC/MCC. Alternatively, the other type of two level subdivision could consist of the MCC and without MCC. In base MS–LTC–DRGs with two levels, cases classified into a ''without CC/MCC'' MS–LTC–DRG are expected to have lower resource use (and lower costs) than the ''with CC/MCC'' and ''with MCC.''

That is, theoretically, cases that are more severe typically require greater expenditure of medical care resources and will result in higher average charges. Therefore, in the three severity levels, relative weights should increase by severity, from lowest to highest. If the weights do not increase (that is, if within a base MS–LTC–DRG, an MS–LTC–DRG with MCC has a lower relative weight than one with CC, or the MS–LTC–DRG without CC/MCC has a higher relative weight than either of the others, they are nonmonotonic. We continue to believe that utilizing nonmonotonic relative weights to adjust Medicare payments would result in inappropriate payments. Consequently, as proposed, in general, we combine MS–LTC–DRG severity levels within a base MS–LTC–DRG for the purpose of computing a relative weight when necessary to ensure that monotonicity is maintained. Specifically, under each of the example scenarios provided below, we would combine severity levels within a base MS–LTC–DRG as follows:

The first example of nonmonotonically increasing relative weights for MS–LTC–DRG pertains to base MS–LTC–DRGs with a three-level split and each of the three levels has 25 or more LTCH cases and, therefore, did not fall into one of the five low volume quintiles. If nonmonotonicity is detected in the relative weights of MS–LTC–DRGs in adjacent severity levels (for example, the relative weight of the ''with MCC'' (the highest severity level) is less than the ''with CC'' (the middle level), or the ''with CC'' is less than the ''without CC/MCC''), we combine the adjacent MS–LTC–DRGs and determine one relative weight based on the case weighted average of the combined LTCH cases of the nonmonotonic MS–LTC–DRG. The case-weighted average charge is determined by dividing the total charges for all LTCH cases in both severity levels by the total number of LTCH cases for the combined MS–LTC–DRGs. We apply this relative weight to both affected levels of the base MS–LTC–DRG. If nonmonotonicity remains an issue because the above process results in a relative weight that is still nonmonotonic to the remaining MS–LTC–DRG within the base MS–LTC–DRG, we combine all three of the severity levels to determine one relative weight based on the case-weighted average charge of the combined severity levels which is assigned to each of the MS–LTC–DRGs in that base MS–LTC–DRG.

A second example of nonmonotonically increasing relative weights for an MS–LTC–DRG pertains to the situation where there are three severity levels and one or more of the severity levels within a base MS–LTC–DRG has less than 25 LTCH cases (that is, low volume). If nonmonotonicity occurs in the case where either the highest or lowest severity level (''with MCC'' or ''without CC/MCC'') has 25 LTCH cases or more and the other two severity levels are low volume (and therefore the other two severity levels would otherwise be assigned the relative weight of the applicable quintile(s)), we combine the data for the cases in the two adjacent low volume MS–LTC–DRGs for the purpose of determining a relative weight. If the combination results in at least 25 cases, we calculate one relative weight based on the case-weighted average charge of the combined severity levels and assign it to both of the severity levels. If the combination results in less than 25 cases, based on the case weighted average charge of the combined low-volume MS–LTC–DRGs, both MS–LTC–DRGs are assigned the relative weight of the quintile that has the closest relative weight to the case-weighted average charge of the combined low volume MS–LTC–DRGs. If nonmonotonicity persists, we combine all three severity levels and one relative weight would be assigned to all three levels based on the case-weighted average charge of the combined severity levels. Similarly, in nonmonotonic cases where the middle level has 25 cases or more but either or both the lowest or highest severity level has less than 25 cases (that is, low volume), we combine the nonmonotonic low-volume MS–LTC–DRG with the middle level MS–LTC–DRG of the base DRG. We calculate one relative weight based on the case-weighted average charge of the combined severity levels and apply it to both of the affected MS–LTC–DRGs. If the nonmonotonicity persists, we combine all three levels for the purpose of determining a relative weight based on the case-weighted average charge of the combined severity levels, and apply that relative weight to all three levels.

A third example of nonmonotonicity involves a base MS–LTC–DRG with three severity levels where at least one of the severity levels has no cases. As discussed in greater detail in Step 5, based on clinical similarity, we initially cross-walk the no-volume MS–LTC–DRG to an MS–LTC–DRG to which it is similar clinically and in intensity of resource use and then assign the no-volume MS–LTC–DRG the relative weight of the quintile with the relative weight closest to that of the MS–LTC–DRG to which the no-volume MS–LTC–DRG had been cross-walked. If this results in nonmonotonicity, in the case where the no-volume MS–LTC–DRG is either the lowest or highest severity level, we assign to the no-volume MS–LTC–DRG the same relative weight that is assigned to the middle level of the MS–LTC–DRG in that base DRG. If nonmonotonicity persists, all three severity levels are combined for the purpose of calculating one relative weight based on the case-weighted average charge of the combined severity levels which is applied to each of the three levels. In the proposed rule, we noted that this is a departure from our current treatment of no-volume LTC–DRGs which results in an ultimate assignment to a quintile. However, this was not accurate. In fact, this policy is consistent with our existing policy. We believe this treatment achieves monotonically increasing relative weights while providing appropriate payment for the no-volume MS–LTC–DRG because the relative weight assigned to the no-volume MS–LTC–DRG is based on the average charges of services rendered within the same base MS–LTC–DRG.

We apply the same process where the base MS–LTC–DRG contains a two-level split. For example, if nonmonotonicity occurs in a base MS–LTC–DRG with two severity levels (that is, the higher severity level relative weight is less than the lower severity level), where both of the MS–LTC–DRGs have at least 25 cases or where one or both of the MS–LTC–DRGs is low volume, we combine the two MS–LTC–DRGs of that base MS–LTC–DRG for the purpose of determining a case-weighted relative weight. If the combination results in at least 25 cases, we calculate one relative weight and assign it to both of the MS–LTC–DRGs. If the combination results in less than 25 cases, we calculate the case-weighted average charge for the combined MS–LTC–DRG. After we calculate the case-weighted average charge for the combined MS LTC DRGs, we compare that weight to the weights

of the quintiles and apply the quintile weight closest to that case-weighted average weight to both of these MS–LTC–DRGs.

Step 7—Calculate MS–LTC–DRG transition blended relative weights for FY 2008.

As discussed above in section II.I.2.a. of this preamble, we are implementing the MS–LTC–DRGs with a 2-year transition beginning in FY 2008. For FY 2008, the first year of the transition, 50 percent of the relative weight for a MS–LTC–DRG will be based on the average LTC–DRG relative weight under Version 24.0 of the LTC–DRG GROUPER. The remaining 50 percent of the relative weight will be based on the MS–LTC–DRG relative weight under Version 25.0 of the MS–LTC–DRG GROUPER. In FY 2009, the MS–LTC–DRG relative weights will be based on 100 percent of the MS–LTC–DRG relative weights.

We used the following methodology to calculate the transition blended MS–LTC–DRG relative weights for FY 2008. To determine the payment for a particular case under the MS–LTC–DRGs in FY 2008, we will group cases to MS–LTC–DRGs (using the Version 25.0 GROUPER), but the relative weight for each case will be determined based on a 50/50 blend of the MS–LTC–DRG relative weight applying steps 1–6 above and the LTC–DRG relative weight applying steps 1–6 above. Thus, we determined a blended weight for each MS–LTC–DRG in the Version 25.0 GROUPER. Using LTCH claims in the FY 2006 MedPAR file, we grouped each case to an LTC–DRG (using the Version 24.0 GROUPER) and an MS–LTC–DRG (using the Version 25.0 GROUPER) and applied steps 1–6 above to each set of grouped claims to determine a set of LTC–DRG relative weights and a set of MS–LTC–DRG relative weights. Commonly, a set of cases that grouped to a single MS–LTC–DRG grouped to two or more LTC–DRGs. Therefore, we determined an average LTC–DRG relative weight using the Version 24.0 GROUPER for all cases that grouped to each MS–LTC–DRG. Specifically, we summed the LTC–DRG relative weights of all the cases that grouped to each MS–LTC–DRG and then divided that number by the number of LTCH cases. To establish the final transition blended weight for each MS–LTC–DRG in the Version 25.0 GROUPER, we added 50 percent of the MS–LTC–DRG relative weight to 50 percent of the average LTC–DRG relative weight for that MS–LTC–DRG.

We also note that after calculating the transition blended relative weights, we adjusted the FY 2008 MS–LTC–DRG relative weights to account for nonmonotonically increasing relative weights using the method described above in Step 6. As noted above, we continue to believe that utilizing nonmonotonic relative weights to adjust Medicare payments would result in inappropriate payments. Therefore, in general, we combine MS–LTC–DRG severity levels within a base MS–LTC–DRG for the purpose of determining the transition blended relative weight when necessary to ensure that monotonicity is maintained. (For specific details on how severity levels within a base MS–LTC–DRG are combined when nonmonotonicity occurs, refer to Step 6 above.)

Step 8—Calculate the FY 2008 budget neutrality factor.

As we established in the RY 2008 LTCH PPS final rule (72 FR 26882), under the broad authority conferred upon the Secretary under section 123 of Pub. L. 106–113 as amended by section 307(b) of Pub. L. 106–554 to develop the LTCH PPS, beginning with the MS–LTC–DRG update for FY 2008, the annual update to the MS–LTC–DRG classifications and relative weights will be done in a budget neutral manner such that estimated aggregate LTCH PPS payments would be unaffected, that is, would be neither greater than nor less than the estimated aggregate LTCH PPS payments that would have been made without the MS–LTC–DRG classification and relative weight changes. Historically, we have not updated the LTC–DRGs in a budget neutral manner because we believed that past fluctuations in the LTC–DRG relative weights were primarily due to changes in LTCH coding practices. We believe that changes in the LTCH PPS payment rates, including the LTC–DRG relative weights, should accurately reflect changes in LTCHs' true cost of treating patients (real CMI increase), and should not be influenced by changes in coding practices (apparent CMI increase). As we explained in the RY 2008 LTCH PPS final rule (72 FR 26882), because LTCH 2006 claims data does not appear to significantly reflect changes in LTCH coding practices in response to the implementation of the LTCH PPS, we believe that, beginning with FY 2008, it is appropriate to update the MS–LTC–DRGs so that estimated aggregate LTCH PPS payments will neither increase nor decrease. Thus, in that same final rule, we established under § 412.517(b) that the annual update to the MS–LTC–DRG classifications and relative weights be done in a budget neutral manner. (As discussed above, we are revising the regulations at § 412.503 to specify that ''MS–LTC–DRG'' is used in place of ''LTC–DRG'' for discharges occurring on or after October 1, 2007. For a detailed discussion on the establishment of the requirement to update the MS–LTC–DRG classifications and relative weights in a budget neutral manner, refer to the RY 2008 LTCH PPS final rule (72 FR 26880 through 26884). Updating the MS–LTC–DRGs in a budget neutral manner will result in an annual update to the individual MS–LTC–DRG classifications and relative weights based on the most recent available data to reflect changes in relative LTCH resource use, and the MS–LTC–DRG relative weights will be uniformly adjusted to ensure that estimated aggregate payments under the LTCH PPS would not be affected (that is, decreased or increased). Consistent with that provision, we are updating the MS–LTC–DRG classifications and relative weights for FY 2008 based on the most recent available data and include a budget neutrality adjustment.

To ensure budget neutrality in updating the MS–LTC–DRG classifications and relative weights under new § 412.517(b), as we proposed, we are using a method that is similar to the methodology used under the IPPS. (A discussion of the IPPS DRG budget neutrality adjustment can be found in the FY 2007 IPPS final rule (71 FR 47970).) We note that, in this final rule with comment period, we have modified our proposed methodology for ensuring budget neutrality in updating the MS–LTC–DRG classifications and relative weights for FY 2008 to accommodate the use of blended transition relative weights (discussed in Step 7 above). Specifically, after recalibrating the MS–LTC–DRG relative weights, as we do under the methodology as described in detail in Steps 1 through 7 above, we calculate and apply a normalization factor to the MS–LTC–DRG relative weights to ensure that estimated payments are not influenced by changes in the composition of case types or changes made to the classification system. That is, the normalization adjustment is intended to ensure that the recalibration of the MS–LTC–DRG relative weights (that is, the process itself) neither increases nor decreases total estimated payments. To calculate the normalization factor for FY 2008, as proposed (with modifications to accommodate the use of blended transition relative weights) we use the following steps: (1) We use the most recent available claims data (FY 2006) and the MS–LTC–DRG transition blended relative weights (determined above in Step 7 of the Steps for Determining the FY 2008 MS–LTC–DRG

Relative Weights) to calculate the average CMI; (2) we group the same claims data (FY 2006) using the FY 2007 GROUPER (Version 24.0) and FY 2007 relative weights (established in the FY 2007 IPPS final rule (71 FR 47971–47984 and 48321–48331) and calculate the average CMI; and (3), we compute the ratio of these average CMIs by dividing the average CMI determined in step (2) by the average CMI determined in step (1). In determining the MS–LTC–DRG relative weights for FY 2008, based on the latest available data, the normalization factor is estimated as 1.020905, which is applied to each MS–LTC–DRG transition blended relative weight. That is, each MS–LTC–DRG transition blended relative weight is multiplied by 1.020905 in the first step of the budget neutrality process. Accordingly, the relative weights in Table 11 in the Addendum of this final rule with comment period reflect this normalization factor. We also ensure that estimated aggregate LTCH PPS payments (based on the most recent available LTCH claims data) after reclassification and recalibration (the new (i.e., FY 2008) relative weights) are equal to estimated aggregate LTCH PPS payments (for the same most recent available LTCH claims data) before reclassification and recalibration (the existing (i.e., FY 2007) relative weights). Therefore, in general, we calculate the budget neutrality adjustment factor by simulating estimated total payments under both sets of GROUPERs and relative weights using current LTCH PPS payment policies (RY 2008) and the most recent available claims data (from the FY 2006 MedPAR file). (We note, in the FY 2008 IPPS proposed rule (72 FR 24770), we proposed to simulate estimated total payments for purposes of determining the proposed FY 2008 budget neutrality adjustment using current LTCH PPS payment policies, which at that time, were RY 2007 LTCH PPS rates and policies. Since the publication of the proposed rule, we have established RY 2008 LTCH PPS rates and policies in the RY 2008 LTCH PPS final rule (72 FR 26870–27029). Accordingly, we are using RY 2008 LTCH PPS rates and policies in determining the FY 2008 budget neutrality adjustment in this final rule with comment period.) In this final rule with comment period, the budget neutrality adjustment was determined using the following steps: (1) We simulate estimated total payments using the normalized transition-blended relative weights under GROUPER Version 25.0 (as described above in Step 7); (2) we simulate estimated total payments using the FY 2007 GROUPER (Version 24.0) and FY 2007 LTC–DRG relative weights (as established in the FY 2007 IPPS final rule (71 FR 47971–47984 and 48321–48331); and (3) we calculate the ratio of these estimated total payments by dividing the estimated total payments determined in step (2) by the estimated total payments determined in step (1). Then, for FY 2008, each of the normalized transition-blended relative weights is multiplied by the budget neutrality factor to determine the budget neutral relative weight for each MS–LTC–DRG. Accordingly, in determining the MS–LTC–DRG relative weights for FY 2008, based on the most recent available data, we are establishing a budget neutrality factor of 0.996467, which is applied to the transition blended relative weights after normalizing. The FY 2008 MS–LTC–DRG relative weights in Table 11 in the Addendum of this final rule with comment period reflect this budget neutrality factor.

Table 11 in the Addendum to this final rule with comment period lists the MS–LTC–DRGs and their respective transition-blended budget neutral relative weights, geometric mean length of stay, and five-sixths of the geometric mean length of stay (used in the determination of short stay outlier payments under § 412.529) for FY 2008. The ''IPPS Comparable Threshold'' (that is, the IPPS geometric average length of stay plus one standard deviation) for each MS–LTC–DRG (used in the determination of short stay outlier payments under § 412.529(c)(3) as established in the RY 2008 LTCH PPS final rule (72 FR 26904–26918)) for FY 2008 is also included in Table 11 in the Addendum to this final rule with comment period.

In determining the proposed MS–LTC–DRG relative weights for FY 2008, in the FY 2008 IPPS proposed rule (72 FR 24771), we proposed to apply a case mix budget neutrality factor to the MS–LTC–DRG relative weight to eliminate the effect of changes in coding or classification of discharges that do not reflect real change in case mix. The budget neutrality factor was proposed because we believed that adoption of the MS–LTC–DRGs would create a risk of increased aggregate levels of payment as a result of increased documentation and coding. We believed this adjustment would be necessary for FY 2008 and FY 2009 to ensure that estimated aggregate LTCH PPS payments would be neither greater than nor less than the estimated aggregate LTCH PPS payments that would have been made without the adoption of the MS–LTC–DRG patient classification system. Accordingly, in the proposed rule each proposed MS–LTC–RG relative weights presented in Table 11 was multiplied by a factor of 0.976 to account for improvements in coding and documentation resulting from the adoption of the new patient classification system.

In this final rule with comment period, as discussed in the responses below, we are not implementing the proposed case-mix budget neutrality factor to the MS–LTC–DRG relative weights. Accordingly, the MS–LTC–DRG relative weights in Table 11 of the Addendum to this final rule with comment period do not reflect any adjustment to account for changes in coding and documentation that do not reflect real change in case mix.

Comment: While several commenters supported the adoption of a patient classification system that recognizes differences in patient acuity in LTCHs, a number of commenters opposed CMS' proposal to apply a budget neutrality adjustment factor to the MS–LTC–DRG relative weights in anticipation of changes in coding or classification of discharges resulting from the adoption of the MS–LTC–DRGs. Commenters expressed doubt that the adoption of the proposed MS–LTC–DRGs would lead to the coding changes CMS expects. Specifically, these commenters believed that in certain situations, such as where there are corresponding and equivalent subclassifications under both the proposed and existing systems, there may not be any real opportunity for coding improvements for those groups. For instance, one commenter cited MS–LTC–DRG 207 and 208 (LTC–DRGs 565 and 566) as an example of a DRG group that would not experience upcoding. Consequently, several commenters opposed the application of the adjustment for improved coding practices across all MS–LTC–DRGs and requested that CMS refrain from applying an adjustment to any MS–LTC–DRG for which they believed coding changes are inapplicable. A commenter asserted specifically that for the DRGs in which upcoding is impossible, CMS would be ''imposing a payment penalty for these cases.'' One commenter, a LTCH trade association group, commissioned a report to evaluate the proposed ''coding adjustment'' to the MS–LTC–DRG relative weights to account for changes in coding or classification of discharges resulting from the adoption of the new patient classification system. CMS had stated in the proposed rule that the ''coding adjustment'' is necessary in order to maintain budget neutrality. Based on the commissioned report, the

commenter concluded that the magnitude of the proposed ''coding adjustment'' is inappropriate for LTCHs because it would not result in budget neutrality, rather, it would result in an overall reduction in aggregate LTCH payments. The commenter noted that since approximately 34 percent of LTCH cases are paid under the short-stay outlier policy where cases are paid at or below costs, there is no opportunity for upcoding in those cases. Furthermore, according to the commissioned report, approximately 61 percent of current LTCH discharges already are coded at what would be the highest severity level under the new MS–LTC–DRG system. That is, the commenter asserted that there is no opportunity to up-code these cases because they are either in a base MS–DRG with only one severity level or these cases are already coded in the highest severity level of a base MS–DRG with multiple severity levels. The report noted that according to their own analysis, this number of LTCH cases is almost triple the number of IPPS discharges that appear in the highest severity level MS–DRGs. The commissioned report further attempted to analyze LTCH discharges and for the potential for upcoding within a base MS–DRG (''MS–DRG family'') by calculating what the report terms as ''upcode ratios.'' The report defines an ''upcode ratio'' as the ratio of the relative weight of the MS–DRG with the highest severity level within the MS–DRG family to the relative weight of the base MS–DRG with the lowest severity level. Presumably, the higher the ''upcode ratio,'' the greater the incentive for upcoding into the highest severity level since the upcoding would result in a higher payment. Based on the ''upcode ratios,'' the report contrasted the potential for upcoding by LTCHs and IPPS hospitals. The report concluded that since 97 percent of LTCH discharges are distributed in the lowest ''upcode ratio'' quartile versus 25 percent of IPPS discharges, LTCHs therefore have less incentive to upcode within the same base MS–DRG than IPPS hospitals. The report also estimated that if every LTCH upcoded every discharge to the highest possible severity level, LTCHs' maximum potential for upcoding would result in a 3.61 percent increase in the case mix index. The report translated this finding to mean that 66 percent of all LTCH cases would have to be upcoded to the highest severity level in order to make the proposed adjustment to the LTCH relative weights budget neutral. The commenter believed it was unreasonable for CMS to assume that LTCHs could improve coding to that extent. Finally, the report also predicted that a significant number of LTCH discharges would be subjected to the 25 percent rule and thus paid at rates that are similar to IPPS rates and not based on MS–LTC–DRGs. The report noted that IPPS hospitals are not subject to the 25 percent rule, implying that the magnitude of the ''coding adjustment'' which was based on primarily IPPS data, is inappropriate for LTCHs. The commenter concludes that ''the vast majority of LTCH discharges present no opportunity to upcode and most of the remaining LTCH discharges provide little potential to do so.'' Another commenter stated that the significant year-to-year changes in LTCH payments due to both policy changes and routine rate and weighting adjustments which results in large payment fluctuations for some DRGS, creates a challenge to LTCHs to effectively operate, plan for the future, and maintain quality care for Medicare patients. In particular, one commenter using MedPAR 2005 claims data compared estimated payments under the proposed MS–DRG system (with the ''coding adjustment'' included) to estimated payment under the current system and asserted that according to their analysis, large payment changes would result in the ten most common LTC–DRGs. The commenter cited specifically that the change in payment for the top ten DRGs ranges from over a 25 percent reduction in some cases to over a 30 percent increase in others. In light of the volatility apparent in adopting the new MS–LTC–DRG system, the commenter recommended that CMS delay making an adjustment for improved coding practices until after a transition to the MS–LTC–DRG system has occurred. The commenter suggested that once the transition has fully occurred, CMS could apply an appropriate adjustment based on actual, rather than anticipated, coding change.

Response: In the proposed rule, we indicated that we believe that adoption of the proposed MS–LTC–DRGs would create a risk of increased aggregate levels of payment as a result of increased documentation and coding. MedPAC noted that ''refinements in DRG definitions have sometimes led to substantial unwarranted increase in payments to hospitals, reflecting more complete reporting of patients' diagnoses and procedures.'' MedPAC further noted that ''refinements to the DRG definitions and weights would substantially strengthen providers' incentives to accurately report patients' comorbidities and complications.'' To address this issue, MedPAC recommended that the Secretary ''project the likely effect of reporting improvements on total payments and make an offsetting adjustment to the national average base payment amounts'' [Report to Congress on Physician-Owned Specialty Hospitals, March 2005, p. 42]. While we modeled the changes to the DRG system and relative weights to ensure budget neutrality, we are concerned that the large increase in the number of DRGs and refinements of severity levels will provide opportunities for hospitals to do more accurate documentation and coding of information contained in the medical record. Coding that has no effect on payment under the current LTC–DRGs may result in a case being assigned to a higher paid DRG under the proposed MS–LTC–DRGs. We note that while the commenters have attempted to analyze the potential for improvements in documentation and coding to affect the MS–LTC–DRG assignment within a base MS–LTC–DRG, improved documentation may also result in a case being assigned from a lower paid MS–LTC–DRG into a higher paid MS–LTC–DRG of a completely different base MS–LTC–DRG. In particular, the commissioned report submitted by the LTCH trade association demonstrated to us that commenters are pre-occupied with focusing on the potential for improving documentation and coding where the MS–LTC–DRG assignment would change from a lower severity level to a higher severity level within the same base MS–LTC–DRG. We are emphasizing here that in addition to the potential for improvements in documentation and coding to change the severity level within a base DRG (''intra-DRG change''), the potential for improvements in documentation and coding to result in the assignment of a case into a higher paid MS–LTC–DRG outside of the base MS–LTC–DRG (''inter-DRG documentation and coding changes'') is also a likely consequence of more accurate and complete documentation and possible for LTCH discharges because patients are admitted with multiple CCs. In general, the commenters expressed the belief that ''the vast majority of LTCH discharges present *no* opportunity to upcode'' (emphasis added). We disagree with this belief since generally, the commenters have provided arguments based on examples which focus entirely on ''intra-DRG change'' without accounting for the ''inter-DRG change'' potential which may be possible for LTCH discharges because patients are

admitted with multiple complications and comorbidities. One commenter cited two MS–LTC–DRGs for patients on ventilators, MS–LTC–DRG 207 and 208 (previously LTC–DRG 565 and 566), as MS–LTC–DRGs that would not experience ''intra-DRG change'' because the classification groups under the old and new classification systems for these ventilator patients remains unchanged. We acknowledge that for MS–LTC–DRG 207, which is a high paying MS–LTC–DRG, there appears to be no incentive for improvements in documentation and coding that result in ''intra-DRG change'' from the lower paid MS–LTC–DRG 208 to the higher paid MS–LTC–DRG 207 or for documentation and coding improvements that affect ''inter-DRG change'' because this DRG is already such a high paying DRG. However, for patients that were classified in MS–LTC–DRG 208, there may be some opportunity for documentation and coding improvements that affect ''inter-DRG change,'' depending on the existence of specific CCs. While we take issue with some of the commenters' generalizations, we agree that there are significant differences in the distribution of patients among the severity DRGs between those in IPPS hospitals and those in LTCHs. Accordingly, we agree with the comments that it would be appropriate to further adjust the proposed budget neutrality adjustment that we are utilizing for IPPS hospitals to reflect the experiences of the LTCHs. However, due to the complexity of the interactions, at this time we are unable to determine the extent to which MS–LTC–DRGs are susceptible to increased case-mix improvements in documentation and coding in order to estimate an appropriate adjustment for such improvements that would be applicable to LTCHs. Accordingly, we are not finalizing the proposed case-mix budget neutrality factor to the MS–LTC–DRG relative weights at this time.

While some commenters have noted that not all MS–LTC–DRGs are equally susceptible to improvements in documentation and coding and suggested that we apply the adjustment for such improvements to only those MS–LTC–DRGs for which improvements in documentation and coding are possible, we note that in general, we apply adjustments to the LTCH PPS on a system-wide basis since the LTCH PPS is a system devised upon averages. We also note that some commenters attempted to analyze the impact of the short-stay outlier policy and the 25 percent rule on improvements in documentation and coding. As we stated previously in this final rule, we continue to believe that payment adjustments that were finalized in the RY 2008 LTCH PPS final rule, among which was the revision to the short-stay outlier policy (§ 412.529(c)) noted by the commenters, will result in more appropriate Medicare payments to LTCHs. The revised short-stay outlier policy addresses the issue of LTCH discharges that are comparable to an acute care IPPS hospital discharge based on the length of stay for that discharge. That policy is not tied to or affected by the adoption of the MS–LTC–DRGs. Nor do we believe that the extension of the 25 percent threshold adjustment that we finalized for RY 2008 at revised 412.534 and new 412.536, which governs Medicare payments for patients discharged from LTCHs who were admitted from specific referring hospitals, is tied to or affected by the adoption of the MS–LTC–DRGs. Furthermore, as noted above, since the MS–LTC–DRGs are so structurally similar to the LTC–DRGs, we do not believe that postponing the adoption of the severity-weighted DRGs in order to evaluate the interaction of the policy changes implemented for the LTCH PPS for RY 2008 would confer any significant advantage to stakeholders. However, we agree with the commenters that the fact that a large number of LTCH discharges are paid as short-stay outliers based on cost could have an effect on the budget neutrality adjustment applicable to LTCHs as compared to the adjustment we are finalizing for the IPPS and the LTCH budget neutrality would need to be adjusted accordingly.

In response to the commenter's concern that our policy changes and routine rate and weighting adjustments result in large payment fluctuations for some DRGs, we note that fluctuations are seen year to year resulting from refinements to the LTC PPS that are necessary in order to pay appropriately for LTCH cases. Each year, we recalibrate the relative weights based on the most recent available LTCH claims data, which reflect current LTCH patient mix and coding practices. The annual recalibration of the relative weights to which LTCH cases are assigned will appropriately reflect more or less resource use than the previous year's LTC–DRG relative weights. We understand the concerns expressed by the commenters regarding the fluctuations in payments for certain MS–LTC–DRGs based on the proposed FY 2008 reweighting of the MS–LTC–DRGs. However, we remind the commenters that the existing budget neutrality requirement for changes in DRGs and recalibrating the relative weights mitigates any effect of the change to MS–LTC–DRGs on estimated aggregate LTCH PPS payments. Additionally, as we have discussed earlier, transitioning the relative weights for FY 2008 should further mitigate the effects from adoption of the MS–LTC–DRG system. For the reasons discussed in the comments and responses section of this final rule with comment period, we will not be implementing the proposed case-mix budget neutrality factor to the MS–LTC–DRG relative weights at this time.

While we agree that the IPPS adjustment would need to be adjusted to be applicable to LTCHs, we continue to believe more accurate and complete documentation and coding will occur because it will result in higher aggregate payments under the MS–LTC–DRG system. We have every reason to expect that hospitals will respond to the adoption of MS–LTC–DRGs in much the same way as they have responded to similar events in the past. They will improve their documentation and coding of diagnoses and procedures, and this change will lead to increases in reported case mix. The reason to make offsetting adjustments is also the same. Although hospitals' efforts to improve the specificity and accuracy of documentation and coding are perfectly legitimate, the increases in payments that result are not warranted because the increase in measured case-mix does not reflect any real change in illness severity or the cost of care for the patients being treated. Therefore, offsetting adjustments to the PPS payment rates are needed to protect the Medicare program from unwarranted increases in spending. We believe the question is not *whether* documentation and coding will improve, resulting in higher case mix and payments, rather, the question is only *how much* will coding change when the incentives to code particular secondary diagnoses change with the adoption of MS–LTC–DRGs, and how long will these changes continue.

Section 123 of the BBRA, as amended by section 307(b) of the BIPA, provides that the Secretary may specify appropriate adjustments to the long-term care hospital payment system, including updates. This broad discretionary authority includes our ability to make adjustments and updates for case mix changes due to improved coding and documentation changes that do not reflect real change in case mix regardless of whether such adjustment

is for anticipated case-mix changes or case mix changes that occurred in a previous time period. We remain convinced that an adjustment is needed to eliminate the effect of changes in coding or classification of LTCH discharges that do not reflect real change in case mix resulting from the adoption of the proposed MS–LTC–DRGs. However, as discussed above, after revisiting this issue, we believe that the adjustment for anticipated improvements in coding and documentation adopted in this final rule with comment period for IPPS hospitals needs to be adjusted to apply to LTCHs. At this time, CMS has not been able to determine an appropriate adjustment to the factor used for IPPS hospitals in order to make it applicable to LTCHs; however, we will continue to monitor LTCHs' response to the MS–LTC–DRG transition. Beginning with RY 2009, if CMS is able to estimate an appropriate adjustment factor applicable to LTCHs, CMS would propose an adjustment factor to LTCHs to account prospectively for coding and documentation changes. We note that in previous years, we have adjusted the annual update to the LTCH PPS standardized rate for case-mix changes due to coding and documentation changes to recoup payments made in a *prior* period by making a prospective adjustment during the rate setting cycle. Specifically, the adjustments for coding and documentation changes implemented in the RY 2007 and RY 2008 regulations were based on actual LTCH case mix data from FY 2004 and FY 2005, respectively (71 FR 27820–2 and 72 FR 26887–90). Since we have an established mechanism to adjust LTCH payments to account for the effect of changes in coding and documentation which is based on actual LTCH data and since we cannot determine an appropriate adjustment factor applicable to LTCHs at this time, we believe it is appropriate to continue using this established process rather than making an adjustment at this time based on an estimate of projected LTCH specific case mix change due to improved coding and documentation. Therefore, at this time, we are not finalizing the proposed case-mix budget neutrality factor to the MS–LTC–DRG relative weights in FY 2008. Instead, consistent with past LTCH payment policy, we could propose to make future adjustments to account for improvements in coding and documentation that do not reflect real changes in case samix during these years that we are implementing MS–LTC–DRGs.

Comment: Finally, one commenter believed that CMS' proposal for FY 2008 would effectively penalize LTCHs twice for the same case-mix changes. That is, the commenter noted that in RY 2008, CMS finalized a retrospective adjustment to account for past coding improvements by reducing the expected update (*i.e.*, full market basket) to the standard payment rate by 2.49 percent in order to recoup payments made in a prior period (FY 2005). The commenter further noted that the reduction in the market basket update reduces the base rate and therefore has a permanent prospective effect. The commenter stated that ''the effect of the case-mix reduction to the market basket of 2.49 percent is applicable to payments in RY 2008 and each rate year thereafter. It is never made up.'' The commenter concluded that the ''additional downward coding adjustment factor of 2.4 percent in each of two years, or any other adjustment that is not borne out by careful retrospective analyses after the full transition to MS–LTC–DRGs, to payments to LTCHs in future years, is redundant and unsupported.''

Response: As discussed above, we are not implementing the proposed case-mix budget neutrality factor to the MS–LTC–DRG relative weights in FY 2008. Where CMS ultimately determines that an adjustment is necessary, CMS will propose adjustments to the LTCH PPS in order to account for changes to coding or documentation that do not reflect real changes in case-mix.

J. Add-On Payments for New Services and Technologies

1. Background

Sections 1886(d)(5)(K) and (L) of the Act establish a process of identifying and ensuring adequate payment for new medical services and technologies (sometimes collectively referred to in this section as ''new technologies'') under the IPPS. Section 1886(d)(5)(K)(vi) of the Act specifies that a medical service or technology will be considered new if it meets criteria established by the Secretary after notice and opportunity for public comment. Section 1886(d)(5)(K)(ii)(I) of the Act specifies that the process must apply to a new medical service or technology if, ''based on the estimated costs incurred with respect to discharges involving such service or technology, the DRG prospective payment rate otherwise applicable to such discharges under this subsection is inadequate.''

The regulations implementing this provision establish three criteria for new medical services and technologies to receive an additional payment. First, § 412.87(b)(2) states that a specific medical service or technology will be considered new for purposes of new medical service or technology add-on payments until such time as data are available to reflect the cost of the technology in the DRG weights through recalibration. There is a lag of 2 to 3 years from the point a new medical service or technology is first introduced on the market (generally on the date that the technology receives FDA approval) and when data reflecting the use of the medical service or technology are used to calculate the DRG weights. For example, data from discharges occurring during FY 2006 are used to calculate the FY 2008 DRG weights in this final rule with comment period. Section 412.87(b)(2) provides that, ''a medical service or technology may be considered new within 2 or 3 years after the point at which data begin to become available reflecting the ICD–9–CM code assigned to the new medical service or technology (depending on when a new code is assigned and data on the new medical service or technology become available for DRG recalibration). After CMS has recalibrated the DRGs based on available data to reflect the costs of an otherwise new medical service or technology, the medical service or technology will no longer be considered 'new' under the criterion for this section.''

The 2-year to 3 year period during which a medical service or technology can be considered new would ordinarily begin with FDA approval, unless there was some documented delay in bringing the product onto the market after that approval (for instance, component production or drug production has been postponed until FDA approval due to shelf life concerns or manufacturing issues). After the DRGs have been recalibrated to reflect the costs of an otherwise new medical service or technology, the special add-on payment for new medical services or technologies ceases (§ 412.87(b)(2)). For example, an approved new technology that received FDA approval in October 2006 and entered the market at that time may be eligible to receive add-on payments as a new technology until FY 2010 (discharges occurring before October 1, 2009), when data reflecting the costs of the technology could be used to recalibrate the DRG weights. Because the FY 2009 DRG weights would be calculated using FY 2007 MedPAR data, the costs of such a new technology would be reflected in the FY 2009 DRG weights.

Section 412.87(b)(3) further provides that new medical services or technologies must be inadequately paid

otherwise under the DRG system to receive the add-on payment. To assess whether technologies would be inadequately paid under the DRGs, we establish thresholds to evaluate applicants for new technology add-on payments. In the FY 2004 IPPS final rule (68 FR 45385), we established the threshold at the geometric mean standardized charge for all cases in the DRG plus 75 percent of 1 standard deviation above the geometric mean standardized charge (based on the logarithmic values of the charges and transformed back to charges) for all cases in the DRG to which the new medical service or technology is assigned (or the case weighted average of all relevant DRGs, if the new medical service or technology occurs in many different DRGs).

However, section 503(b)(1) of Pub. L. 108–173 amended section 1886(d)(5)(K)(ii)(I) of the Act to provide for ''applying a threshold * * * that is the lesser of 75 percent of the standardized amount (increased to reflect the difference between cost and charges), or 75 percent of 1 standard deviation for the diagnosis-related group involved.'' The provisions of section 503(b)(1) apply to classification for fiscal years beginning with FY 2005. (We refer readers to section IV.D. of the preamble to the FY 2005 IPPS final rule (69 FR 49084) for a discussion of the revision of the regulations to incorporate the change made by section 503(b)(1) of Pub. L. 108–173.) Table 10 of the Addendum to the FY 2007 IPPS final rule (71 FR 48319) contained the final thresholds that are being used to evaluate applications for new technology add-on payments for FY 2008. An applicant must demonstrate that the cost threshold is met using information from inpatient hospital claims.

We were recently asked to revisit the issue of whether the HIPAA Privacy Rule at 45 CFR Parts 160 and 164 applies to claims information that providers submit with applications for new technology add-on payments. We previously addressed this issue in the September 7, 2001 final rule (66 FR 46917) that established the new technology add on payment regulations. In the preamble to that final rule, we explained that health plans, including Medicare, and providers that conduct certain transactions electronically, including the hospitals that would be receiving payment under the FY 2001 IPPS final rule, are required to comply with the HIPAA Privacy Rule. We further explained how such entities could meet the applicable HIPAA requirements by discussing how the HIPAA Privacy Rule permitted providers to share with health plans information needed to ensure correct payment, if they had obtained consent from the patient to use that patient's data for treatment, payment, or health care operations. We also explained that because the information to be provided within applications for new technology add-on payment would be needed to ensure correct payment, no additional consent would be required. The HHS Office of Civil Rights has since amended the HIPAA Privacy Rule, but the results remain. The HIPAA Privacy Rule no longer requires covered entities to obtain consent from patients to use or disclose protected health information for treatment, payment, or health care operations, and expressly permits such entities to use or to disclose protected health information for any of these purposes. (We refer readers to 45 CFR 164.502(a)(1)(ii), and 506(c)(1) and (c)(3) and the Standards for Privacy of Individually Identifiable Health Information published in the **Federal Register** on August 14, 2002, for a full discussion of changes in consent requirements).

Section 412.87(b)(1) of our existing regulations provides that a new technology is an appropriate candidate for an additional payment when it represents ''an advance that substantially improves, relative to technologies previously available, the diagnosis or treatment of Medicare beneficiaries.'' For example, a new technology represents a substantial clinical improvement when it reduces mortality, decreases the number of hospitalizations or physician visits, or reduces recovery time compared to the technologies previously available. (We refer readers to the September 7, 2001 final rule (66 FR 46902) for a complete discussion of this criterion.)

The new medical service or technology add-on payment policy provides additional payments for cases with high costs involving eligible new medical services or technologies while preserving some of the incentives under the average-based payment system. The payment mechanism is based on the cost to hospitals for the new medical service or technology. Under § 412.88, Medicare pays a marginal cost factor of 50 percent for the costs of a new medical service or technology in excess of the full DRG payment. If the actual costs of a new medical service or technology case exceed the DRG payment by more than the 50-percent marginal cost factor of the new medical service or technology, Medicare payment is limited to the DRG payment plus 50 percent of the estimated costs of the new technology.

Section 1886(d)(4)(C)(iii) of the Act requires that the adjustments to annual DRG classifications and relative weights must be made in a manner that ensures that aggregate payments to hospitals are not affected. Further, the Congressional report language accompanying section 533 of Pub. L. 106–554 indicated Congress' intent to require the Secretary to implement the new mechanism on a budget neutral basis (H.R. Conf. Rep. No. 106–1033, 106th Cong., 2nd Sess. at 897 (2000)). Therefore, in the past, we accounted for projected payments under the new medical service and technology provision during the upcoming fiscal year at the same time we estimated the payment effect of changes to the DRG classifications and recalibration. The impact of additional payments under this provision was then included in the budget neutrality factor, which was applied to the standardized amounts and the hospital-specific amounts.

Section 1886(d)(5)(K)(ii)(III) of the Act, as amended by section 503(d)(2) of Pub. L. 108–173, provides that there shall be no reduction or adjustment in aggregate payments under the IPPS due to add-on payments for new medical services and technologies. Therefore, add-on payments for new medical services or technologies for FY 2005 and later years have not been budget neutral.

Applicants for add-on payments for new medical services or technologies for FY 2009 must submit a formal request, including a full description of the clinical applications of the medical service or technology and the results of any clinical evaluations demonstrating that the new medical service or technology represents a substantial clinical improvement, along with a significant sample of data to demonstrate the medical service or technology meets the high-cost threshold. Complete application information, along with final deadlines for submitting a full application, will be available on our Web site after the publication of this FY 2008 IPPS final rule at: *http://www.cms.hhs.gov/AcuteInpatientPPS/08_newtech.asp.* To allow interested parties to identify the new medical services or technologies under review before the publication of the proposed rule for FY 2009, the Web site will also list the tracking forms completed by each applicant.

2. Public Input Before Publication of a Notice of Proposed Rulemaking on Add-On Payments

Section 1886(d)(5)(K)(viii) of the Act, as amended by section 503(b)(2) of Pub. L. 108–173, provides for a mechanism

for public input before publication of a notice of proposed rulemaking regarding whether a medical service or technology represents a substantial clinical improvement or advancement. The process for evaluating new medical service and technology applications requires the Secretary to—

- Provide, before publication of a proposed rule, for public input regarding whether a new service or technology represents an advance in medical technology that substantially improves the diagnosis or treatment of Medicare beneficiaries.
- Make public and periodically update a list of the services and technologies for which applications for add-on payments are pending.
- Accept comments, recommendations, and data from the public regarding whether a service or technology represents a substantial clinical improvement.
- Provide, before publication of a proposed rule, for a meeting at which organizations representing hospitals, physicians, manufacturers, and any other interested party may present comments, recommendations, and data regarding whether a new medical service or technology represents a substantial clinical improvement to the clinical staff of CMS.

In order to provide an opportunity for public input regarding add-on payments for new medical services and technologies for FY 2008 before publication of the FY 2008 IPPS proposed rule, we published a notice in the **Federal Register** on December 22, 2006 (71 FR 77031), and held a town hall meeting at the CMS Headquarters Office in Baltimore, MD, on February 22, 2007. In the announcement notice for the meeting, we stated that the opinions and alternatives provided during the meeting would assist us in our evaluations of applications by allowing public discussion of the substantial clinical improvement criterion for each of the FY 2008 new medical service and technology add on payment applications before the publication of the FY 2008 IPPS proposed rule.

Approximately 70 individuals attended the town hall meeting in person, while additional participants listened over an open telephone line. Boston Scientific presented data on how its product (Wingspan® Stent System with Gateway™ PTA Balloon Catheter) meets the substantial clinical improvement criterion, as well as the need for additional payments to ensure its access to Medicare beneficiaries. No other attendees at the town hall meeting made a presentation with regard to the Wingspan® new technology add-on payment application.

In the FY 2008 IPPS proposed rule, we considered Boston Scientific's presentation made at the town hall meeting, as well as written comments submitted with their application, in our evaluation of the Wingspan® new technology application for FY 2008 in the FY 2008 IPPS proposed rule. We have summarized these comments under section I.4. of the preamble of this final rule with comment period. At the Town Hall meeting, we did not receive any other comments regarding substantial clinical improvement of Wingspan®.

There were a number of public comments made at the Town Hall meeting suggesting that CMS provide more specific detail about how it would apply the substantial clinical improvement criterion. For example, the public commenters at the Town Hall meeting suggested that CMS provide clear guidance with respect to the type of data that applicants should submit to support an application for add-on payments for new medical services and technologies. We were asked to work with stakeholders, including researchers, clinicians, representatives of patients, and manufacturers, to develop specific criteria and data quality standards that would make determinations of ''substantial clinical improvement'' more predictable and transparent.

In the FY 2008 IPPS proposed rule, we welcomed public comment on this issue. In particular, we indicated that we were interested in any ''specific criteria or data quality standards'' that the commenters believed we should adopt to improve the new technology add-on application process, or any concerns or challenges that commenters believed we may encounter in undertaking this effort. Again, as we stated at the new technology Town Hall meeting, we indicated that we continue to be interested in working with our stakeholders to improve the inpatient new technology add-on payment process. We stated that we were interested in ensuring that the latest medical technology that improves care for the Medicare patient population continues to be available to our beneficiaries.

Comment: One commenter supported how CMS currently evaluates whether a technology represents a substantial clinical improvement over existing technologies. Specifically, the commenter stated, ''we believe the new technology add-on payment mechanism is structured fairly and provides technologies that truly improve care with a challenging yet reasonable opportunity to qualify for enhanced payment status * * * the criteria articulated by CMS to prove substantial clinical improvement offer significant discretion and flexibility on the parts of both applicants and CMS to, respectively, demonstrate and decide whether a new technology truly represents an advancement in care.''

Response: We appreciate the commenter's support of our application of the criteria we currently use to determine whether a new technology merits an add-on payment. The commenter noted that the current standards allow us an opportunity to be both fair and flexible and for each individual application to be evaluated on a case-by-case basis rather than by a stringent set of inflexible criteria. We believe the commenter raises a reasonable concern that establishing specific data standards may make it more difficult for an applicant to qualify for a new technology add-on payment because such standards cannot account for the various types of new technologies that may become available in the future and the types of requirements that those novel technologies may or may not be able to meet.

Comment: Several commenters suggested that CMS revise or alter the standards we use to determine whether a technology meets the substantial clinical improvement criterion. One commenter requested that CMS ''quickly announce its proposed data standards for a showing of substantial clinical improvement'' and stated that, in the past, CMS did not provide clear guidance on the type of data that applicants would need to submit. The commenter applauded CMS' recent endeavor to provide clear guidance on the issue. Another commenter supported the provision of more detailed criteria for the types of data and documentation that would help to demonstrate whether a new technology was a substantial clinical improvement, but did not recommend any specific standards that CMS could use. The commenter did, however, recommend that applicants utilize credentialed coding professionals to ensure correct codes and DRGs are identified prior to submitting a detailed cost analysis.

Response: The purpose of us asking for public input on how to improve the substantial clinical improvement criterion was to garner information and ideas from the public and stakeholders about how that specific criterion could be improved. We note that we did not propose any specific standards for substantial clinical improvement, but

instead, we were anticipating that members of the public, including those who recommended we revise our standards, would suggest some ideas that we could consider adopting in a subsequent notice of proposed rule-making. Our goal was to present the ideas submitted by the public commenters to learn whether past or potential future applicants would find them useful.

In response to the comment suggesting that an applicant seek coding advice before submitting a new technology application, our regulations neither require nor prohibit an applicant from using the any specific type of expertise available in the health care community in preparing its application. We certainly encourage applicants to make the best possible case for why the technology that interests them should receive an add-on payment. If that effort involves use of a medical coder, we encourage the applicant to seek that expertise.

Comment: One commenter recommended that CMS deem the ''drugs and biologicals for which the FDA has granted fast track approval or approval based on surrogate endpoints to represent substantial clinical improvements.'' The commenter also suggested that CMS deem a device to be a substantial clinical improvement ''* * * if it has been granted a humanitarian device exemption or priority review based on the fact that it represents breakthrough technologies, that offer significant advantages over existing approved alternatives, for which no alternatives exist, or the availability of which is in the best interests of the patients.''

Response: The FDA provides a number of different types of approvals to devices, drugs and other medical products. At this time, we do not believe that any particular type of FDA approval alone would automatically demonstrate a substantial clinical improvement for the Medicare population. However, as noted in previous final rules, we do take FDA approval into consideration in our evaluation of new technology applications. We note that an Humanitarian Device Exemption (HDE) approval only requires an approval threshold of safety and probable benefit as opposed to the safety and effectiveness standard that exists for pre-market approval (PMA). Among other requirements, the labeling of a humanitarian use device must state that the effectiveness of the device for the specific indication has not been demonstrated. While an HDE approval certainly does not preclude us from considering a technology for an add-on payment (as we do in this final rule with comment period for Wingspan®), neither does it suggest that the product automatically meets the requirement to be judged a substantial clinical improvement. We will continue to evaluate products receiving an HDE approval by measuring it against the specific criteria we listed for determining substantial clinical improvement at 66 FR 46914.

Comment: One commenter stated that our current administration of the substantial clinical improvement criterion is ''inconsistent and unnecessarily opaque.'' The commenter recommended that CMS ''convene a panel of stakeholders, including researchers, clinicians, industry representatives and patient groups to develop specific, generally applicable criteria for determining whether a new product represents a substantial clinical improvement, including the creation of objective standards for the use of external data.'' The commenter specifically recommended that we convene a panel to consider, as a starting point for developing more specific standards on substantial clinical improvement, the following criteria:

- Clinical Effectiveness: The expected magnitude of improvement in patient health outcomes, including mortality, morbidity, quality of life, and functional status.
- Clinical and Organizational Efficiency: The expected impact of the technology on resource utilization, assessed at the level of individual patients. CMS would consider improvements in the timely and efficient delivery of care, as well as short and long-term savings across various settings of care. In addition, CMS would weigh the expected impact of the technology on resource utilization, assessed at the level of health care institutions and the health care system. This would include the impact on worker productivity, the extent to which the technology increases the capacity of existing facilities, etc.
- Strength and Consistency of Evidence: The level of confidence that the judgments about clinical effectiveness and clinical efficiency are reliable and based on scientific studies, pathophysiologic reasoning, economic modeling, clinical judgment and other sources of information. The assessment of evidence should be undertaken with recognition of the practical and economic challenges to proving definitively the benefits of novel technologies.
- Safety: The degree to which the technology may reduce the risk of adverse events for patients and health care providers.

Response: In response to the comment that suggested that our application of the substantial clinical improvement criterion is ''inconsistent and unnecessarily opaque,'' we again note that the intent of soliciting comments on this topic in the proposed rule was to obtain ideas for how to make improvements in our policy from those who are dissatisfied with it. Nevertheless, we reiterate that CMS has been committed to providing ample opportunity for applicants and other interested parties to make their views known to us through the application process, at the annual public meeting, and during the comment period on the proposed rule. We encourage interested parties to contact CMS staff for more information about the new technology add-on application process. Interested parties may contact Tiffany Swygert at (410) 786–4642 or Michael Treitel at (410) 786–4552.

In response to the comment about convening a panel of stakeholders, we believe the commenter is suggesting that we establish an advisory panel under the Federal Advisory Committee Act (FACA). Although we believe it may be unnecessary to establish a FACA committee solely for this purpose, we do not have objections to having a one-time public meeting specifically to consider ideas that are raised on this topic. We convened a new technology and coding workshop this past year prior to the New Technology Town Hall meeting. We received favorable feedback from the many attendees at that meeting and we would consider having a similar meeting intended to garner ideas for addressing the topic of specific data standards.

In response to the ideas offered in the public comments that could be used as a basis of developing more specific and transparent criteria for evaluating whether a technology represents a substantial clinical improvement, it is exactly these kinds of ideas for which we would like further public reaction—potentially through a forum like the public meeting noted above. We are interested in public comments from past or potential future new technology applicants and other stakeholders whether these ideas would improve the new technology application process and if they should be developed further.

Comment: A number of commenters addressed topics relating to the marginal cost factor for new technology, implementation of ICD–10–CM, external

data, and changing our standards under the newness criterion.

Response: We did not request comment nor propose to make any changes to any of the issues addressed by the commenters. As the comments are unrelated to any of the provisions in the proposed rule, we are not responding to them in this final rule with comment period.

3. FY 2008 Status of Technologies Approved for FY 2007 Add-On Payments

a. Endovascular Graft Repair of the Thoracic Aorta

W. L. Gore & Associates, Inc., submitted an application for consideration of its Endovascular Graft Repair of the Thoracic Aorta (GORE TAG) for new technology add-on payments for FY 2006. The manufacturer argued that endovascular stent-grafting of the descending thoracic aorta provides a less invasive alternative to the traditional open surgical approach required for the management of descending thoracic aortic aneurysms. The GORE TAG device is a tubular stent-graft mounted on a catheter-based delivery system, and it replaces the synthetic graft normally sutured in place during open surgery. The device was initially identified using ICD–9–CM procedure code 39.79 (Other endovascular repair (of aneurysm) of other vessels). The applicant also requested a unique ICD–9–CM procedure code. As noted in Table 6B of the FY 2006 IPPS final rule (70 FR 47637), new procedure code 39.73 (Endovascular implantation of graft in thoracic aorta) was assigned to this technology.

In the FY 2006 IPPS final rule (70 FR 47356), we approved the GORE TAG device for new technology add-on payment for FY 2006. FDA approved GORE TAG on March 23, 2005. Because the technology remained within the 2- to 3-year period during which it could be considered new for FY 2007, we continued add-on payments for the endovascular graft repair of the thoracic aorta in the FY 2007 IPPS final rule (71 FR 47999). GORE TAG will have been on the market for more than 3 years as of March 23, 2008, or less than 6 months of FY 2008. Our practice has been to begin and end new technology add-on payments on the basis of a fiscal year. In general, we extend add-on payments for an additional year only if the 3-year anniversary date of the product's entry on the market occurs in the latter half of the fiscal year (70 FR 47362). Because the 3-year anniversary date of GORE TAG's entry onto the market was in the first half of the fiscal year, in the FY 2008 IPPS proposed rule, we proposed to discontinue its new technology add-on payment for FY 2008. In response to the proposed rule, we received the following public comments:

Comment: One commenter recommended that we continue to make add-on payments for GORE TAG since the approval date of the device is only 8 days away from being in the second half of FY 2008. The commenter requested that CMS should consider the possible delay in making this technology available on the market since devices can routinely take several months to enter the general provider population.

Another commenter, the manufacturer of GORE TAG, also requested that we continue to make the new technology add-on payments for an additional year and noted that the technology remains inadequately paid under the MS–DRGs.

Response: As we stated in the proposed rule, GORE TAG received FDA approval on March 23, 2005 which falls in the first half of FY 2005. The 3-year anniversary of the product's FDA approval will be during the first half of FY 2008. Our policy is that we only provide an additional year of new technology add-on payment if the 3-year anniversary of FDA approval is during the second half of the fiscal year unless we receive evidence of a documented delay in making the product available on the market. The manufacturer did not provide a documented delay in marketing of the device. Therefore, our policy is not to allow the product to receive an additional year of new technology add-on payments.

Although we are not extending an additional year of new technology add-on payments to GORE TAG, we note that cases where a thoracic aortic stent is placed through an endovascular procedure will be reassigned from MS–DRG 238 (Major Cardiovascular Procedures without MCC) to MS–DRG 237 (Major Cardiovascular Procedures without MCC). For more information, we refer readers to section II.D. of the preamble of this final rule with comment period.

Because the technology no longer meets the newness criterion, we are finalizing our proposal to discontinue new technology add-on payments for GORE TAG for FY 2008.

b. Restore® Rechargeable Implantable Neurostimulator

Medtronic Neurological submitted an application for new technology add-on payments for its Restore® Rechargeable Implantable Neurostimulator for FY 2006. The Restore® Rechargeable Implantable Neurostimulator is designed to deliver electrical stimulation to the spinal cord to block the sensation of pain. The technology standard for neurostimulators uses internal sealed batteries as the power source to generate the electrical current. These internal batteries have finite lives, and require replacement when their power has been completely discharged. According to the manufacturer, the Restore® Rechargeable Implantable Neurostimulator ''represents the next generation of neurostimulator technology, allowing the physician to set the voltage parameters in such a way that fully meets the patient's requirements to achieve adequate pain relief without fear of premature depletion of the battery.'' The applicant stated that the expected life of the Restore® rechargeable battery is 9 years, compared to an average life of 3 years for conventional neurostimulator batteries. We approved new technology add-on payments for all rechargeable, implantable neurostimulators for FY 2006 and FY 2007. Cases involving these devices, made by any manufacturer, are identified by the presence of newly created ICD–9–CM code 86.98 (Insertion or replacement of dual array rechargeable neurostimulator pulse generator).

The FDA approved the Restore® Rechargeable Implantable Neurostimulator in 2005. However, as noted in the FY 2006 IPPS final rule (70 FR 47358), at least one similar product was approved by the FDA as early as April 2004. Because the Restore® Rechargeable Implantable Neurostimulator will be beyond the 2- to 3-year period during which it can be considered new for FY 2008, in the FY 2008 IPPS proposed rule, we proposed to discontinue add-on payments for the technology in FY 2008. In response to the proposed rule, we received the following public comments:

Comment: The manufacturer of Restore® recommended that we continue to make add-on payments for rechargeable implantable neurostimulators for an additional year. The commenter indicated that an additional year of the add-on payment, ''maintains the hospital payment level for rechargeable neurostimulator devices until data reflects the market volume and costs associated with rechargeable technology.'' The commenter stated that ''rechargeable neurostimulators were launched in 2005 in a limited fashion and the majority were sold during the second half of FY 2005.'' The commenter also noted that Restore® was launched on the market on April 8, 2005 and that a unique ICD–9–

CM procedure code to identify rechargeable neurostimulators was not created until FY 2006. According to the commenter, prior to the date for which a unique ICD–9–CM code was effective, ''there was no way to identify rechargeable neurostimulators separately from non-rechargeable ones.'' The manufacturer stated that there were 12,801 rechargeable neurostimulators sold in FY 2006, but its analysis of FY 2006 MedPAR data showed that only 0.3 percent of all rechargeable neurostimulators sold in the United States were implanted in Medicare patients in the inpatient hospital setting. Therefore, the manufacturer suggested, the low utilization of rechargeable stimulators in FY 2005 may be justification for extending the add-on payment period because they ''still fall within the 2–3 year period of newness to qualify for add-on.''

Response: Implantable rechargeable neurostimulators do not qualify for an additional year of new technology add-on payments. As we indicated in the FY 2006 final rule, the Advanced Bionics Precision® Rechargeable Neurostimulator was approved by the FDA on April 2004 (70 FR 47358). Thus, the FDA approved a substantially similar rechargeable neurostimulator product more than 3 years ago. No commenters provided documentation or even asserted that there was a delay in the marketing of the Advanced Bionics Precision® Rechargeable Neurostimulator. Therefore, we are finalizing our proposal to discontinue new technology add-on payments for rechargeable implantable neurostimulators for FY 2008. Although we are not extending an additional year of new technology add-on payments for rechargeable implantable neurostimulators, we are making the following DRG reassignments:

- MDC 1—Spinal neurostimulators from MS–DRG 30 (Spinal Procedures without CC) to MS–DRG–29 (Spinal Procedures with CC);
- MDC 1—Peripheral neurostimulators from MS–DRG 42 (Peripheral and Cranial Nerve and Other Nervous System Procedures without CC) to MS–DRG 41 (Peripheral and Cranial Nerve and Other Nervous System Procedures with CC);
- MDC 8—Full system spinal cord neurostimulators from MS–DRG 491 (Back and Neck Procedures Except Spinal Fusion without CC/MCC) to MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC/MCC or Disc Devices).

For more information on DRG reassignments for rechargeable implantable neurostimulators, we refer readers to section II.G.2. of the preamble of this final rule with comment period.

c. X STOP Interspinous Process Decompression System

St. Francis Medical Technologies submitted an application for new technology add-on payments for the X STOP Interspinous Process Decompression System (X STOP) for FY 2007. Lumbar spinal stenosis describes a condition that occurs when the spaces between bones in the spine become narrowed due to arthritis and other age-related conditions. This narrowing, or stenosis, causes nerves coming from the spinal cord to be compressed, thereby causing symptoms including pain, numbness, and weakness. It particularly causes symptoms when the spine is in extension, when a patient stands fully upright or leans back. The X STOP device is inserted between the spinous processes of adjacent vertebrae in order to provide a minimally invasive alternative to conservative treatment (exercise and physical therapy) and invasive surgery (spinal fusion). It works by limiting the spine's extension that compresses the nerve's roots while still preserving as much motion as possible. The device is inserted in a relatively simple, primarily outpatient procedure using local anesthesia. However, in some circumstances, the physician may prefer to admit the patient for an inpatient stay. The manufacturer described the device as providing ''a new minimally invasive, stand-alone alternative treatment for lumbar spinal stenosis.''

The X STOP Interspinous Process Decompression system received pre-market approval from the FDA on November 21, 2005. The device was initially described by ICD–9–CM code 84.58 (Implantation of Interspinous process decompression device) (excluding: fusion of spine (codes 81.00 through 81.08, and 81.30 through 81.39)). This ICD–9–CM code went into effect on October 1, 2005. As noted in section II.G.4.c. of this preamble of this final rule with comment period, X STOP will be identified by ICD–9–CM code 84.80 (Insertion or replacement of interspinous process device(s)), effective October 1, 2007.

In the FY 2007 final rule, with respect to substantial clinical improvement, we noted our concern that, during the FDA approval process, the Center for Devices and Radiological Health Advisory Panel voted against pre-market approval of X STOP because of concerns about proper patient selection, as well as the lack of objective endpoints. The applicant addressed our concerns by demonstrating that the mechanism of effect on the spine in cadavers with in vivo clinical radiographic data. That is, the applicant was able to show that the X STOP device limits spine extension that compresses the nerve. Thus, we indicated that we believed the technology has promise for providing a less invasive alternative to procedures such as laminectomy or fusion for patients that have failed conservative treatment (exercise, physical therapy, and medication). The X STOP system represents a new level of treatment on the continuum of care for patients with lumbar spinal stenosis that previously did not exist.

Accordingly, after consideration of the comments received, we approved the X STOP Interspinous Process Decompression System for new technology add-on payment for FY 2007. For FY 2007, cases involving X STOP were identified by ICD–9–CM code 84.58 (Implantation of interspinous process decompression device). These cases were generally included in CMS DRG 499 (Back and Neck Procedures Except Spinal Fusion with CC) and CMS DRG 500 (Back and Neck Procedures Except Spinal Fusion without CC) for FY 2007. As noted in section II.G.4.c. of the preamble of this final rule with comment period, beginning FY 2008, cases involving X STOP will be identified with ICD–9–CM code 84.80 and will generally be included in MS–DRG 490 (Back and Neck Procedures Except Spinal Fusion with CC/MCC or Disc Devices or Neurostimulator).

The X STOP Interspinous Process Decompression System is still within the 2- to 3-year period during which it can be considered new for FY 2008. However, in the proposed rule, we noted that we were concerned that it may no longer meet the cost-threshold criterion. In section II.G.4.c. of the preamble of the FY 2008 IPPS proposed rule (72 FR 24734), we proposed to adopt MS–DRGs for FY 2008 and assign cases with procedure codes 84.58 (replaced by procedure code ''84.80'' in this final rule with comment period) into proposed MS–DRG 490. Proposed MS–DRG 490 would include back and neck procedures except spinal fusion with a CC or MCC. As indicated earlier, we did a comprehensive review of the spinal fusion and nonspinal fusion DRGs. Based on this review, we proposed to further modify MS–DRG 490 to also include the higher cost of cases where the patient receives a spinal disc device such as an artificial spinal disc prosthesis, or an interspinous process decompression system. Our earlier analysis of the spinal and nonspinal fusion DRGs showed that the

average charge per case for cases involving X STOP is $29,162. The average charge per case for MS–DRG 490 is $29,656. Therefore, cases that use X STOP have a lower average charge per case than all cases in MS–DRG 490. The data show that the technology is not inadequately paid under the revised MS–DRGs, and it no longer meets the cost threshold for new technology add-on payment. For this reason, we proposed to discontinue new technology add-on payments for X STOP in FY 2008 and correlate the payments under MS–DRG 490. In the FY 2008 IPPS proposed rule, we noted that the high costs for cases using X STOP that necessitated an add-on payment under the CMS DRGs would no longer be necessary if we were to adopt MS–DRGs because of the higher payment that would be made under MS–DRG 490 (72 FR 24734).

We received the following public comments on this proposal:

Comment: One commenter supported our recommendation to discontinue add-on payment for X STOP since it would no longer meet the cost threshold under the MS–DRG system. However, the commenter noted that it would expect the add-on payment to continue if the MS–DRG system was not finalized as proposed.

Response: In this final rule with comment period, we are finalizing our proposals to discontinue new technology add-on payments for X STOP in FY 2008 and to correlate the payments under MS–DRG 490.

4. FY 2008 Application for New Technology Add-On Payments

Boston Scientific submitted an application for the Wingspan® Stent System with Gateway™ PTA Balloon Catheter (Wingspan®) for new technology add-on payments for FY 2008. The device is designed for the treatment of patients with significant intracranial arterial stenosis who are refractory to medical management. The device consists of the following: a self-expanding nitinol stent; a multilumen over wire delivery catheter; and a Gateway™ PTA Balloon Catheter. The device is used to treat stenoses that occur in the intracranial vessels. Prior to stent placement, the Gateway™ PTA Balloon is inflated to dilate the target lesion, and then the stent is deployed across the lesion to restore and maintain luminal patency. Effective October 1, 2004, two new ICD–9–CM procedure codes were created to code intracranial angioplasty and intracranial stenting procedures: procedure codes 00.62 (Percutaneous angioplasty or atherectomy of intracranial vessels) and 00.65 (Percutaneous insertion of intracranial vascular stents).

On August 3, 2005, the Wingspan® was approved by the FDA as an HDE. We note that the applicant submitted an application for new technology add-on payment in FY 2006 but was not approved for add-on payment because it had not yet received FDA approval. In November 2006, we issued a national coverage determination (NCD) on intracranial stents. The NCD stated that the treatment of cerebral artery stenosis in patients with intracranial atherosclerotic disease with intracranial percutaneous transluminal angioplasty (PTA) and stenting is reasonable and necessary when furnished in accordance with the FDA-approved protocols governing Category B Investigational Device Exemption (IDE) clinical trials. Currently, there are no clinical trials in place for the Wingspan®. However, because the technology is covered by Medicare, if it is used in the setting of a clinical trial, in the FY 2008 IPPS proposed rule, we evaluated whether the Wingspan® met the criteria for an inpatient new technology add-on payment. Wingspan® has been available on the market since August 3, 2005. Therefore, we believe that the technology meets the newness criterion.

The applicant noted in its application that cases of intracranial angioplasty and stenting cases are currently grouped to CMS DRGs 533 (Extracranial Procedure with CC) and 534 (Extracranial Procedure Without CC). However, the applicant believes these cases should be assigned to CMS DRGs 1 (Craniotomy Age >17 with CC), 2 (Craniotomy Age >17 without CC), and 543 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis) based on resource use and for clinical consistency with other endovascular intracranial procedures assigned to these DRGs. As discussed in section II.D. of the preamble of the proposed rule and this final rule with comment period, we proposed to move procedure code 00.62 to MS–DRGs 25, 26, and 27 (Craniotomy & Endovascular Intracranial Procedures with MCC, with CC, and without CC/MCC, respectively) and MS–DRGs 23 and 24 (Craniotomy with Major Device Implant or Acute Complex Central Nervous System Principal Diagnosis with MCC or without MCC, respectively) under the MS–DRG system, which are comparable to DRGs 1, 2, and 543 under the current CMS DRG system.

To demonstrate that the Wingspan® meets the cost threshold, the manufacturer submitted data from MedPAR and non-MedPAR databases. Using the FY 2005 MedPAR data, the applicant identified cases of intracranial angioplasty that had a procedure code of 39.50 (Angioplasty or atherectomy of other noncoronary vessels) in combination with one of the following principal diagnosis codes: any principal diagnosis code that begins with the prefix of 433 (Occlusion and stenosis of precerebral arteries), excluding 433.10 (Carotid artery without mention of cerebral infarction) and 433.11 (Carotid artery with cerebral infarction); any principal diagnosis code that begins with the prefix of 434 (Occlusion of cerebral arteries), 437.0 (Cerebral atherosclerosis), 437.1 (Other generalized ischemic cerebrovascular disease), or 437.9 (Unspecified). The applicant noted that procedure code 39.50 is the predecessor code for identifying cases of intracranial angioplasty. The applicant explained that, given the newness of procedure codes 00.62 and 00.65 that were implemented beginning October 1, 2005, it believes there are still cases being coded with the predecessor procedure codes. Using this methodology, the applicant found 577 cases in DRG 533 and 179 cases in DRG 534. The applicant noted that charges in the MedPAR file do not include the total costs of devices, drugs, and medical supplies associated with the Wingspan®, so the applicant conducted an estimate of the charges associated with the Wingspan®. The applicant determined that costs associated with the Wingspan® are approximately $10,073. Because we use charges to determine if a technology meets the threshold, it is necessary to inflate the costs to charges. Using the national average CCR of 0.47, the applicant inflated the costs associated with the Wingspan® to $21,432 in charges. After adding the charges associated with the Wingspan®, the average standardized charge per case was $76,416 and $51,277 for DRGs 533 and 534, respectively.

In the proposed rule, we stated our concern that the cases identified by the applicant may not be a useful proxy to identify cases of intracranial angioplasty. Procedure code 39.50 describes cases of angioplasty in any artery of the body except the heart. Intracranial angioplasty with stenting was not covered by Medicare in any circumstance prior to October 2006. Therefore, the Medicare cases submitted by the applicant under procedure code 39.50 should not involve intracranial angioplasty because they are neither described by the code nor covered by Medicare. Furthermore, procedure code

00.62 is assigned to the Non-Covered Procedure edit of the MCE. The applicant supplied Medicare data from FY 2005 for claims coded with procedure code 00.62. It is unclear to us how these claims were processed despite the Non-Covered Procedure edit. Because these data appear to be based on claims that may not have been coded or processed correctly, we question the reliability and validity of these data. In the FY 2008 IPPS proposed rule, we noted our concern that it may not be appropriate to rely on these data for purposes of determining whether the technology meets the cost threshold (72 FR 24775).

As stated above, the applicant also submitted non-Medicare data. The applicant used the 2005 patient discharge data from California's Office of Statewide Health Planning and Development database for hospitals in California and the 2005 patient data from Florida's Agency for Health Care Administration for hospitals in Florida. Similar to the analysis above, the applicant identified cases of intracranial angioplasty using procedure code 39.50 in combination with the diagnosis codes listed above. The applicant identified 43 cases in DRG 533, and 21 cases in DRG 534. These cases already included charges associated with Wingspan® so it was not necessary to further increase them to include the cost of the technology like the applicant did with the Medicare data. The average standardized charge per case was $89,697 and $40,475 for DRGs 533 and 534, respectively. As discussed above, we are concerned about whether these cases actually represent cases of intracranial angioplasty and are concerned about our inability to validate non-Medicare data. In addition, similar to the analysis described above, the applicant also identified cases of intracranial angioplasty using procedure code 00.62. The applicant found 30 cases in DRG 533, and 23 cases in DRG 534. The average standardized charge per case was $93,215 and $31,479 for DRGs 533 and 534, respectively. Based on these data, the applicant maintains that the technology meets the cost threshold.

As noted above, the applicant has requested that cases of the Wingspan® be reassigned to CMS DRGs 1, 2 and 543. In section II.G.2. of the preamble of the proposed rule, we proposed to assign procedure code 00.62 to proposed MS–DRGs 23, 24, 25, 26 and 27, which we proposed to replace DRGs 1, 2, and 543 of the CMS DRGs. The thresholds in Table 10 of the Addendum of the FY 2007 IPPS final rule (as corrected at 71 FR 60040) for DRGs 1, 2 and 543 are $53,969, $37,116 and $64,397, respectively. Analyzing the same Medicare and non-Medicare data that the applicant used to demonstrate that the Wingspan® exceeds the cost threshold for DRGs 533 and 534, the applicant compared the average standardized charge per case to the thresholds for DRGs 1, 2, and 543. The applicant maintains that the Wingspan® would still exceed the cost threshold even if it were reassigned to DRGs 1, 2, and 543.

However, for the reasons described above, it was not clear to us at the time of the proposed rule whether Wingspan® met the cost threshold for new technology add-on payment. In the proposed rule, we welcomed public comments on this issue. In response, we received the following public comments:

Comment: One commenter was concerned that the technology will not meet the cost criterion unless CMS accepts the external data submitted by the applicant. The commenter raised further concerns that CMS' narrow application of the cost criterion combined with the proposed MS–DRGs will prevent technologies from being approved and discourage manufacturers from seeking add-on payments in the future. The commenter urged CMS to implement new technology add-on payments in a manner that encourages continued innovation and access to advanced technologies.

The applicant supported our decision to reassign the technology from the MS–DRGs for extracranial procedures to the MS–DRGs for craniotomy. However, it stated that CMS should accept the MedPAR and non-MedPAR analyses to evaluate whether the technology meets the cost criterion. The commenter explained that the analysis is based on claims with unique codes which describe intracranial angioplasty and stenting and the economic results are consistent with analogous neuroendovascular procedures. The commenter also noted that two years of MedPAR data showed consistency in resources, mean length of stay and mean standardized charges. Additionally, the costs for cases of intracranial angioplasty with stenting (including resources such as hours spent in radiology, clinical monitoring, and advance imaging evaluations, among others) are consistent with unruptured brain aneurysm treatments with craniotomy assigned to CMS DRGs 1 and 2. The commenter stated that the MedPAR data currently reflect a low volume of cases of intracranial angioplasty because procedures using the technology have not been covered by Medicare. However, the applicant anticipates the volume of cases to increase now that Medicare coverage has been expanded to include the Wingspan ® HDE population. In addition, due to the newness of procedure code 00.62, the applicant supplemented the MedPAR data with external data that includes intracranial angioplasty and stenting which it asserts demonstrates the technology meets the cost criterion.

In addition, the applicant submitted FY 2005 and FY 2006 MedPAR data that included any paid or unpaid cases where procedure code 00.62 was coded. In the FY 2005 MedPAR, the applicant found 21 cases in DRG 533 and fewer than 11 cases in DRG 534. The average standardized charge per case including an additional $21,432 for charges related to the device was $90,312 and $47,144 for DRGs 533 and 534 respectively. In the FY 2006 MedPAR, the applicant found 15 cases in DRG 533 and fewer than 11 cases in DRG 534. The average standardized charge per case including an additional $21,432 for charges related to the device was $75,032 and $55,759 for DRGs 533 and 534 respectively. Based on the data it submitted, the applicant maintains that the Wingspan ® meets the cost criteria for MS–DRGs 23, 24, 25, 26 and 27—the MS–DRGs to which the technology is assigned beginning in FY 2008.

Response: Without further detail from the commenter, we cannot respond to the comment suggesting that we have applied the cost criterion too narrowly. However, we note that CMS policy is to accept external data to determine whether a technology meets the cost criterion provided that it can be validated. Although our preference is to evaluate the cost criterion using data that reflect the cost of cases using the technology in Medicare patients, we do have a policy that permits us to use external data.

We continue to have concerns about validity and reliability of the claims for Medicare cases submitted by the applicant because of Medicare's policy of not covering intracranial angioplasty with stenting at all or only through an FDA approved clinical trial. We note that there is currently no clinical trial in place for Wingspan ® in the United States. Therefore, Medicare should not have paid for any case of intracranial angioplasty with stenting during the time period for which the applicant submitted claims. With respect to the external data submitted by the applicant, we believe it is a useful proxy to determine whether the average standardized charge per case exceeds the thresholds in Table 10. As the

applicant notes, the external data show that the average cost of these cases including the technology exceeds the cost thresholds shown in the IPPS rule for MS–DRGs 23 through 27.

The applicant also maintains that the technology meets the substantial clinical improvement criterion. In the past there has been no surgical or medical treatment available for recurrent strokes that occur despite optimal medical management. The applicant asserts that the Wingspan ® provides a new treatment option for these patients. The applicant submitted three studies to support this position.

First, the applicant cites data derived from a series of cases of 45 patients who received the Wingspan ® that demonstrate 4.4 percent composite ipsilateral stroke or death at 30 days, 7.0 percent composite ipsilateral stroke or death at 6 months, and 9.3 percent ipsilateral stroke or death at 13 months. The applicant then used patients in the well known Warfarin-Aspirin Symptomatic Intracranial Disease (WASID) trial as a historical control against which to compare patients who received Wingspan ®. The WASID trial compared the warfarin vs. aspirin therapy in treating symptomatic intracranial arterial stenosis, and it demonstrated a 23 percent stroke/death rate at one year in patients with severe (70 percent or greater) stenosis, and a 21 percent stroke/death rate at 2 years in patients with 50 percent or greater stenosis. The applicant also submitted data from an ongoing Wingspan ® registry of patients that demonstrate a 4.8 percent stroke/death rate at 30 days, and a 9.7 percent stroke/death rate at 3 to 6 month follow up in 72 patients. In addition, the applicant submitted data from a multicenter NIH registry of 131 patients with 70 percent or greater stenosis that demonstrate an 8.4 percent rate of stroke, intracerebral hemorrhage or death at 30 days and a 9.9 percent rate of stroke and death at the mean 3.2 months followup.

As we noted in the FY 2008 IPPS proposed rule, while we recognize that Wingspan ® may represent a promising technology in patients with significant intracranial arterial stenosis who are refractory to medical management, we are concerned that, to date, there has been no controlled, randomized trial to demonstrate its clinical efficacy (72 FR 24775). We are also concerned that the Wingspan ® data did not compare patients over the same followup periods as WASID. In addition, we are concerned over the use of WASID patients as a control group against which to compare Wingspan ® patients. The current FDA Humanitarian Device Exemption, in combination with the current CMS NCD, while providing access to this technology for very ill patients with generally poor prognoses who have few other options, also effectively designates the technology as investigational, and in need of further studies to prove its effectiveness. We would prefer that the product's effectiveness be demonstrated before we judge whether the product represents a substantial clinical improvement. For these reasons, we are concerned that there may not be sufficient evidence that Wingspan ® represents an advance that substantially improves the diagnosis or treatment of Medicare beneficiaries. However, in the proposed rule, we welcomed public comments that may pertain to this matter.

Comment: Some commenters recommended that CMS approve Wingspan ®. None of the comments, except for a comment from the manufacturer, contained any data or analysis in response to our concerns regarding the substantial clinical improvement criterion. However, the manufacturer did submit a detailed comment, including two studies which were not published at the time of the initial application. One study was the original Wingspan ® study used to achieve HDE status with the FDA; this study was discussed in the FY 2008 IPPS proposed rule (72 FR 24774–24775) and does not contain any new information regarding the efficacy of intracranial stenting. The second study involved a registry of 78 patients with >50 percent stenosis treated at four U.S. institutions, and it was designed to evaluate the acute results of intracranial stenting with the Wingspan ® device. Findings include a 6.1 percent major peri-procedural morbidity and mortality (5 of 78), of which 4 of 78 resulted in death within 30 days. The technical success rate was found to be 98.8% (81/82). The authors of the study concluded that Wingspan ® has a high degree of technical success, that it has an acceptable risk of peri-procedural morbidity and mortality, and that it is a viable endovascular treatment option.

The manufacturer asserted again that the Wingspan ® device ''addresses a treatment need for a patient population, who are unresponsive or inappropriate for other available options and otherwise face a high risk of stroke and death, if left untreated,'' and also that ''Wingspan's self-expanding stent design represents a substantial clinical improvement over off-label balloon expandable stents because of improved access, superior conformability in curved intracranial vessels, and atraumatic deployment to reduce the risk of vessel rupture.'' Finally, the manufacturer asserts significantly improved outcomes in patients receiving Wingspan ® compared to patients treated medically in the WASID study.

Response: We acknowledge that the Wingspan ® technology has the potential to provide a new treatment option for patients who have severe intracranial arterial disease and who are failing currently available medical therapy. The FDA recognized the technology's potential by granting HDE status, and CMS did so by extending limited Medicare coverage in the context of an FDA approved clinical trial. However, neither FDA's HDE approval nor CMS's coverage with evidence development decision prove the technology's effectiveness. As we stated in the FY 2008 IPPS proposed rule, we would prefer that the product's effectiveness be demonstrated before we judge whether Wingspan ® is a substantial clinical improvement in patients that otherwise would have no treatment options. We note that the studies provided by the applicant articulate the need for controlled, randomized prospective studies to determine the effectiveness of the device. Therefore, even information submitted by the applicant raises the concern that it may be premature to find the technology to be a substantial clinical improvement because its effectiveness is yet to be determined.

We remain concerned that in the absence of compelling data such as a prospective, randomized controlled study comparing similar groups of patients, there is not sufficient data to demonstrate that Wingspan ® patients have better outcomes than those who receive medical treatment. Similarly, the data presented also did not demonstrate Wingspan ® patients will not have worse outcomes than those who receive medical treatment. In addition, we do not believe that the currently available data adequately demonstrate effectiveness to qualify as a substantial clinical improvement over existing treatment, particularly in light of the very serious potential adverse events associated with the device. For these reasons, we are not approving the Wingspan ® for new technology add-on payments for FY 2008.

5. Technical Correction

Section 1886(d)(5)(K)(i) of the Act requires that the Secretary establish a mechanism to recognize the costs of new medical services and technologies under subsection (d) of section 1886 of the Act. As made clear under section 1886(d)(1)(A) of the Act, subsection (d)

provides the methodology for payment with respect to the operating costs of inpatient hospital services. Section 1886(g) of the Act provides for payment of capital costs of inpatient hospital services. Although it has always been our policy that new technology add-on payment is available only with respect to operating costs, § 412.88(a)(2) of our regulations does not specifically refer to operating costs or the operating CCR. Therefore, we proposed to revise § 412.88(a)(2) to clarify that the new technology add-on payment is available only for operating costs, and that we estimate the costs of a case by applying the hospital's operating CCR to the billed charges.

We did not receive any public comment on this proposal. Therefore, we are finalizing the proposed revision of § 412.88(a)(2) to clarify that the new technology add on payment is available only for operating costs. This correction will not have an impact on new technology add-on payments because, to the best of our knowledge, MACs already correctly apply only the operating CCR to calculate new technology add-on payments.

III. Changes to the Hospital Wage Index

A. Background

Section 1886(d)(3)(E) of the Act requires that, as part of the methodology for determining prospective payments to hospitals, the Secretary must adjust the standardized amounts ''for area differences in hospital wage levels by a factor (established by the Secretary) reflecting the relative hospital wage level in the geographic area of the hospital compared to the national average hospital wage level.'' In accordance with the broad discretion conferred under the Act, we currently define hospital labor market areas based on the definitions of statistical areas established by the Office of Management and Budget (OMB). A discussion of the FY 2008 hospital wage index based on the statistical areas, including OMB's revised definitions of Metropolitan Areas, appears under section III.B. of the preamble of this final rule with comment period.

Beginning October 1, 1993, section 1886(d)(3)(E) of the Act requires that we update the wage index annually. Furthermore, this section provides that the Secretary base the update on a survey of wages and wage-related costs of short-term, acute care hospitals. The survey must exclude the wages and wage-related costs incurred in furnishing skilled nursing services. This provision also requires us to make any updates or adjustments to the wage index in a manner that ensures that aggregate payments to hospitals are not affected by the change in the wage index. The adjustment for FY 2008 is discussed in section II.B. of the Addendum to this final rule with comment period.

As discussed below in section III.I. of the preamble of this final rule with comment period, we also take into account the geographic reclassification of hospitals in accordance with sections 1886(d)(8)(B) and 1886(d)(10) of the Act when calculating IPPS payment amounts. Under section 1886(d)(8)(D) of the Act, the Secretary is required to adjust the standardized amounts so as to ensure that aggregate payments under the IPPS after implementation of the provisions of sections 1886(d)(8)(B) and (C) and 1886(d)(10) of the Act are equal to the aggregate prospective payments that would have been made absent these provisions. The budget neutrality adjustment for FY 2008 is discussed in section II.A.4.b. of the Addendum to this final rule with comment period.

Section 1886(d)(3)(E) of the Act also provides for the collection of data every 3 years on the occupational mix of employees for short-term, acute care hospitals participating in the Medicare program, in order to construct an occupational mix adjustment to the wage index. A discussion of the occupational mix adjustment that we are applying beginning October 1, 2007 (the FY 2008 wage index) appears under section III.C. of the preamble of this final rule with comment period.

B. Core-Based Statistical Areas for the Hospital Wage Index

The wage index is calculated and assigned to hospitals on the basis of the labor market area in which the hospital is located. In accordance with the broad discretion under section 1886(d)(3)(E) of the Act, beginning with FY 2005, we define hospital labor market areas based on the Core-Based Statistical Areas (CBSAs) established by OMB and announced in December 2003 (69 FR 49027). For a discussion of OMB's revised definitions of CBSAs and our implementation of the CBSA definitions, we refer readers to the preamble of the FY 2005 IPPS final rule (69 FR 49026 through 49032). The revised area designations established by OMB resulted in a higher wage index for some areas and a lower wage index for others. Further, some hospitals that were previously classified as urban became classified as rural. Given the significant payment impacts upon some hospitals because of these changes, we provided a transition period to the new labor market areas in the FY 2005 IPPS final rule. As part of that transition, we allowed urban hospitals that became rural under the new definitions to maintain their assignment to the Metropolitan Statistical Area (MSA) where they were previously located for the 3 year period of FY 2005, FY 2006, and FY 2007. For a discussion of the transition, we refer readers to the FY 2005 IPPS final rule (69 FR 49032 through 49034).

FY 2007 was the last year of the transition period for urban hospitals that became classified as rural. Therefore, for discharges on or after October 1, 2007 (FY 2008), these hospitals will receive their statewide rural wage index or their FY 2008 MGCRB reclassified wage index. (These hospitals were and are eligible to apply for reclassification by the MGCRB both during the transition period and in subsequent years. These hospitals are considered rural for reclassification purposes.)

Consistent with the FY 2005, FY 2006, and FY 2007 IPPS final rules, for FY 2008 we are providing that hospitals receive 100 percent of their wage index based upon the CBSA configurations. Specifically, for each hospital, we will determine a wage index for FY 2008 employing wage index data from FY 2004 hospital cost reports and using the CBSA labor market definitions. We consider CBSAs that are MSAs to be urban, and CBSAs that are Micropolitan Statistical Areas as well as areas outside of CBSAs to be rural. In addition, where an MSA has been divided into Metropolitan Divisions, we consider the Metropolitan Division to comprise the labor market areas for purposes of calculating the wage index (69 FR 49029).

On December 18, 2006, OMB announced the inclusion of two new CBSAs and the revision of designations for six areas (OMB Bulletin No. 07–01). The new CBSAs are as follows:

- Lake Havasu-Kingman, Arizona (CBSA 29420). This CBSA comes from Mohave County, Arizona.
- Palm Coast, Florida (CBSA 37380). This CBSA comes from Flager County, Florida.

The revised CBSA designations are as follows:

- Mauldin, South Carolina and Easley, South Carolina qualify as new principal cities of the Greenville-Mauldin-Easley, South Carolina CBSA.
- Conway, Arkansas qualifies as a new principal city of the Little Rock-North Little Rock-Conway, Arkansas CBSA.
- Goleta, California qualifies as a new principal city of the Santa Barbara-Santa Maria-Goleta, California CBSA.

• Franklin, Tennessee qualifies as a new principal city of the Nashville-Davidson-Murfreesboro-Franklin, Tennessee CBSA.

• Fort Pierce, Florida no longer qualifies as a principal city of the Port St. Lucie-Fort Pierce, Florida CBSA; the new designation is Port St. Lucie, Florida CBSA.

(We note also that OMB renamed the Essex County, Massachusetts Metropolitan Division as the Peabody, Massachusetts Metropolitan Division. OMB also changed the CBSA code from 21604 to 37764.)

The OMB bulletin is available on the OMB Web site at *http://www.whitehouse.gov/OMB*—go to ''Bulletins'' or ''Statistical Programs and Standards.'' CMS will apply these changes to the IPPS beginning October 1, 2007.

Comment: One commenter stated that the term ''Core-Based Statistical Area'' actually includes both Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas (Micropolitan). The commenter also noted that Micropolitan Areas are considered by CMS to be part of statewide rural areas. The commenter agreed that, for the FY 2005 proposed and final rules, it was a good idea for CMS to differentiate between the old and new Census definitions by utilizing the term CBSA rather than MSA. However, the commenter suggested that, to be technically correct, CMS should now return to using the term MSAs when referring to urban areas.

Response: We disagree with the commenter that we should now use the term ''MSA'' rather than ''CBSA'' when referring to urban areas. As the commenter noted, CBSA is the broader classification for MSAs and Micropolitan Areas. Therefore, it is technically correct to refer to either MSA or Micropolitan Areas as CBSAs. Further, when it is necessary for CMS to distinguish between urban and rural areas, we specify ''urban'' or ''rural''. In addition, we believe that our labor market area terminology and definitions are explained clearly enough in the preamble of our proposed and final rules to minimize confusion.

C. Occupational Mix Adjustment to the FY 2008 Wage Index

As stated earlier, section 1886(d)(3)(E) of the Act provides for the collection of data every 3 years on the occupational mix of employees for each short-term, acute care hospital participating in the Medicare program, in order to construct an occupational mix adjustment to the wage index, for application beginning October 1, 2004 (the FY 2005 wage index). The purpose of the occupational mix adjustment is to control for the effect of hospitals' employment choices on the wage index. For example, hospitals may choose to employ different combinations of registered nurses, licensed practical nurses, nursing aides, and medical assistants for the purpose of providing nursing care to their patients. The varying labor costs associated with these choices reflect hospital management decisions rather than geographic differences in the costs of labor.

1. Development of Data for the FY 2008 Occupational Mix Adjustment

On October 14, 2005, we published a notice in the **Federal Register** (70 FR 60092) proposing to use a new survey, the 2006 Medicare Wage Index Occupational Mix Survey (the 2006 survey) to apply an occupational mix adjustment to the FY 2008 wage index. In the proposed 2006 survey, we included several modifications based on the comments and recommendations we received on the 2003 survey, including (1) allowing hospitals to report their own average hourly wage rather than using BLS data; (2) extending the prospective survey period; and (3) reducing the number of occupational categories but refining the subcategories for registered nurses.

We made the changes to the occupational categories in response to MedPAC comments to the FY 2005 IPPS final rule (69 FR 49036). Specifically, MedPAC recommended that CMS assess whether including subcategories of registered nurses would result in a more accurate occupational mix adjustment. MedPAC believed that including all registered nurses in a single category may obscure significant wage differences among the subcategories of registered nurses, for example, the wages of surgical registered nurses and floor registered nurses may differ. Also, to offset additional reporting burden for hospitals, MedPAC recommended that CMS should combine the general service categories that account for only a small percentage of a hospital's total hours with the ''all other occupations'' category because most of the occupational mix adjustment is correlated with the nursing general service category.

In addition, in response to the public comments on the October 14, 2005 notice, we modified the 2006 survey. On February 10, 2006, we published a **Federal Register** notice (71 FR 7047) that solicited comments and announced our intent to seek OMB approval on the revised occupational mix survey (Form CMS 10079 (2006)). OMB approved the survey on April 25, 2006.

The 2006 survey provides for the collection of hospital specific wages and hours data, a 6-month prospective reporting period (that is, January 1, 2006, through June 30, 2006), the transfer of each general service category that comprised less than 4 percent of total hospital employees in the 2003 survey to the ''all other occupations'' category (the revised survey focuses only on the mix of nursing occupations), additional clarification of the definitions for the occupational categories, an expansion of the registered nurse category to include functional subcategories, and the exclusion of average hourly rate data associated with advance practice nurses.

The 2006 survey included only two general occupational categories: nursing and ''all other occupations.'' The nursing category has four subcategories: registered nurses, licensed practical nurses, aides, orderlies, attendants, and medical assistants. The registered nurse subcategory includes two functional subcategories: management personnel and staff nurses or clinicians. As indicated above, the 2006 survey provided for a 6-month data collection period, from January 1, 2006 through June 30, 2006. However, we allowed flexibility for the reporting period begin and end dates to accommodate some hospitals' bi-weekly payroll and reporting systems. That is, the 6-month reporting period had to begin on or after December 25, 2005, and end before July 9, 2006.

We are using the 6-month 2006 survey data to calculate the occupational mix adjustment for the FY 2008 wage index. We used the 1st quarter of 2006 survey data in the FY 2007 wage index to comply with a court decision in *Bellevue Hosp. Center* v. *Leavitt*, 443 F.3d 163 (2nd Cir. 2006). For a discussion of our use of the 2006 survey data in the FY 2007 wage index, in compliance with the *Bellevue* decision, we refer readers to the FY 2007 IPPS final rule (71 FR 48007) as well as the FY 2007 IPPS final notice (71 FR 59886). However, as stated above, we are using the entire 6-month 2006 survey data (that is, from the period January 1, 2006 through June 30, 2006) to calculate the occupational mix adjustment for the FY 2008 wage index.

2. Timeline for the Collection, Review, and Correction of the Occupational Mix Data

In a Joint-Signature Memorandum that we issued on April 21, 2006 (JSM–06412), and in the FY 2007 IPPS final rule (71 FR 48008), we discussed the

schedule for the 1st quarter 2006 occupational mix survey data that would be used in the FY 2007 wage index. The schedule included deadlines for—

- Hospitals to submit 1st quarter occupational mix data. The deadline was June 1, 2006.
- Fiscal intermediary/MAC review of the submitted 1st quarter data. The deadline was June 22, 2006.
- Availability of the submitted first quarter data on the CMS Web site. The deadline was June 29, 2006.
- Hospitals to submit requests to their fiscal intermediary/MAC for corrections to their 1st quarter occupational mix data. The deadline was July 13, 2006.
- Fiscal intermediaries/MAC to submit corrected 1st quarter occupational mix survey data to CMS. The deadline was July 27, 2006.

In the Joint-Signature Memorandum, we also indicated that hospitals were to submit their 2nd quarter 2006 occupational mix survey data to their fiscal intermediary/MAC by August 31, 2006. On October 6, we published on our Web site both the audited 1st quarter and unaudited 2nd quarter 2006 occupational survey data and Worksheet S–3 wage data to be used in calculating the FY 2008 wage index. In addition, we sent a letter to hospitals through their fiscal intermediary/MAC (dated October 6, 2006) that discussed the timeframe for reviewing and correcting Worksheet S–3 wage data and the 2nd quarter 2006 survey data, and an opportunity for hospitals to request additional adjustments to their 1st quarter 2006 survey data for the FY 2008 wage index. The revision and correction process for all of the data used for computing the FY 2008 wage index is discussed in detail in section III.K. of the preamble of this final rule with comment period.

3. Calculation of the Occupational Mix Adjustment for FY 2008

For FY 2008 (as we did for FY 2007), we are calculating the occupational mix adjustment factor using the following steps:

Step 1—For each hospital, determine the percentage of the total nursing category attributable to a nursing subcategory by dividing the nursing subcategory hours by the total nursing category's hours (registered nurse management personnel and registered nurse staff nurses or clinicians are treated as separate nursing subcategories). Repeat this computation for each of the five nursing subcategories: registered nurse management personnel; registered nurse staff nurses or clinicians; licensed practical nurses; nursing aides, orderlies, and attendants; and medical assistants.

Step 2—Determine a national average hourly rate for each nursing subcategory by dividing a subcategory's total salaries for all hospitals in the occupational mix survey database by the subcategory's total hours for all hospitals in the occupational mix survey database.

Step 3—For each hospital, determine an adjusted average hourly rate for each nursing subcategory by multiplying the percentage of the total nursing category (from Step 1) by the national average hourly rate for that nursing subcategory (from Step 2). Repeat this calculation for each of the five nursing subcategories.

Step 4—For each hospital, determine the adjusted average hourly rate for the total nursing category by summing the adjusted average hourly rate (from Step 3) for each of the nursing subcategories.

Step 5—Determine the national average hourly rate for the total nursing category by dividing total nursing category salaries for all hospitals in the occupational mix survey database by total nursing category hours for all hospitals in the occupational mix survey database.

Step 6—For each hospital, compute the occupational mix adjustment factor for the total nursing category by dividing the national average hourly rate for the total nursing category (from Step 5) by the hospital's adjusted average hourly rate for the total nursing category (from Step 4).

If the hospital's adjusted average hourly rate is less than the national average hourly rate (indicating the hospital employs a less costly mix of nursing employees), the occupational mix adjustment factor is greater than 1.0000. If the hospital's adjusted average hourly rate is greater than the national average hourly rate, the occupational mix adjustment factor is less than 1.0000.

Step 7—For each hospital, calculate the occupational mix adjusted salaries and wage-related costs for the total nursing category by multiplying the hospital's total salaries and wage-related costs (from Step 5 of the unadjusted wage index calculation in section III.F. of the preamble of this final rule with comment period) by the percentage of the hospital's total workers attributable to the total nursing category (using the occupational mix survey data, this percentage is determined by dividing the hospital's total nursing category salaries by the hospital's total salaries for ''nursing and all other'') and by the total nursing category's occupational mix adjustment factor (from Step 6 above).

The remaining portion of the hospital's total salaries and wage-related costs that is attributable to all other employees of the hospital is not adjusted by the occupational mix. A hospital's all other portion is determined by subtracting the hospital's nursing category percentage from 100 percent.

Step 8—For each hospital, calculate the total occupational mix adjusted salaries and wage related costs for a hospital by summing the occupational mix adjusted salaries and wage-related costs for the total nursing category (from Step 7) and the portion of the hospital's salaries and wage-related costs for all other employees (from Step 7).

To compute a hospital's occupational mix adjusted average hourly wage, divide the hospital's total occupational mix adjusted salaries and wage-related costs by the hospital's total hours (from Step 4 of the unadjusted wage index calculation in section III.F. of the preamble of this final rule with comment period).

Step 9—To compute the occupational mix adjusted average hourly wage for an urban or rural area, sum the total occupational mix adjusted salaries and wage-related costs for all hospitals in the area, then sum the total hours for all hospitals in the area. Next, divide the area's occupational mix adjusted salaries and wage-related costs by the area's hours.

Step 10—To compute the national occupational mix adjusted average hourly wage, sum the total occupational mix adjusted salaries and wage-related costs for all hospitals in the Nation, then sum the total hours for all hospitals in the Nation. Next, divide the national occupational mix adjusted salaries and wage-related costs by the national hours. The FY 2008 final occupational mix adjusted national average hourly wage is $30.9133.

Step 11—To compute the occupational mix adjusted wage index, divide each area's occupational mix adjusted average hourly wage (Step 9) by the national occupational mix adjusted average hourly wage (Step 10).

Step 12—To compute the Puerto Rico specific occupational mix adjusted wage index, follow Steps 1 through 11 above. The FY 2008 final occupational mix adjusted Puerto Rico specific average hourly wage is $13.5536.

The table below is an illustrative example of the occupational mix adjustment.

BILLING CODE 4120–01–P

Example of Occupational Mix Adjustment

Hospital A								
			Step 1	Step 2	Step 3	Step 5	Step 6	in Step 7
	Provider Occupational Mix Hours	**Provider Occupational Mix Salaries**	**Provider % by Subcategory**	**National AHWs by Subcategory**	**Provider Adjusted AHW**	**National Adjusted Nurse AHW**	**Nurse Occupational Mix Adjustment Factor**	**Provider % by Total**
RN Management	202,387.00	$780,640.00	**9.84%**	$50.00	**$4.92**			
RN Staff	1,439,742.00	$17,345,123.00	**70.00%**	$30.00	**$21.00**			
LPNs	67,860.00	$404,822.00	**3.30%**	$20.00	**$0.66**			
Nurse Aides	259,177.00	$1,762,579.00	**12.60%**	$13.00	**$1.64**			
Medical Assistants	87,622.00	$577,045.00	**4.26%**	$12.00	**$0.51**			
Total Nurse Hours and Salaries	2,056,788.00	$20,870,209.00			**$28.73**	**$27.00**	**0.9398**	**52.40%**
					Step 4			
ALL OTHER	5,000,000.00	$18,957,010.00						**47.60%**
TOTAL	**7,056,788.00**	**$39,827,219.00**						
Wage Data from Cost Report								
Wages (From S-3, Parts II and III)	$83,312,942.55							
Hours (From S-3, Parts II and III)	3,836,299.60							
Hospital A Unadjusted AHW	**$21.72**							
Nurse Occupational Mix Wages	**$41,030,019**	Step 7						
All Other Unadjusted Occupational Mix Wages	**$39,655,400**	Step 7						

Total Occupational Mix Wages	**$80,685,419**	Step 8						
Hospital A Final Occupational Mix Adjusted AHW	**$21.03**	Step 8						
Hospital B								
			Step 1	Step 2	Step 3	Step 5	Step 6	in Step 7
	Provider Occupational Mix Hours	**Provider Occupational Mix Salaries**	**Provider % by Subcategory**	**National AHWs by Subcategory**	**Provider Adjusted AHW**	**National Adjusted Nurse AHW**	**Nurse Occupa-tional Mix Adjustment Factor**	**Provider % by Total**
RN Management	70,333.00	$680,650.00	**3.01%**	$50.00	**$1.51**			
RN Staff	1,430,114.00	$17,245,113.00	**61.27%**	$30.00	**$18.38**			
LPNs	159,795.00	$304,832.00	**6.85%**	$20.00	**$1.37**			
Nurse Aides	391,201.00	$2,762,589.00	**16.76%**	$13.00	**$2.18**			
Medical Assistants	282,728.00	$677,035.00	**12.11%**	$12.00	**$1.45**			
Total Nurse Hours and Salaries	2,334,171.00	$21,670,219.00			**$24.89**	**$27.00**	**1.0848**	**53.34%**
					↗			
ALL OTHER	5,000,000.00	$18,957,010.00			Step 4			**46.66%**
TOTAL	**7,334,171.00**	**$40,627,229.00**						
Wage Data from Cost Report								
Wages (From S-3, Parts II and III)	$25,979,714							
Hours (From S-3, Parts II and III)	1,097,585							
Hospital B Unadjusted AHW	**$23.67**							
Nurse Occupational Mix Wages	**$15,032,916**	Step 7						

All Other Unadjusted Occupational Mix Wages	**$12,122,355**	Step 7							
Total Occupational Mix Wages	**$27,155,271**	Step 8							
Hospital B Final Occupational Mix Adjusted AHW	**$24.74**	Step 8							
Note: The numbers in this example are hypothetical, including all National AHW amounts.									

BILLING CODE 4120–01–C

Because the occupational mix adjustment is required by statute, all hospitals that are subject to payments under the IPPS, or any hospital that would be subject to the IPPS if not granted a waiver, must complete the occupational mix survey, unless the hospital has no associated cost report wage data that are included in the FY 2008 wage index.

For the FY 2007 wage index, if a hospital did not respond to the occupational mix survey, or if we determined that a hospital's submitted data were too erroneous to include in the wage index, we assigned the hospital the average occupational mix adjustment for the labor market area (71 FR 48013). We believed this method had the least impact on the wage index for other hospitals in the area. For areas where no hospital submitted data for purposes of calculating the occupational mix adjustment, we applied the national occupational mix factor of 1.0000 in calculating the area's FY 2007 occupational mix adjusted wage index. We indicated in the FY 2007 IPPS final rule that we reserve the right to apply a different approach in future years, including potentially penalizing nonresponsive hospitals.

For the FY 2008 wage index, we are handling the data for hospitals that did not respond to the occupational mix survey (neither the 1st quarter nor 2nd quarter data) in the same manner as discussed above for the FY 2007 wage index. In addition, if a hospital submitted survey data for either the 1st quarter or 2nd quarter, but not for both quarters, we used the data the hospital submitted for one quarter to calculate the hospital's FY 2008 occupational mix adjustment factor. Lastly, if a hospital submitted a survey(s), but that survey data could not be used because we determined it to be aberrant, we also assigned the hospital the average occupational mix adjustment for its labor market area. For example, if a hospital's individual nurse category average hourly wages were out of range (that is, unusually high or low), and the hospital did not provide sufficient documentation to explain the aberrancy, or the hospital did not submit any registered nurse staff salaries or hours data, we assigned the hospital the average occupational mix adjustment for the labor market area in which it is located.

In calculating the average occupational mix adjustment factor for a labor market area, we replicated Steps 1 through 6 of the calculation for the occupational mix adjustment. However, instead of performing these steps at the hospital level, we aggregated the data at the labor market area level. In following these steps, for example, for CBSAs that contain providers that did not submit occupational mix survey data, the occupational mix adjustment factor ranged from a low of 0.8971 (CBSA 39820, Redding, CA), to a high of 1.0731 (CBSA 19, Rural Louisiana). Also, in computing a hospital's occupational mix adjusted salaries and wage-related costs for nursing employees (Step 7 of the calculation), in the absence of occupational mix survey data, we multiplied the hospital's total salaries and wage-related costs by the percentage of the *area's* total workers attributable to the *area's* total nursing category. For FY 2008, there is one CBSA in which none of the providers submitted the occupational mix survey (CBSA 49740, Yuma, AZ). In the absence of any data in this labor market area, we applied an occupational mix adjustment factor of 1.0 to all provider(s).

In the FY 2007 IPPS final rule, we also indicated that we would give serious consideration to applying a hospital-specific penalty if a hospital does not comply with regulations requiring submission of occupational mix survey data in future years. We stated that we believe that section 1886(d)(5)(I)(i) of the Act provides us with the authority to penalize hospitals that do not submit occupational mix survey data. That section authorizes us to provide for exceptions and adjustments to the payment amounts under IPPS as the Secretary deems appropriate. We also indicated that we would address this issue in the FY 2008 IPPS proposed rule.

In the FY 2008 IPPS proposed rule, we solicited comments and suggestions for a hospital-specific penalty for hospitals that do not submit occupational mix survey. In response to the FY 2007 IPPS proposed rule, some commenters suggested a 1-percent to 2-percent reduction in the hospital's wage index value or a set percentage of the standardized amount. We note that any penalty that we would determine for nonresponsive hospitals would apply to a future wage index, not the FY 2008 wage index.

Below is a summary of the public comments we received on the FY 2008 IPPS proposed rule and our responses:

Comment: Commenters supported CMS's proposal for the FY 2008 wage index to handle the occupational mix data for nonresponsive hospitals in the same manner as the data were handled for the FY 2007 wage index. The commenters also opined that full participation in the occupational mix survey is critical, and hospitals that do not participate should not benefit from the participation of others. Several commenters encouraged CMS to develop a methodology that encourages hospitals to report but does not unfairly penalize neighboring hospitals.

In addition, two commenters recommended that, for future surveys, CMS should not simply provide substitute data for nonresponsive hospitals, because that data will also have an impact on other hospitals. One commenter suggested that CMS should consider a penalty for hospitals that do not respond to the occupational mix survey that would either reduce the hospital's wage index value by no more than 0.5 percentage points, or reduce the hospital's standardized amount by no more than 0.4 percentage points (the original penalty applied to hospitals that did not submit quality data). The commenter noted that, since CMS began imposing the penalty for not reporting quality data, the rate of reporting that data has increased. Another commenter suggested a penalty of a 2-percent reduction in a hospital's wage index value for nonsubmission or submission of aberrant occupational mix data. Several commenters also suggested that, if CMS decides to adopt a penalty for non-responsive hospitals, CMS should also establish an appeal process for hospitals with extenuating circumstances (for example, hospitals affected by Hurricane Katrina).

Response: As proposed, in the FY 2008 final wage index in this rule, we have assigned nonresponsive hospitals the average occupational mix adjustment for the labor market area. For areas where no hospital submitted survey data, we applied the national occupational mix adjustment factor of 1.0000 in calculating the area's FY 2008 occupational mix adjusted wage index. We appreciate the suggestions we received regarding future penalties for hospitals that do not submit occupational mix survey data. We may consider proposing a policy to penalize hospitals that do not submit occupational mix survey data for FY 2010, the first year of the application of the new 2007–2008 occupational mix survey. One option we may consider is paying hospitals that do not submit occupational mix survey data at the same reduced IPPS rate that currently applies to hospitals that do not submit quality data (or an update to the standardized amount that equals the market basket less 2.0 percentage points). We agree that hospitals may have extenuating circumstances that preclude them from submitting occupational mix survey data and they should not be subject to a nonresponse

penalty. For instance, hospitals that do not begin operations until after the survey period would clearly be unable to provide occupational mix survey data. There may be other extenuating circumstances as well that warrant special consideration. The survey period for the FY 2010 occupational mix adjustment is July 1, 2007 to June 30, 2008. Hospitals will be required to submit occupational mix survey data from that time period to their fiscal intermediaries (or MAC) by September 1, 2008, or one month prior to the first day of FY 2009. Therefore, we would have more than a year to address any potential extenuating circumstances that could apply to hospitals that do not submit survey data. If we decide to adopt a policy that will penalize hospitals for not responding to the occupational mix survey, we will announce it in the FY 2009 IPPS proposed rule so hospitals will be aware of the policy prior to the deadline for submitting the data. The FY 2009 IPPS final rule will be made available to the public by August 1, 2008.

4. 2007–2008 Occupational Mix Survey for the FY 2010 Wage Index

As stated earlier, section 304(c) of Pub. L. 106–554 amended section 1886(d)(3)(E) of the Act to require CMS to collect data every 3 years on the occupational mix of employees for each short-term, acute care hospital participating in the Medicare program. We used occupational mix survey data collected in 2006 in the FY 2007 IPPS. Since we implemented the 2006 survey, we received several public comments suggesting further improvements to the occupational mix survey instructions and definitions. Specifically, some commenters recommended that we include certain employees, such as surgical technicians and paramedics in the occupational mix adjustment. The commenters indicated that these occupations perform similar functions, and in some cases, are used as substitutes for nursing staff. Therefore, they recommended that CMS include these occupations with the nursing categories on the survey. (On the 2003 and 2006 surveys, these categories were included in the ''All Other Occupations'' category.) The commenters also recommended that CMS expand the list of cost centers for the survey to include additional cost centers that contain a significant number of nursing personnel.

Some commenters suggested that CMS not collect occupational mix data for the ''Registered Nurse'' subcategories (that is, Management Personnel and Staff Nurse/Clinician). The commenters expressed concern that requiring the subcategories led to errors and inconsistencies in reporting, and added to the hospitals' collection burden. The commenters did not believe that this level of specificity significantly affects the adjustment. Therefore they recommended that CMS eliminate the registered nurse subcategories.

In addition, commenters recommended that CMS provide for a 1-year data collection period rather than a 6-month data collection period for the next survey collection. The commenters suggested that a 1-year data collection period would provide a better representation of a hospital's employment mix, which can vary during different times of the year. The commenters also indicated that a 1-year data collection period would allow hospitals to verify their wages and hours to year-end payroll reports and contractor invoices.

In response to these suggestions we have modified the occupational mix survey. The revised 2007–2008 occupational mix survey will provide for the collection of hospital-specific wages and hours data for a 1-year prospective reporting period from July 1, 2007, through June 30, 2008, additional clarifications to the survey instructions, the elimination of the registered nurse subcategories, some refinements to the definitions of the occupational categories, and the inclusion of additional cost centers that typically provide nursing services. The revised 2007–2008 Medicare occupational mix survey will be applied beginning with the FY 2010 wage index.

On February 2, 2007, we published a notice soliciting comments on the proposed revisions to the occupational mix survey (Form CMS–10079 (2006)) (72 FR 5055). The comment period for the proposed survey ended on April 3, 2007. We are in the process of developing a final notice for publication in the **Federal Register**.

D. Worksheet S–3 Wage Data for the FY 2008 Wage Index

The FY 2008 wage index values (to be effective for hospital discharges occurring on or after October 1, 2007, and before October 1, 2008) in section II.B. of the Addendum to this final rule with comment period are based on the data collected from the Medicare cost reports submitted by hospitals for cost reporting periods beginning in FY 2004 (the FY 2007 wage index was based on FY 2003 wage data).

1. Included Categories of Costs

The FY 2008 wage index includes the following categories of data associated with costs paid under the IPPS (as well as outpatient costs):

- Salaries and hours from short-term, acute care hospitals (including paid lunch hours and hours associated with military leave and jury duty).
- Home office costs and hours.
- Certain contract labor costs and hours (which includes direct patient care, certain top management, pharmacy, laboratory, and nonteaching physician Part A services, and certain indirect patient care as discussed in section III.D.2. of the preamble of this final rule with comment period).
- Wage-related costs, including pensions and other deferred compensation costs.

2. Contract Labor for Indirect Patient Care Services

In the FY 2003 IPPS final rule (67 FR 50022), we discussed the inclusion of contract labor cost in calculating the wage index. Our policy has evolved over the years with the increasing role of contract labor in meeting special personnel needs of hospitals. In response to suggestions that we further expand our definition of contract labor for the wage index, we indicated our intent to begin collecting data in future Medicare cost reports on the following overhead services: administrative and general (A&G); housekeeping; and dietary. We selected these three overhead services for consideration because they are provided at all hospitals, either directly or through contracts, and together they comprise about 60 percent of a hospital's overhead hours. Consistent with our consideration of contract A&G services, we also stated that we would begin collecting costs and hours data associated with other contract management services that would not be included on the cost report as overhead A&G and are not top management contracts (that is, the chief executive officer, chief financial officer, chief operating officer, and nurse administrator) that are included on Line 9 of Worksheet S–3, Part II.

We revised the cost report, beginning October 1, 2003 (the FY 2004 cost report), to provide for the collection of cost and hours data for the four identified contract indirect patient care services. We added four new line items to Worksheet S–3, Part II: Line 9.03 (Contract management and administrative services); Line 22.01 (Contract A&G services); Line 26.01 (Contract housekeeping services); and Line 27.01 (Contract dietary services). We stated in the FY 2003 final rule that our decision on whether to include these costs in calculating the wage

index would depend on our analyses of the data and public comments. The FY 2008 wage index, which is based on FY 2004 cost report data, is the first year that we can assess the impact of including these costs in the wage index.

As part of the FY 2008 wage index desk review program, we required the fiscal intermediaries (or, if applicable, the MAC) to verify the accuracy of the data reported on the new Lines 9.03, 22.01, 26.01, and 27.01. As we discussed in the FY 2008 IPPS proposed rule, after completion of these reviews, some hospitals continued to fail our edits for reasonableness. Many of these edit failures were for wage data that were not to be included in the wage index and would be excluded through the wage index calculation. Some hospitals that continued to critically fail edits related to contract labor were also designated for removal from the FY 2008 wage index due to failure of other critical wage edits. In addition, some of the aberrant data were resolved through the correction process described in section III.K. of the preamble of this final rule with comment period. Ultimately, we believe that the amount of aberrant data on these new line items is minimal and will have little impact on area wage index values. In addition, we have simulated the effect of including these wage data for contract indirect patient care services on the wage index. We note that the results of these simulations differ from those specified in the FY 2008 IPPS proposed rule (72 FR 24782) not only because we used more updated and accurate wage data for the final rule analysis, but also because of changes we incorporated into Step 2 and Step 4 of the wage index calculation for this final rule with comment period to more accurately account for the wages and hours of contract labor. (We refer readers to section III.G., Computation of the FY 2008 Unadjusted Wage Index, of this preamble for a more detailed explanation of the changes to the wage index calculation).

Under this simulation, we found that the resulting average hourly wage will not be affected for 3,032 hospitals (85.0 percent), will decrease for 327 hospitals (9.2 percent), and will increase for 209 hospitals (5.9 percent). The average hourly wage for 12 hospitals will decline by 5 percent or greater (the largest being 7.8 percent). The average hourly wage for 67 hospitals will decline between 1 and 5 percent. Twenty-one hospitals are experiencing an increase of 1 percent or greater in average hourly wage from this policy, with the increase for 2 of these hospitals being larger than 5 percent (the largest increase is 7.8 percent.) At the labor market area level, we found that the resulting average hourly wage will not affect 232 areas (53.3 percent), will decrease for 132 areas (30.3 percent), and will increase for 71 areas (16.3 percent). The wage index of 13 areas will decrease between 1 percent and 5 percent, with the largest decrease for an urban area being 4.07 percent and the largest decrease for a rural area being 0.63 percent. The largest increase in an area's wage index is 0.69 percent for an urban area and 0.30 percent for a rural area.

As a result of the correction, and using the final data, the combined effect on the FY 2008 wage index of including the new contract labor lines 9.03, 22.01, 26.01, and 27.01 is the following for hospitals:

Percent change to wage index	Number of hospitals
Greater than −5 percent	0
−1 percent to −5 percent	47
Between −1 percent and +1 percent	3,522
+1 percent to +5 percent	0
Greater than +5 percent	0

The wage index values for 98.7 percent of all hospitals will change by less than 1 percent, and 119 hospitals (3.3 percent) will experience no change as a result of including the new contract labor lines. We believe that the combined effect of including these costs in the wage index is negligible because the higher labor costs associated with contract management and A&G services are offset by the lower labor costs associated with contract housekeeping and dietary services.

Public commenters have expressed interest in including in the wage index the costs and hours for contract management, A&G, housekeeping, and dietary services. We also believe that including a more comprehensive measure of area differences in the cost of labor will improve the accuracy of the wage index. For these reasons, we are including these contract services in the wage index, beginning with FY 2008.

In the FY 2008 IPPS proposed rule, we invited public comment on whether we should revise a future cost report to collect contract labor data for the remaining indirect patient care cost centers on Worksheet S–3, Part II for possible inclusion in the wage index. We indicated that we would consider these comments in the context of potential reforms of the IPPS wage index for FY 2009 and subsequent years. As indicated in section III.M. of the preamble of this final rule with comment period, section 106(b) of the MIEACMS–TRHCA (Pub. L. 109–432) requires the Secretary to consider a MedPAC study and nine specific aspects of the wage index in making one or more proposals for revisions in FY 2009.

Comment: Several commenters stated that they supported including salaries and hours for contract indirect patient care services in the wage index, as it discourages hospitals from outsourcing in order to raise their average hourly wage for the wage index. However, they noted that CMS had made an error in computing the wage index in the proposed rule with regards to lines 22.01, 26.01, and 27.01. The new lines were included in Step 4 of the calculation (the step that allocates a portion of overhead wages and wage related costs to excluded areas, and then subtracts the associated amount from total wages and wage-related costs). However, lines 22.01, 26.01, and 27.01 were not included in total wages in Step 2. Therefore, an amount for overhead wages and wage related costs for excluded areas was subtracted from total wages that did not include those costs. The commenters requested that CMS correct the calculation and reassess the impact on hospitals of including the new contract indirect patient care services in the wage index.

Some commenters recommended that CMS provide a transition if the impact of including overhead contract labor costs in the wage index on any hospital is great. One commenter suggested that CMS should provide a 2–3 year transition for labor market areas that have more than a 2 percent reduction in the wage index. In addition, the commenter urged CMS to revise future cost reports to collect the remaining contract labor indirect patient care costs on Worksheet S–3, Part II for possible inclusion in the wage index.

Response: We appreciate the commenters bringing to our attention the error in the proposed wage index calculation. As indicated above, we have corrected the calculation.

As discussed above, we believe the impact of this policy is generally very minor, and we do not believe the additional complexity of a transition wage index is warranted for an impact this small. Further, we continue to believe it is prudent policy to include in the wage index the costs for these contract indirect patient care services. Therefore, we are adopting this policy, beginning with the FY 2008 wage index. We will consider the inclusion of contract labor costs associated with the remaining indirect cost centers on Worksheet S–3, Part II, in our study of

wage index reforms for FY 2009 and future years.

3. Excluded Categories of Costs

Consistent with the wage index methodology for FY 2007, the wage index for FY 2008 also excludes the direct and overhead salaries and hours for services not subject to IPPS payment, such as SNF services, home health services, costs related to GME (teaching physicians and residents) and certified registered nurse anesthetists (CRNAs), and other subprovider components that are not paid under the IPPS. The FY 2008 wage index also excludes the salaries, hours, and wage-related costs of hospital-based rural health clinics (RHCs), and Federally qualified health centers (FQHCs) because Medicare pays for these costs outside of the IPPS (68 FR 45395). In addition, salaries, hours, and wage-related costs of CAHs are excluded from the wage index, for the reasons explained in the FY 2004 IPPS final rule (68 FR 45397).

4. Use of Wage Index Data by Providers Other Than Acute Care Hospitals Under the IPPS

Data collected for the IPPS wage index are also currently used to calculate wage indices applicable to other providers, such as SNFs, home health agencies, and hospices. In addition, they are used for prospective payments to IRFs, IPFs, and LTCHs, and for hospital outpatient services. We note that, in the IPPS rules, we do not address comments pertaining to the wage indices for non-IPPS providers. Such comments should be made in response to separate proposed rules for those providers.

E. Verification of Worksheet S–3 Wage Data

The wage data for the FY 2008 wage index were obtained from Worksheet S–3, Parts II and III of the FY 2004 Medicare cost reports. Instructions for completing the Worksheet S–3, Parts II and III are in the Provider Reimbursement Manual, Part I, sections 3605.2 and 3605.3. The data file used to construct the wage index includes FY 2004 data submitted to us as of February 26, 2007. As in past years, we performed an intensive review of the wage data, mostly through the use of edits designed to identify aberrant data.

We asked our fiscal intermediaries/MAC to revise or verify data elements that resulted in specific edit failures. For the proposed FY 2008 wage index, we identified and excluded 23 hospitals with data that were too aberrant to include in the proposed wage index, although we stated that if these data elements were corrected, we intended to include some of these providers in the FY 2008 final wage index. However, because some unresolved data elements were included in the calculation of the proposed FY 2008 wage index, we instructed fiscal intermediaries/MAC to complete their data verification of questionable data elements and to transmit any changes to the wage data no later than April 13, 2007. While the data for some hospitals were resolved, the data for some other hospitals were identified as too aberrant to include in the final wage index. Therefore, we determined that the data for 30 hospitals should not be included in the FY 2008 final wage index.

In constructing the FY 2008 wage index, we include the wage data for facilities that were IPPS hospitals in FY 2004, even for those facilities that have since terminated their participation in the program as hospitals, as long as those data do not fail any of our edits for reasonableness. We believe that including the wage data for these hospitals is, in general, appropriate to reflect the economic conditions in the various labor market areas during the relevant past period. However, we exclude the wage data for CAHs as discussed in 68 FR 45397. For this final rule with comment period, we removed 19 hospitals that converted to CAH status between February 17, 2006, the cut-off date for CAH exclusion from the FY 2007 wage index, and February 16, 2007, the cut-off date for CAH exclusion from the FY 2008 wage index. After removing hospitals with aberrant data and hospitals that converted to CAH status, the FY 2008 wage index is calculated based on 3,569 hospitals.

F. Wage Index for Multicampus Hospitals

As discussed earlier under section III.B. of the preamble of this final rule with comment period, effective October 1, 2004, for the IPPS, CMS implemented new labor market areas based on the CBSA definitions of MSAs. As a result of these labor market areas, there are multicampus hospitals previously located in a single MSA that are now located in more than one CBSA. A multicampus hospital is a single integrated institution. For this reason, the multicampus hospital has one provider number and submits a single cost report that combines the total wages and hours of each of its campuses. When campuses of a multicampus hospital are located in the same CBSA, the wages and hours for the entire institution are included in the calculation of the wage index for that labor market area and there is no need to separate the data by campus. However, when a multicampus hospital has campuses located in different labor market areas, wages and hours are reported in a single CBSA even though the hospital's staff is working at campuses in more than one labor market area. The wage data are reported in the labor market area of the hospital campus associated with the provider number. Wages and hours are not reported separately for each campus and no data from the multicampus hospital are used in determining the wage index for the labor market area(s) where the other campus(es) are located. Under § 412.64(b)(5) of our regulations, the wage-adjusted standardized amount is based on geographic location of the hospital facility at which the discharge occurred. Therefore, the wage index for each hospital campus used to make the IPPS payment is based on its geographic location, while the wage data from all of the campuses, including those that may be located in a different geographic area, are applied to one area only. We have received inquiries from several hospitals suggesting that we should adopt a policy that results in an allocation of a multicampus hospital's wages and hours across the different labor market areas where its campuses are located.

The wage index was developed to adjust the IPPS standardized amount to reflect area differences in hospital wage levels in the hospital's geographic area compared to the national hospital wage level as required under section 1886(d)(3)(E) of the Act. Although we acknowledge that reporting the wage data into a single labor market area when individual campuses of a multicampus hospital are located in different labor market areas may not allocate wage data with exact precision, the Medicare cost report, in its current form, does not enable a multicampus hospital to separately report its costs by location. The fact that a multicampus hospital submits a single cost report reflects that it is an integrated institution with one accounting structure. Nevertheless, we agree with the comments brought to our attention that we should consider a policy that allocates a multicampus hospital's wages and hours among the different labor market areas where it is located. That is, rather than giving 100 percent of the hospital's wage data to the labor market area associated with its provider number, we believe that an allocation of its wage data should be made to each campus.

We considered three alternative methods of apportionment: beds, discharges, or FTE staff. A hospital's number of discharges can fluctuate from

year to year and may be an unstable data source to use in allocating a hospital's wages and hours among the different campuses. Alternatively, while a hospital's number of beds is a more static number, it likely does not correlate well with how a hospital incurs its wage costs. Furthermore, neither of these numbers is available on a campus-specific basis in Medicare's data systems. (While an individual campus of a multicampus hospital located in a different labor market area than the remainder of the institution is required to indicate a suffix on its provider number when submitting a claim in order to receive payment using the wage index for its geographic location, the suffix is only used by the fiscal intermediary (or, if applicable, the MAC) and is not retained in Medicare's historical data files that we use to determine IPPS rates).

Given the unavailability of beds and discharges and their respective drawbacks for allocating wages and hours across multiple campuses, in the FY 2008 IPPS proposed rule, we proposed to apportion wages and hours for each campus of a multicampus hospital based on FTE staff. For example, a multicampus hospital may have three campuses located in two different labor market areas. Campuses A and B are located in labor market area 1 and have 50 and 25 FTEs, respectively. Campus C is located in labor market area 2 and has an additional 25 FTEs. Therefore, 75 percent of the hospital's FTEs work in labor market 1 and 25 percent in labor market area 2. Under the proposed policy, we would apportion 75 percent of the hospital's occupational mix adjusted total salaries, wage-related costs and hours to labor market 1 and 25 percent to labor market 2. We believe that the number of FTEs will provide the best method of apportioning wages and hours among the different campuses, thereby allowing the apportioned wage data to be included in each geographic area where the hospital has employees working.

We indicated that the proposed policy would require the identification of all multicampus hospitals located in more than one CBSA, the county, State, and zip code of each campus, and the campus-specific number of FTEs. Based on our comprehensive interactions with our fiscal intermediaries since adopting the revised labor market areas beginning in FY 2005, we are only aware of three multicampus hospitals that are located in more than one labor market area. We are beginning the process to make updates and refinements to the cost report for the future. We are currently planning to add additional lines to Worksheet S–2 of the cost report that will allow a multicampus hospital to report the locations of its different campuses (county, State, and zip code) and number of FTE staff by location so this information would become part of the cost report submission process. The effective date of the revised cost report is not expected until FY 2009. Therefore, we would not have data from multicampus hospitals under our normal wage data collection process to be able to allocate wages to each labor market area by FTEs until at least the FY 2013 wage index. In the interim, we proposed to collect this information from multicampus hospitals on a small survey form through our fiscal intermediaries/MAC as part of the wage index desk review process beginning with the FY 2009 wage index. In the proposed rule, we indicated that we will not be able to apply this policy to the FY 2008 wage index unless we have this information from multicampus hospitals prior to the close of the comment period for the proposed rule. Therefore, for the FY 2008 wage index, we indicated that multicampus hospitals with campuses located in more than one geographic area should submit the information during the comment period on the proposed rule for the county, State, and zip code of its campuses, and the FTE number, including contract labor, per campus along with supporting documentation.

We stated that the hospitals should submit data from their FY 2004 cost reporting period to match the same data that will be used for the FY 2008 wage index. However, if unavailable, the hospital may submit the data for a subsequent cost reporting period that is closest to the FY 2004 reporting period that provides the information in order to apportion the hospital's wage data among its campuses. These data will enable CMS to apportion the wages and hours of the multicampus hospital among its different campuses for use in the FY 2008 wage index calculations should the proposal become final.

As stated earlier, we are only aware of three hospitals that would be affected by this information collection request. As stipulated under 5 CFR 1320.3(c)(4), the proposed information collection request is exempt from the Paperwork Reduction Act (PRA) as it does not affect 10 or more persons within a 12-month period. In the proposed rule, we stated that if, during the IPPS rule comment period, we determine the number of affected persons surpasses the threshold of 10 as specified in 5 CFR 1320.3(c)(4), we would not adopt the policy until FY 2009 in order for us to seek the requisite approval from OMB under the PRA. As we discuss below, only two hospitals are affected by the data submission. Therefore, the information collection is exempt from the PRA.

Comment: Several commenters were supportive of our proposed policy to include the wages and hours of each campus of a multicampus hospital in the wage index calculation of its respective CBSA, as opposed to the current situation where all wages and hours for the entire hospital are included in the CBSA where the campus associated with the provider number is located. However, the commenters urged that we exercise flexibility with respect to the basis for allocating the wage data among the campuses. Some commenters stressed the difficulty for hospitals with fully integrated operations to collect data and determine an FTE count for each campus, particularly in light of the short timeframe to submit this information. One commenter suggested three alternative approaches to allocating wage data that may be much less administratively burdensome than collecting FTE information: Medicare discharges; Medicare inpatient and outpatient reimbursement; and number of beds.

Another commenter, a multicampus hospital, believed that providing FTEs for each campus is extremely burdensome, given the fully integrated structure of its organization. The commenter stated that over half of the organization's employees have responsibilities at two and three of its campuses. The commenter indicated that some types of employees, such as those involved with information services and human resources, spend time at all three campuses and nurses move from facility to facility depending on need. While this commenter offered support for CMS' proposal, the commenter also suggested that there are better, simpler, and easier methods to consider. The commenter suggested that CMS allow discharges as the basis for allocating salaries and hours among campuses. Another multicampus hospital recommended that, in order to determine the FTEs per campus, CMS should allow multicampus hospitals to use a methodology that allocates the wages and hours of staff not directly assigned to a single campus using the same proportions as the staff that are directly assigned to a single campus.

There was consensus among the commenters that the benefit of having more accuracy in the wage index calculations should outweigh concerns over which alternative methods to use

in of allocating salaries and hours, particularly as it relates to FY 2008 and the time constraints involved. Moreover, one commenter believed that discharge data from its campuses would be a more accurate means of allocating at this point because there was not enough time to accurately assign FTEs to each campus. Another commenter pointed out that to not allocate salaries and hours to each campus runs contrary to Congress' intent when it established the area wage adjustment and the method is not as important as is the result.

Response: For the FY 2008 wage index, we received the requested data from one multicampus hospital. Although the hospital stated some of the concerns summarized in the comments above about the difficulty of providing these data, it was able to provide FTEs per campus by the close of the comment period on June 12, 2007. We appreciate the efforts this multicampus hospital made to provide the requested data, given the short timeframe and the difficulty it reported in collecting the data.

Another commenter submitted a multicampus hospital's number of beds and suggested that CMS use this information to allocate the multicampus hospital's wages and hours by campus in the absence of the number of FTEs if the multicampus hospital did not provide the requested information.

We continue to believe that using FTE data is the most appropriate methodology for apportioning salaries and hours among the campuses. However, in light of the comments and after further consideration, we have concluded that, given the time constraints, it is reasonable to use Medicare discharge data in the absence of FTE data until we have a routine process for collecting this information via Worksheet S–3 of the Medicare cost report. Although we stated in the proposed rule that discharge data are not available on a campus-specific basis in Medicare's data systems, we have since determined that the data can be obtained through the local systems of the fiscal intermediaries/MAC. We believe that Medicare discharge data, although not ideal for allocating salaries and hours, provide a reasonable indication of staffing requirements for each campus. We continue to believe that the number of beds does not correlate well with how a hospital incurs its wage costs. A hospital's bed size alone, without its occupancy rate, does not necessarily reflect a hospital's staffing needs, whereas the number of discharges does provide a more accurate measure of a hospital's staffing requirements. Therefore, we have chosen not to use the number of beds as an alternative method for allocating wage data to the campuses of multicampus hospitals in the absence of FTE data. Therefore, as our final policy, and as reflected in the FY 2008 wage index in this final rule with comment period, we are using FTEs or Medicare discharge data to allocate salaries and hours to the campuses of multicampus hospitals that are located in different labor markets. We will continue the policy of using annually reported FTEs or Medicare discharges to allocate wage data by campus until revisions are made to Worksheet S–3 of the Medicare cost report to require reporting of FTE data by campus, and until such data in the cost report can be used to calculate the wage index, at which time the wage data of a multicampus hospital will be allocated among its campuses based only on reported FTE counts by campus. Once Worksheet S 3 of the Medicare cost report is revised to require reporting of FTE data by campus, all multicampus hospitals that cross labor market area boundaries will have to provide the FTE data by campus on the cost report.

We agree with the commenter that suggested that hospitals should be allowed to report the number of directly assigned staff to each campus, and all other employees can be allocated to each campus using the same proportions as the directly assigned staff. Once revisions to the cost report have been made, we will provide further detailed instructions for how to report FTE data by campus.

Also, until the cost report data can be used to allocate wages and hours, multicampus hospitals having campuses that are located in more than one labor market are to report their FTEs or Medicare discharge data to CMS during the comment period for the respective IPPS update. Therefore, for the FY 2009 wage index, such hospitals are to report their FTEs or Medicare discharge data during the FY 2009 comment period. If a multicampus hospital that crosses labor market areas fails to submit FTE or Medicare discharge data, and CMS is aware that the hospital meets this criteria, CMS will automatically allocate the hospital's wages and hours to its campuses based on Medicare discharge data obtained from the intermediary/MAC. Given the consensus among commenters that the benefit of having more accuracy in the wage index calculations outweighs concerns over which alternative methods to use in allocating wage data, we believe that it is a reasonable policy to automatically allocate a hospital's wage and hours based on discharge data in the absence of FTE data.

For the FY 2008 wage index, we allocated salaries and hours to the campuses of two multicampus hospitals. One Illinois hospital submitted FTEs per campus. Two of their three campuses are located in Cook County, the Chicago-Naperville-Joliet, IL CBSA, with 60.61 percent of their FTEs at one of the campuses and 17.18 percent of the FTEs at the other campus. The third campus is located in Lake County, Lake County-Kenosha County, IL–WI CBSA, and has 22.21 percent of the hospital's FTEs.

As recommended by the second multicampus hospital, which is located in Massachusetts, we used Medicare discharge data to allocate salaries and hours to its campuses. The hospital also has three campuses with two of them located in Bristol County, the Providence-New Bedford-Fall River, RI–MA CBSA, and the third campus located in Plymouth County, the Boston-Quincy CBSA. The two campuses in Bristol County have 90 percent of the Medicare discharges, while the campus in the Boston-Quincy area has 10 percent of Medicare discharges.

Based on the above proportions, we allocated the hospitals' salaries and hours to the respective CBSAs of each campus. For wage index calculation purposes, we created two new records for each of these providers, one record for each CBSA allocation. Although we are not including a separate entry for each campus in Table 2, as discussed in section III.I.7. of the preamble of this final rule with comment period, each campus's wage data will be included in a public use file, ''Three Year MGCRB Reclassification Data for FY 2009 Application,'' that will be posted on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/WIFN/list.asp#TopOfPage,* concurrent with the publication of this final rule with comment period. As discussed in section III.I.7. of the preamble of this final rule with comment period, these campus-specific data will be considered appropriate wage data for reclassification under §§ 412.230. 412.232 and 412.234 because they will be part of the CMS hospital wage survey used to construct the wage index. We consider these data to constitute ''published hospital wage survey data'' under section 1886(d)(10)(D)(vi) of the Act. The wage indices for the four affected CBSAs were recalculated with the following results:

FY 2008 FINAL PRE-RECLASSIFICATION OCCUPATIONAL MIX ADJUSTED WAGE INDEX

CBSA	Wage and hour allocation(%)	Wage index (without allocation)	Wage index (with allocation)
Massachusetts			
Boston-Quincy, MA (14484)	10.0	1.1736	1.1883
Providence-New Bedford-Falls River, RI-MA (39300)	90.0	1.0645	1.0567
Total	100		
Illinois			
Chicago-Naperville-Naperville, IL (16974)	77.8	1.0643	1.0623
Lake County-Kenosha County, IL-WI (29404)	22.2	1.0341	1.0618
Total	100		

*The final FY 2008 post-reclassified wage indices are included in Table 4A of the Addendum to this final rule with comment period.

G. Computation of the FY 2008 Unadjusted Wage Index

1. Method for Computing the FY 2008 Unadjusted Wage Index

The method used to compute the FY 2008 wage index without an occupational mix adjustment follows:

Step 1—As noted above, we based the FY 2008 wage index on wage data reported on the FY 2004 Medicare cost reports. We gathered data from each of the non Federal, short-term, acute care hospitals for which data were reported on the Worksheet S–3, Parts II and III of the Medicare cost report for the hospital's cost reporting period beginning on or after October 1, 2003, and before October 1, 2004. In addition, we include data from some hospitals that had cost reporting periods beginning before October 2003 and reported a cost reporting period covering all of FY 2004. These data are included because no other data from these hospitals would be available for the cost reporting period described above, and because particular labor market areas might be affected due to the omission of these hospitals. However, we generally describe these wage data as FY 2004 data. We note that, if a hospital had more than one cost reporting period beginning during FY 2004 (for example, a hospital had two short cost reporting periods beginning on or after October 1, 2003, and before October 1, 2004), we include wage data from only one of the cost reporting periods, the longer, in the wage index calculation. If there was more than one cost reporting period and the periods were equal in length, we include the wage data from the later period in the wage index calculation.

Step 2—Salaries—The method used to compute a hospital's average hourly wage excludes certain costs that are not paid under the IPPS. (We note that, as we stated in section III.D.2. of this final rule with comment period, we are including lines 22.01, 26.01, and 27.01 of Worksheet S–3, Part II for overhead services in the wage index beginning in FY 2008. However, because these lines were only used for purposes of data collection up to this point, and had not been incorporated into the wage index or onto line 101 of Worksheet A, the electronic cost reporting software had not been modified to incorporate these 3 line items, for wages and hours respectively, into line 1 of Worksheet S–3, Part II. Therefore, the first step in the wage index calculation for FY 2008 is to compute a ''revised'' Line 1, by adding to the Line 1 on Worksheet S–3, Part II (for wages and hours respectively) the amounts on Lines 22.01, 26.01, and 27.01.) In calculating a hospital's average salaries plus wage related costs, we subtract from Line 1 (total salaries) the GME and CRNA costs reported on Lines 2, 4.01, 6, and 6.01, the Part B salaries reported on Lines 3, 5 and 5.01, home office salaries reported on Line 7, and exclude salaries reported on Lines 8 and 8.01 (that is, direct salaries attributable to SNF services, home health services, and other subprovider components not subject to the IPPS). We also subtract from Line 1 the salaries for which no hours were reported. To determine total salaries plus wage related costs, we add to the net hospital salaries the costs of contract labor for direct patient care, certain top management, pharmacy, laboratory, and nonteaching physician Part A services (Lines 9 and 10), home office salaries and wage-related costs reported by the hospital on Lines 11 and 12, and nonexcluded area wage-related costs (Lines 13, 14, and 18).

We note that contract labor and home office salaries for which no corresponding hours are reported are not included. In addition, wage-related costs for nonteaching physician Part A employees (Line 18) are excluded if no corresponding salaries are reported for those employees on Line 4.

Step 3—Hours—With the exception of wage-related costs, for which there are no associated hours, we compute total hours using the same methods as described for salaries in Step 2.

Step 4—For each hospital reporting both total overhead salaries and total overhead hours greater than zero, we then allocate overhead costs to areas of the hospital excluded from the wage index calculation. First, we determine the ratio of excluded area hours (sum of Lines 8 and 8.01 of Worksheet S–3, Part II) to revised total hours (Line 1 minus the sum of Part II, Lines 2, 3, 4.01, 5, 5.01, 6, 6.01, 7, and Part III, Line 13 of Worksheet S–3). We then compute the amounts of overhead salaries and hours to be allocated to excluded areas by multiplying the above ratio by the total overhead salaries and hours reported on Line 13 of Worksheet S–3, Part III. Next, we compute the amounts of overhead wage-related costs to be allocated to excluded areas using three steps: (1) we determine the ratio of overhead hours (Part III, Line 13 minus the sum of lines 22.01, 26.01, and 27.01) to revised hours excluding the sum of lines 22.01, 26.01, and 27.01 (Line 1 minus the sum of Lines 2, 3, 4.01, 5, 5.01, 6, 6.01, 7, 8, 8.01, 22.01, 26.01, and 27.01). (We note that for the FY 2008 and subsequent wage index calculations, we are excluding the sum of lines 22.01, 26.01, and 27.01 from the determination of the ratio of overhead hours to revised hours, since hospitals typically do not provide fringe benefits (wage-related costs) to contract personnel. Therefore, it is not necessary for the wage index calculation to exclude overhead wage-related costs

for contract personnel. Further, if a hospital does contribute to wage-related costs for contracted personnel, the instructions for lines 22.01, 26.01, and 27.01 require that associated wage-related costs be combined with wages on the respective contract labor lines.); (2) we compute overhead wage-related costs by multiplying the overhead hours ratio by wage-related costs reported on Part II, Lines 13, 14, and 18; and (3) we multiply the computed overhead wage-related costs by the above excluded area hours ratio. Finally, we subtract the computed overhead salaries, wage-related costs, and hours associated with excluded areas from the total salaries (plus wage-related costs) and hours derived in Steps 2 and 3.

Step 5—For each hospital, we adjust the total salaries plus wage-related costs to a common period to determine total adjusted salaries plus wage-related costs. To make the wage adjustment, we estimate the percentage change in the employment cost index (ECI) for compensation for each 30-day increment from October 14, 2003, through April 15, 2005, for private industry hospital workers from the BLS' *Compensation and Working Conditions.* We use the ECI because it reflects the price increase associated with total compensation (salaries plus fringes) rather than just the increase in salaries. In addition, the ECI includes managers as well as other hospital workers. This methodology to compute the monthly update factors uses actual quarterly ECI data and assures that the update factors match the actual quarterly and annual percent changes. We also note that, since April 2006 with the publication of March 2006 data, the BLS' ECI uses a different classification system, the North American Industrial Classification System (NAICS), instead of the Standard Industrial Codes (SICs), which no longer exist. We have consistently used the ECI as the data source for our wages and salaries and other price proxies in the IPPS market basket and are not making any changes to the usage at this time. However, in the proposed rule, we solicited comments on our continued use of the BLS ECI data in light of the BLS change in system usage to the NAICS-based ECI. The factors used to adjust the hospital's data were based on the midpoint of the cost reporting period, as indicated below.

MIDPOINT OF COST REPORTING PERIOD

After	Before	Adjustment factor
10/14/2003	11/15/2003	1.05743
11/14/2003	12/15/2003	1.05355
12/14/2003	01/15/2004	1.04964
01/14/2004	02/15/2004	1.04578
02/14/2004	03/15/2004	1.04198
03/14/2004	04/15/2004	1.03830
04/14/2004	05/15/2004	1.03482
05/14/2004	06/15/2004	1.03153
06/14/2004	07/15/2004	1.02821
07/14/2004	08/15/2004	1.02466
08/14/2004	09/15/2004	1.02086
09/14/2004	10/15/2004	1.01705
10/14/2004	11/15/2004	1.01344
11/14/2004	12/15/2004	1.01003
12/14/2004	01/15/2005	1.00671
01/14/2005	02/15/2005	1.00336
02/14/2005	03/15/2005	1.00000
03/14/2005	04/15/2005	0.99663

For example, the midpoint of a cost reporting period beginning January 1, 2004, and ending December 31, 2004, is June 30, 2004. An adjustment factor of 1.02821 would be applied to the wages of a hospital with such a cost reporting period. In addition, for the data for any cost reporting period that began in FY 2004 and covered a period of less than 360 days or more than 370 days, we annualize the data to reflect a 1-year cost report. Dividing the data by the number of days in the cost report and then multiplying the results by 365 accomplishes annualization.

Step 6—Each hospital is assigned to its appropriate urban or rural labor market area before any reclassifications under section 1886(d)(8)(B), section 1886(d)(8)(E), or section 1886(d)(10) of the Act. Within each urban or rural labor market area, we add the total adjusted salaries plus wage-related costs obtained in Step 5 for all hospitals in that area to determine the total adjusted salaries plus wage-related costs for the labor market area.

Step 7—We divide the total adjusted salaries plus wage-related costs obtained under both methods in Step 6 by the sum of the corresponding total hours (from Step 4) for all hospitals in each labor market area to determine an average hourly wage for the area.

Step 8—We add the total adjusted salaries plus wage related costs obtained in Step 5 for all hospitals in the Nation and then divide the sum by the national sum of total hours from Step 4 to arrive at a national average hourly wage. Using the data as described above, the national average hourly wage (unadjusted for occupational mix) is $30.9346.

Step 9—For each urban or rural labor market area, we calculate the hospital wage index value, unadjusted for occupational mix, by dividing the area average hourly wage obtained in Step 7 by the national average hourly wage computed in Step 8.

Step 10—Following the process set forth above, we develop a separate Puerto Rico-specific wage index for purposes of adjusting the Puerto Rico standardized amounts. (The national Puerto Rico standardized amount is adjusted by a wage index calculated for all Puerto Rico labor market areas based on the national average hourly wage as described above.) We add the total adjusted salaries plus wage related costs (as calculated in Step 5) for all hospitals in Puerto Rico and divide the sum by the total hours for Puerto Rico (as calculated in Step 4) to arrive at an overall average hourly wage (unadjusted for occupational mix) of $13.5584 for Puerto Rico. For each labor market area in Puerto Rico, we calculate the Puerto Rico-specific wage index value by dividing the area average hourly wage (as calculated in Step 7) by the overall Puerto Rico average hourly wage.

Step 11—Section 4410 of Pub. L. 105–33 provides that, for discharges on or after October 1, 1997, the area wage index applicable to any hospital that is located in an urban area of a State may not be less than the area wage index applicable to hospitals located in rural areas in that State. For FY 2008, this change affects 340 hospitals in 68 urban areas. The areas affected by this provision are identified by a footnote in Table 4A in the Addendum of this final rule with comment period.

2. Expiration of the Imputed Floor

Section 4410 of Pub. L. 105–33 provides that the area wage index applicable to any hospital that is located in an urban area of a State may not be less than the area wage index applicable to hospitals located in rural areas of that State (''the rural floor''). There are two States that have no rural areas (New Jersey and Rhode Island) and one State that has rural areas but no IPPS hospitals located in the rural areas of the State (Massachusetts). In the FY 2005 IPPS final rule (69 FR 49109), we temporarily adopted an ''imputed'' floor measure to address a concern by some individuals that hospitals in all-urban States were disadvantaged by the absence of rural areas, because there is no floor within the State. We limited application of the policy to FYs 2005, 2006, and 2007 and indicated our intent to make additional changes to the policy or eliminate it for fiscal years after FY 2007.

In FY 2008, the rural floor will apply to 340 hospitals in 24 States. If the imputed rural floor were to continue into FY 2008, it would apply to an

additional 30 hospitals in New Jersey. In FY 2007, 40 hospitals in 10 urban areas received higher wage indices due to the imputed floor policy: Massachusetts (10 hospitals in 2 areas); New Jersey (30 hospitals in 8 areas); Rhode Island (no areas and no hospitals). In Massachusetts, the imputed rural floor will no longer apply because one hospital acquired rural status under § 412.103. We note that if a State has a hospital reclassified as rural under § 412.103, the State will be considered to have IPPS hospitals located in rural areas because, in this case, the reclassified hospital is treated as being located in a rural area in accordance with section 1886(d)(8)(E) of the Act. This policy also accords with how we defined an ''all-urban State'' under § 412.64(h)(5) of the regulations, which specifies that ''A State with rural areas and with hospitals reclassified as rural under § 412.103 is not an all-urban State.'' Therefore, in the case where a State has no hospitals that are geographically located in its rural areas, and one or more hospitals in the State are reclassified as rural under § 412.103, the data for the reclassified rural hospitals will be used to set the rural floor for the State until a new geographically located rural hospital opens and data are available from that hospital (as noted above, 4 years later) to compute the rural floor.

In the FY 2008 IPPS proposed rule, we proposed to discontinue the imputed floor policy after the FY 2007 wage index. We stated that after further considering the issue, we do not believe that it is necessary to have an ''imputed'' rural floor in States that have no rural areas or no rural hospitals. As discussed above, the imputed floor would not apply to two of the three States: it is not necessary for Rhode Island and it is no longer necessary for Massachusetts. In addition, we stated that the imputed rural floor methodology creates a disadvantage in the application of the wage index to hospitals in States with rural hospitals but no urban hospitals receiving the rural floor. Because the application of a rural floor requires a transfer of payments from hospitals in States with rural hospitals but where the rural floor is not applied to hospitals in States where either a rural or imputed floor is applied, we stated that we believed the policy should apply only when required by statute. Thus, only States with both rural areas and hospitals located in such areas (including any hospital reclassified under § 412.103) would benefit from the rural floor, as required by Congress.

However, in light of the public comments, we believe it appropriate to transition the expiration of the imputed rural floor over a 2-year period. We will continue the imputed rural floor for FY 2008, but allow it to expire in FY 2009. Thus, beginning in FY 2009, only States with both rural areas and hospitals located in such areas (including any hospital reclassified under § 412.103) would benefit from the rural floor, as required by Congress.

As in past years, we applied a budget neutrality adjustment to the standardized amount to ensure that payments remained constant to payments that would have occurred in the absence of the imputed rural floor policy.

Comment: Several commenters in States affected (and potentially affected) by the imputed floor policy questioned whether CMS has given enough reason to allow the imputed floor provision to expire. They mentioned that the imputed floor was created to protect all-urban States by offering them a wage index protection similar to that offered to other States with a rural floor. The commenters noted that the rationale behind creating the imputed floor still exists and that hospitals benefiting from the policy were counting on it to continue. The commenters added that because CMS has used its broad authority to enact other policies absent statutory authority, many of them disagreed with CMS' contention that an imputed floor system should be applied only if required by statute. The commenters requested that CMS consider the severe negative financial impact of its proposed policy on several New Jersey hospitals, and requested a rationale to justify the estimated 0.2 percent decrease in urban hospital reimbursement rates resulting from the expiration of the imputed floor. Other commenters explained that about 8 Massachusetts hospitals would experience a decrease in Medicare payments of $8 million, or 3.9 percent of their Medicare inpatient and outpatient revenue, if CMS no longer imputes a rural floor for that State. Some commenters stated that as the number of States utilizing the imputed floor decreases, the original rationale of protecting States with ''unique circumstances'' holds more true today than when originally proposed.

One commenter supported CMS's proposal to discontinue the imputed floor because it agreed that this type of floor should only apply when required by statute.

Response: With respect to the impact on payment for Massachusetts hospitals from discontinuing the imputed rural floor, we note that an urban hospital applied to be redesignated as rural under 42 CFR § 412.103. Therefore, as this hospital was approved for an urban-to-rural designation, it is now considered to be rural for purposes of its IPPS payments. Therefore, its wage index will set the rural floor for Massachusetts, and the imputed rural floor would no longer apply in Massachusetts. Thus, the payment impact of concern to the commenter about hospitals in Massachusetts would occur irrespective of whether we continued the imputed rural floor. (We refer readers to the next comment/response for more information about this issue.)

The imputed floor was originally authorized for only 3 years. In the FY 2005 IPPS final rule (69 FR 49110), we indicated that during the 3 years that the policy is in effect, we would determine whether to make additional changes to the policy or eliminate it. Given that we had indicated in the FY 2005 IPPS final rule that the provision was set to expire after 3 years, we believe that hospitals in all urban States should not have been relying on the policy to continue. Hospitals in these States were given a reasonable expectation that the policy would expire after 3 years.

The intent of the imputed floor was to create a protection for all-urban States similar to the protection offered to urban-rural mixed States by the rural floor. However, about 50 percent of urban-rural mixed States do not benefit from the rural floor provision because, in those States, the urban wage indices are all above the rural floor. Thus, like hospitals in all urban States prior to the creation of the imputed rural floor, hospitals in these States do not receive any benefit from a rural floor.

We further note that the imputed rural floor provides a guaranteed benefit for certain all-urban States that is not guaranteed to hospitals in urban-rural mixed States. Specifically, the imputed rural floor methodology creates a mathematical certainty that New Jersey hospitals will benefit from the imputed rural floor and Rhode Island hospitals will not. The imputed rural floor is based on a comparison of the average of the ratios of the lowest-to-highest wage indices of all of the all-urban States to the ratio of the lowest-to-highest wage index of each of those States individually. For each State, we then take the higher of the State-specific ratio and the average of the ratios of the all-urban States and multiply it by the highest area wage index applicable in the State. The product becomes the imputed floor below which no wage

index in the State could fall. The ratio of the lowest-to-highest wage index within each State multiplied by the highest wage index will never provide any benefit to hospitals within an individual State. This calculation will only set the floor equal to the wage index that is already the lowest within the State. The methodology can only have a benefit to hospitals within a State if its State-specific ratio of the lowest-to-highest wage index is lower than the average of these ratios across all of the all-urban States. New Jersey will always have a lowest-to-highest wage index ratio of less than 1.0 because it has more than one labor market area. Rhode Island has only one labor market area so the ratio of its lowest-to-highest wage index will always be 1.0. As long as Rhode Island has only one labor market area, New Jersey will always have the lower ratio of the lowest-to-highest wage index among these two States, and thus New Jersey's ratio of the lowest-to-highest wage index will always be lower than the average of these ratios for New Jersey and Rhode Island. By contrast, Rhode Island's ratio of the lowest-to-highest wage index will always be higher than the average of these two States (and all three all-urban States if the imputed rural floor were still applicable in Massachusetts) and it can never obtain any benefit. Thus, the provision, as currently formulated, provides a guaranteed benefit to New Jersey hospitals that is not afforded to mixed urban-rural States, and no protection at all for Rhode Island hospitals. The imputed floor was never intended to provide an exclusive and unending benefit to a single state. Because, in the current system, New Jersey would always have hospitals benefiting from the imputed floor, and only slightly more than half of all urban-rural mixed States have hospitals benefiting from the rural floor, we no longer view the imputed floor as being a protective measure.

However, in light of the public comments, we believe it appropriate to transition the expiration of the imputed rural floor over a 2-year period. We will continue the imputed rural floor for FY 2008, but beginning with the FY 2009 wage index, we will no longer apply an imputed floor policy for all-urban States.

Comment: One commenter questioned whether Massachusetts should indeed lose its imputed floor due to a hospital acquiring an urban-to-rural reclassification under 42 CFR 412.103. The commenter noted that the ''hold harmless'' provisions (in section 1886(d)(8)(C) of the Act) protect a State's rural floor from being unduly reduced due to the effects of reclassification/redesignation. The commenter believed the imputed floor should be treated in a similar manner.

Response: As discussed in section III.I.2. of the preamble of this final rule with comment period, we have a policy that precludes an urban-to-rural redesignation under § 412.103 from reducing the rural wage index. However, when no hospitals are geographically located in a rural area, or when no rural hospitals' wage data can be used to calculate the rural wage index, there is no rural wage index. Therefore, the urban-to-rural redesignation is not reducing the rural wage index. Rather, the data of the redesignated hospital establish the rural wage index. The imputed floor was intended to be applied in states where a rural floor could not be calculated and is rendered moot when an urban-to-rural redesignation within a State establishes a situation where a rural floor can be calculated. Therefore, we disagree with this commenter and are calculating a rural wage index for Massachusetts based on the average hourly wage for the one hospital that has been redesignated as rural. This rural wage index will become the rural floor for Massachusetts hospitals for FY 2008.

For all of the reasons stated above, we are not continuing the imputed rural floor in fiscal years after FY 2008. Nevertheless, we recognize that we still need a policy for determining the rural wage index when a new IPPS hospital opens in a State that has rural areas, but no IPPS hospitals. There is a lag between the time a hospital opens or becomes an IPPS provider and when the hospital's cost report wage data are available to include in calculating the area wage index. For example, if a hospital files its first Medicare cost report as an IPPS provider with a beginning date of January 1, 2007, and an ending date of December 31, 2007, the hospital's FY 2007 wage data would not be included in the wage index until the FY 2011 IPPS update. Therefore, when a rural IPPS hospital opens in a State that has rural areas, but no wage data are available to calculate a rural wage index, in the FY 2008 proposed rule, we proposed to apply a wage index to that hospital using the same methodology that we currently use for home health and other postacute care providers in rural Massachusetts (71 FR 65906). That is, we will use the unweighted average of the wage indices from all CBSAs that are contiguous to the rural counties of the State. (We define contiguous as sharing a border.)

Comment: One organization commented that CMS should allow data from a new hospital that opens in a rural area to be included in the rural wage index as soon as a full year's cost report is available for the hospital. The commenter stated that it is ''unfair, inconsistent, and unnecessary to have to wait 4 years'' for a new hospital's data to be included in the rural wage index. However, this commenter and others stated that they supported the use of data from contiguous counties to establish the rural wage index when a new rural hospital opens and there are no data available to calculate the rural wage index.

Response: We note that we did not receive any comments opposing our proposal to use data from contiguous counties to establish the rural wage index when a new rural hospital opens and there are no data available to calculate the rural wage index.

The IPPS final rule for FY 2007 provides a detailed response to a similar comment explaining why the wage data submission and review process occurs over a 4-year time period (71 FR 48016). As we stated, the 4-year time period is necessary to allow time for hospitals to complete and submit their wage data for the fiscal year, for the fiscal intermediaries to present the results of their review to hospitals, for hospitals to review any potential errors in the wage index files, for us to resolve any disputes between the fiscal intermediary and the hospital, and, finally, for the wage indices to be calculated and published in advance of the fiscal year. The commenter suggested that we use wage data for a new rural hospital that are from a later time period than all other hospitals that does not go through this rigorous collection, review and correction process. We have two concerns about the commenter's suggestion. First, we would be concerned about the consistency of using wage data from a new rural hospital that does not undergo the same rigorous collection, review and correction process as wage data for other hospitals. Second, as the wage index is a relative measure of area differences in wage levels, it is imperative that the data included in the calculation are from the same time period, particularly because wage costs are subject to inflationary effects and hospital employment trends fluctuate over time (for example, outsourcing is more common now than it was several years ago). Therefore, our methodology would be flawed if we used data from very different time periods.

We appreciate the commenters' support of our proposal to use the

unweighted average of the wage indices from all CBSAs that are contiguous to the rural counties of the State to compute the rural wage index when a new hospital opens and there are no other data available to calculate the rural wage index. Because we received no comments that oppose this proposal, we are adopting this policy as final in this final rule with comment period. The policy affects no rural areas for the FY 2008 wage index.

We will apply the wage index calculated above until the new IPPS hospital files a cost report for the base year that is used in calculating the wage index. (In the above example, the rural hospital's wage index will be calculated for FYs 2008, 2009, and 2010 using urban area data.) Further, under section 4410 of Pub. L. 105–33, the wage index for this rural hospital would become the State's rural floor. As stated above, however, if a State has rural areas, and a hospital is reclassified as rural under § 412.103, then there would be no need to apply the above policy. The reclassified hospital would set the rural floor, and the wage data of the newly opened rural hospitals would be included in the calculation of the wage index of the rural area only once their wage data correlated with the survey year used to establish the wage index (4 years after wage data are reported).

3. CAHs Reverting Back to IPPS Hospitals and Raising the Rural Floor

Medicare payments to CAHs are based on 101 percent of reasonable costs and are generally greater than the payments Medicare would make if the same hospitals were paid under the IPPS, which pays hospitals a fixed rate per discharge. Also, as a CAH, a hospital is guaranteed to recover its costs, while under the IPPS, it is not. We are aware of a situation where two rural hospitals in a State are considering converting from CAH status back to IPPS even though they continue to be CAH eligible. The CAHs would convert back to IPPS even though it would not directly benefit them. As IPPS providers, the hospitals' wage data would eventually set the rural floor for the State (that is, in 4 years when the hospitals' first IPPS cost reports would be included in a base year used in calculating the State's rural wage index). In this case, we are concerned that these hospitals are converting solely in order to take advantage of the rural floor provisions for the other hospitals in the State, but not for any reasons that are intrinsic to the two specific hospitals. Because the hospitals' wage levels are higher than most, if not all, of the urban IPPS hospitals in the State, including one hospital in the State that acquired rural status under § 412.103, the wage indices for most, if not all, of the State's urban hospitals would increase as a result of the rural floor provision if the CAHs convert to IPPS status. Such an arrangement would increase payments to the hospitals in the State at the expense of every other IPPS hospital in the nation. The two rural hospitals that are currently CAHs were last paid under the IPPS in FY 2003. We simulated the effect of allowing these two hospitals to set the State's rural floor with the same data used to calculate the FY 2003 wage index as would occur in FY 2011 if these hospitals were to convert to IPPS status in FY 2007 and no other hospitals were to open in the rural area of the State. Based on this simulation, all hospitals except two would be paid using the rural floor, increasing payments in excess of $220 million for a single year. If the average hourly wage for these two hospitals increased faster than the national average, the increase in payments would be even higher. It seems likely that over 5 years, Medicare payments to hospitals in this State would increase by more than $1 billion. Again, these increased payments would be budget neutralized at the expense of all other IPPS hospitals nationwide. Given that the hospitals continue to be eligible for the higher paying CAH status, we are concerned that hospitals are converting to IPPS status solely in order to raise the State's rural floor. We are concerned about the propriety of such an arrangement if the intent is to manipulate the State's area wage index values to receive higher Medicare reimbursement.

Section 1886(d)(5)(I)(i) of the Act allows the Secretary the authority to ''provide by regulation for such other exceptions and adjustments * * * as the Secretary deems appropriate.'' In the FY 2008 IPPS proposed rule, we solicited public comments regarding whether it would be appropriate for CMS to establish a policy under this authority to preclude the arrangement described above and, if so, how such a policy would be applied. We believe that any policy should only apply to a CAH that continues to meet the CAH certification requirements and should not apply if a CAH no longer met those requirements and converted to an IPPS provider.

Comment: Several commenters shared the concerns of CMS about the possibility of intentional gaming of the CAH conversion system in order to achieve greater payments through the establishment of a state rural floor. The commenters in general were supportive of CMS developing a policy to prevent or mitigate the impacts of a situation where a State will gain benefits at the expense of all other IPPS hospitals nationwide. Some commenters suggested that CMS should consider this issue in the broader context of wage index reform planned for the FY 2009 IPPS proposed rule. Some commenters provided suggestions to assist in determining what CAH conversions should or should not be precluded based on historical data.

Other commenters were concerned that CMS may be overreaching its authority by granting itself the ability to restrict a hospital's ability to choose the type of Medicare provider it wishes to be. The commenters were also concerned with CMS attempting to determine the intent of hospitals seeking conversion. One commenter added that as long as a hospital is essentially the same provider as when it was previously an IPPS hospital, CMS should reinstate the provider as an IPPS hospital. Another commenter suggested that ''Section 1886(d)(5)(I)(i) does not provide CMS the authority to adopt a policy that precludes qualified CAHs from converting to IPPS'', and even if CMS has the authority, the policy would be ''discriminatory and constitutes bad public policy.'' Some commenters also suggested that CMS was inappropriately ''singling out'' hospitals in one State to apply this policy.

Response: We appreciate the commenters' ideas and contributions to this matter for consideration. While we have proposed no policy pertaining to this issue at this time, we will consider all of these comments as we develop the FY 2009 IPPS proposed rule. One approach that we will explore in the context of wage index reform is to apply the rural floor budget neutrality adjustment at the State level. Such an application would protect hospitals in other States from being harmed by potential gaming associated with the rural floor. Thus, in the scenario of concern to us, the CAHs would convert to IPPS status and set a rural floor that would raise the wage index for most or all urban hospitals within the State. However, budget neutrality would be achieved by adjusting the wage index for all hospitals within the State rather than all hospitals nationwide. Under such a policy, we would no longer be concerned about the scenario of CAHs converting to IPPS status to raise the rural floor. While the former CAHs that pay high wages in this circumstance would continue to set the rural floor, the policy would be redistributive within the State rather than across States. Under such a policy, we would not have to address the concern raised in the

comments of having to determine the motives of the CAH converting to IPPS status because the within State budget neutrality adjustment would provide no advantage to the State's hospitals in the aggregate and would merely redistribute existing Medicare payments differently within the State. The new policy that we intend to explore in next year's IPPS rule would also resolve the concern that CMS is ''singling out'' one State because we would propose to apply the new policy (that is, applying budget neutrality within a State rather than across all hospitals nationwide) in any State that benefits from the rural floor.

Again, we look forward to addressing this issue in next year's IPPS proposed rule as we develop a proposal (or proposals) to reform the IPPS wage index as required under section 106(b) of the MIEA–TRHCA.

4. Application of Rural Floor Budget Neutrality

Section 4410 of the Balanced Budget Act of 1997 (BBA) established the rural floor by requiring that the wage index for a hospital in any urban area cannot be less than the area wage index determined for the State's rural area. Since FY 1998, we have implemented the budget neutrality requirement of this provision by adjusting the standardized amounts. A discussion and illustration of the calculation of the standardized amounts is shown in the Addendum of every year's IPPS rule. [27]

In the FY 2008 IPPS proposed rule, we proposed a prospective change to how budget neutrality is applied to implement the rural floor for FY 2008 and subsequent years. Section 4410(a) of the BBA indicates that ''the area wage index applicable * * * to any hospital which is not located in a rural area * * * may not be less than the area wage index applicable * * * to hospitals located in rural areas in the State in which the hospital is located.'' Section 4410(b) of the BBA imposes the budget neutrality requirement and states that the Secretary shall ''adjust the area wage index referred to in subsection (a) for hospitals not described in such subsection.''

One possible interpretation of section 4410(b) of the BBA is that the budget neutrality adjustment would be applied only to those hospitals that do not receive the rural floor. In other words, the wage index of an urban hospital subject to the rural floor would be increased to the level of the rural wage index in the same State, but would not be adjusted for budget neutrality. Thus, urban hospitals receiving the rural floor would receive a higher wage index than the rural hospitals within the same State (because rural floor hospitals would not be subject to budget neutrality, whereas rural hospitals would be). We believe such a reading would not be in accordance with Congressional intent, which was to set a floor for urban hospitals, not to pay urban hospitals a wage index higher than the wage index applicable to rural hospitals.

In order to avoid the apparent contradiction between raising an urban hospital's wage index to the rural floor and not applying budget neutrality to its wage index, we also believe the statute could be read to allow an iterative calculation of budget neutrality and wage indices. Under such iterative calculations (consistent with section 4410(a) of the BBA), we would raise the wage index for urban hospitals to the level of the pre-budget neutrality rural wage index. Consistent with section 4410(b) of the BBA, we would adjust the wage index for all nonrural floor hospitals to achieve budget neutrality. However, such an adjustment would result in an urban hospital that would receive the rural floor having a higher wage index than a rural hospital in the same State. Therefore, we would then decrease wage indices for the rural floor hospitals so they are equal to the adjusted rural wage index in the same State. At this point, payments would be less in the aggregate than they were prior to applying the rural floor. Accordingly, a new budget neutrality adjustment would have to be calculated to raise the wage indices and total payments for rural hospitals and nonrural floor urban hospitals. The rural wage index would now be higher than the wage index for the rural floor hospitals in the same State. Therefore, the wage index for rural floor hospitals would then be increased again to the level of the State's rural wage index, leading to budget neutrality being recalculated again, the wage index reduced for rural floor hospitals, and so forth until the wage index and the budget neutrality adjustment stabilize.

We have determined that the iterative method is substantively equivalent to simply adjusting all area wage indices by a uniform percentage. We have performed the iterative calculation using provider-level data based on FY 2007 MedPAR data and the first half of FY 2007 wage index data. Using such data, we determined that the iterative method results in the same final wage indices through four decimal places that would result if a uniform budget neutrality factor were applied to all hospitals' wage indices. Furthermore, an iterative method, which requires adjusting only the wage index values of nonrural floor providers, reassigning the lowered rural floor value to rural floor providers, and reiterating the budget neutrality factor applied to the nonrural floor providers would require an excessive number of iterations and computer processing, which is not necessary if we simply apply a uniform budget neutrality adjustment to all wage index values. The latter method is accomplished more quickly, is less complex, and arrives at the same final wage index values. Because the IPPS schedule is relatively condensed, with a proposed rule issued in April, a 60-day comment period until June, and then only 2 months to analyze comments, respond to them, determine final policies and calculate final rates prior to the August 1 publication, we believe it would not be practical to require such multiple layers of calculations, when a uniform adjustment would produce substantively identical results. Therefore, we proposed to implement the rural floor budget neutrality requirement by applying a uniform budget neutrality adjustment to all hospital wage indices rather than the more complicated iterative process illustrated below.

The following hypothetical example, which includes a series of nine iterations, illustrates how the iterative process works. The example assumes three IPPS hospitals in one State. Hospital A is rural and Hospitals B and C are urban.

[27] The BBA was enacted on August 5, 1997, and required application of the rural floor beginning with the FY 1998 IPPS. See the following for a description and calculation of the IPPS standardized amounts since that time: 62 FR 46038–46043, August 29, 1997; 63 FR 41006–41010, July 31, 1998; 64 FR 41544–41549, July 30, 1999; 65 FR 47111–47116, August 1, 2000; 66 FR 39939–39946, August 1, 2001; 67 FR 50120–50126, August 1, 2002; 68 FR 45474–45480, August 1, 2003; 69–FR–49273–49282, August 11, 2004; 70 FR 47491–47498, August 12, 2005; 71 FR 59889–58980, October 11, 2006.

PRE-FLOOR WAGE INDEX

	Hospital A	Hospital B	Hospital C	Total
Wage Index	0.9500	1.1700	0.8600	
Relative Weights	100	200	150	
Location	Rural	Urban	Urban	
Standardized Amounts	$1,000	$1,000	$1,000	
Payments	$95,000	$234,000	$129,000	$458,000

Note: Hospital C is urban and has a lower wage index than Hospital A which is rural.

POST-FLOOR WAGE INDEX; PRE-BUDGET NEUTRALITY

	Hospital A	Hospital B	Hospital C	Total
Wage Index	0.9500	1.1700	0.9500	
Relative Weights	100	200	150	
Location	Rural	Urban	Urban	
Standardized Amounts	$1,000	$1,000	$1,000	
Payments	$95,000	$234,000	$142,500	$471,500

Note: Hospital C's wage index is raised to the same level as Hospital A.

POST FLOOR—BUDGET NEUTRALITY PROCESS—ITERATION 1

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9110	1.1220	0.9500	BN Factor.
Relative weights	100	200	150	0.95897.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$91,102	$224,398	$142,500	$458,000.

[Step 2: Reduce Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9110	1.1220	0.9110	BN Factor.
Relative weights	100	200	150	0.95897.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$91,102	$224,398	$136,653	$452,153.

ITERATION 2

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9279	1.1428	0.9110	BN Factor.
Relative weights	100	200	150	1.01853.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,790	$228,557	$136,653	$458,000.

[Step 2: Increase Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9279	1.1428	0.9279	BN Factor.
Relative weights	100	200	150	1.01854.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,790	$228,557	$139,185	$460,532.

ITERATION 3

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9206	1.1338	0.9279	BN Factor.
Relative weights	100	200	150	0.99212.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,059	$226,756	$139,185	$458,000.

[Step 2: Reduce Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9206	1.1338	0.9206	BN Factor.
Relative weights	100	200	150	0.99212.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,059	$226,756	$138,088	$456,903.

ITERATION 4

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9238	1.1377	0.9206	BN Factor.
Relative weights	100	200	150	1.00344.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,376	$227,536	$138,088	$458,000.

[Step 2: Increase Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9238	1.1377	0.9238	BN Factor.
Relative weights	100	200	150	1.00344.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,376	$227,536	$138,563	$458,475.

ITERATION 5

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9224	1.1360	0.9238	BN Factor.
Relative weights	100	200	150	0.99852.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,238	$227,198	$138,563	$458,000.

[Step 2: Reduce Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9224	1.1360	0.9224	BN Factor.
Relative weights	100	200	150	0.99852.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,238	$227,198	$138,358	$457,794.

ITERATION 6

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9230	1.1367	0.9224	BN Factor.
Relative weights	100	200	150	1.00064.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,298	$227,344	$138,358	$458,000.

[Step 2: Increase Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9230	1.1367	0.9230	BN Factor.
Relative weights	100	200	150	1.00064.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,298	$227,344	$138,447	$458,089.

ITERATION 7

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9227	1.1364	0.9230	BN Factor.
Relative weights	100	200	150	0.99972.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,272	$227,281	$138,447	$458,000.

[Step 2: Reduce Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9227	1.1364	0.9227	BN Factor.
Relative weights	100	200	150	0.99972.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,272	$227,281	$138,408	$457,961.

ITERATION 8

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9228	1.1365	0.9227	BN Factor.
Relative weights	100	200	150	1.00012.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,283	$227,308	$138,408	$458,000.

[Step 2: Increase Hospital C's wage index to Hospital A's level.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9228	1.1365	0.9228	BN Factor.
Relative weights	100	200	150	1.00012.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,283	$227,308	$138,425	$458,016.

ITERATION 9

[Step 1: Apply budget neutrality to Hospital A and Hospital B.]

	Hospital A	Hospital B	Hospital C	Total
Wage index	0.9228	1.1365	0.9228	BN Factor.
Relative weights	100	200	150	0.99995.
Location	Rural	Urban	Urban	Target.
Standardized amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,279	$227,297	$138,425	$458,000.

In the example above, the wage indices are shown only to the 4th decimal place even though they are not rounded. However, the actual wage indices that we calculate for the IPPS are rounded to 4 decimal places. In the 9th and final iteration of the budget neutrality adjustment shown above, there was no change to the wage indices through the 4th decimal place relative to the 8th iteration. Therefore, because the wage indices stopped changing, we could not obtain further precision in the budget neutrality and wage index calculations in the example shown above with further iterations. We note that the example above produces the same result as simply applying a uniform adjustment to hospital wage indices. Using the same data as the above hypothetical example, we show this result below:

PRE-FLOOR WAGE INDEX

	Hospital A	Hospital B	Hospital C	Total
Wage Index	0.9500	1.1700	0.8600	
Relative Weights	100	200	150	
Location	Rural	Urban	Urban	
Standardized Amounts	$1,000	$1,000	$1,000	
Payments	$95,000	$234,000	$129,000	$458,000

Note: Hospital C is urban and has a lower wage index than Hospital A which is rural.

POST-FLOOR WAGE INDEX; PRE-BUDGET NEUTRALITY

	Hospital A	Hospital B	Hospital C	Total
Wage Index	0.9500	1.1700	0.9500	
Relative Weights	100	200	150	
Location	Rural	Urban	Urban	
Standardized Amounts	$1,000	$1,000	$1,000	
Payments	$95,000	$234,000	$142,500	$471,500

Note: Hospital C's wage index is raised to the same level as Hospital A.

POST FLOOR—BUDGET NEUTRALITY

	Hospital A	Hospital B	Hospital C	Total
Wage Index	0.9228	1.1365	0.9228	BN Factor.
Relative Weights	100	200	150	0.971368.
Location	Rural	Urban	Urban	Target.
Standardized Amounts	$1,000	$1,000	$1,000	$458,000.
Payments	$92,280	$227,300	$138,420	$458,000.

We note that, as proposed, our change applies the budget neutrality adjustment to the wage index, and not to the standardized amount. In previous years, we applied a budget neutrality adjustment to the standardized amount to ensure that payments remained constant to payments that would have occurred in the absence of the rural floor requirement in section 4410 of the BBA. We believe such an adjustment is in keeping with the statute, which requires that the rural floor not result in aggregate payments that are greater or less than those that would have been made in the absence of a rural floor. We believe that an adjustment to the wage index would result in a substantially similar payment as an adjustment to the standardized amount, as both involve multipliers to the standardized amount, and both would be based upon the same modeling parameters. We do note that because hospitals have different labor-related shares (62 percent for hospitals with wage indices less than or equal to 1; 69.7 percent for hospitals with wage indices greater than 1), an adjustment to the wage index would have slightly different effects from an adjustment to the standardized amount, as each wage index would be adjusted by a uniform percentage.

For FY 2008, we are using FY 2006 discharge data and FY 2008 wage indices to simulate IPPS payments without the rural floor. We compare these simulated payments to simulated payments using the same data with a rural floor.

We believe that the statute supports either an adjustment to the standardized amount or the wage indices because under either methodology, the rural floor would not result in aggregate

payments that were greater or less than those that would have been made in the absence of a rural floor.

Comment: Many commenters requested additional information as to the purpose and method CMS is proposing for applying the rural floor budget neutrality adjustment to the wage index. Most commenters were supportive of CMS' proposal. Other commenters expressed concern that CMS acknowledged that because the labor-related share is higher for hospitals with a wage index greater than 1.0000, an adjustment to the wage index, as opposed to the standardized amount, will treat hospitals in an inequitable manner. One commenter did not view it to be appropriate to intentionally move from an equitable adjustment system to one known to be potentially problematic. Another commenter stated that, for past years, the methodology for applying the adjustment was flawed because the adjustment was a cumulative adjustment (that is, previous year adjustments were not removed before making current year adjustments), causing an ''inappropriate duplicating effect'' to be ''permanently built into the standardized amount.'' Commenters requested clarification as to whether the proposed one-time 1.002214 adjustment is meant to address a single year transition to a new system of budget neutrality adjustment, or is meant to reverse effects of prior year cumulative adjustments. One commenter requested CMS to more clearly explain and fully disclose any known errors in the calculation from past years' methodologies, as well as report standardized amount adjustment figures from 1999 through 2007. Several commenters suggested that besides removing any compounding effect on the standardized amount (which some deemed to be ''budget-negative'') for the current year, a positive adjustment should also be implemented in FY 2008 to retroactively reimburse hospitals. Some commenters claimed that the proposed adjustment is not adequate to fix the effects of past data errors, nor adequate to reimburse hospitals for past underpayments.

Response: We appreciate that most commenters supported our proposal to apply the rural floor budget neutrality adjustment to the wage index rather than the standardized amount. For FY 2008, we will apply budget neutrality for application of the rural floor to the wage index rather than the standardized amounts.

With respect to the concern that the budget neutrality adjustment will have a greater impact on hospitals with a labor-related share of 69.7, we believe that this policy is consistent with the intent of section 403 of Pub. L. 108–173. Under section 403 of Pub. L. 108–103, CMS must use a labor-related share of 62 percent for hospitals with a wage index less than or equal to 1, unless application of a labor-related share of 62 percent would result in lower payments to a hospital than would otherwise be made. We believe that Congress intended that the wage index adjustment should have less of an impact on hospitals with lower wage indexes. Thus, although we could evenly distribute the effect of the budget neutrality adjustment across all hospitals by applying one budget neutrality factor to the wage indexes of hospitals with a labor-related share of 69.7 and a different factor to the wage indexes of hospitals with a labor-related share of 62 percent, we do not believe such an adjustment would be as consistent with the intent of Congress.

Regarding the cumulative nature of the budget neutrality adjustment, the rural floor budget neutrality adjustment previously was a cumulative adjustment, similar to the adjustments we currently make for updates to the wage index and DRG reclassification and recalibration. Beginning in FY 2008, the rural floor budget neutrality adjustment will be noncumulative. However, we do not believe that our prior policy of cumulatively adjusting for rural floor budget neutrality was improper. The commenters are correct that the one-time 1.002214 adjustment is meant to address a single year transition to a noncumulative system of budget neutrality adjustment.

With regard to alleged errors in FYs 1999 through 2007, our calculation of budget neutrality in past fiscal years is not within the scope of this rulemaking. Even if errors were made in prior fiscal years, we would not make an adjustment to make up for those errors when setting rates for FY 2008. It is our longstanding policy that finality is critical to a prospective payment system. Although errors in ratesetting are inevitable, we believe the need to establish final prospective rates outweighs the greater accuracy we might gain if we retroactively recomputed rates whenever an error is discovered.

H. Analysis and Implementation of the Occupational Mix Adjustment and the FY 2008 Occupational Mix Adjusted Wage Index

As discussed in section III.C. of the preamble of this final rule with comment period, for FY 2008, we apply the occupational mix adjustment to 100 percent of the FY 2008 wage index. We calculated the occupational mix adjustment using data from the 2006 occupational mix survey data, using the methodology described in section III.C.3. of the preamble of this final rule with comment period.

Using the first and second quarter occupational mix survey data and applying the occupational mix adjustment to 100 percent of the final FY 2008 wage index results in a national average hourly wage of $30.9133 and a Puerto-Rico specific average hourly wage of $13.5536. After excluding data of hospitals that either submitted aberrant data that failed critical edits, or that do not have FY 2004 Worksheet S–3 cost report data for use in calculating the FY 2008 wage index, we calculated the FY 2008 wage index using the occupational mix survey data from 3,367 hospitals. Using the Worksheet S–3 cost report data of 3,569 hospitals and occupational mix first and/or second quarter survey data from 3,367 hospitals represents a 94.3 percent survey response rate. The FY 2008 national average hourly wages for each occupational mix nursing subcategory as calculated in Step 2 of the occupational mix calculation are as follows:

4. Occupational mix nursing subcategory	5. Average hourly wage ($)
National RN Management	38.6202
National RN Staff	33.4705
National LPN	19.2209
National Nurse Aides, Orderlies, and Attendants	13.6938
National Medical Assistants	15.7737
National Nurse Category	28.7329

The national average hourly wage for the entire nurse category as computed in Step 5 of the occupational mix calculation is $28.7329. Hospitals with a nurse category average hourly wage (as calculated in Step 4) of greater than the national nurse category average hourly wage receive an occupational mix adjustment factor (as calculated in Step 6) of less than 1.0. Hospitals with a nurse category average hourly wage (as calculated in Step 4) of less than the national nurse category average hourly wage receive an occupational mix adjustment factor (as calculated in Step 6) of greater than 1.0.

Based on the January through June 2006 occupational mix survey data, we determined (in Step 7 of the occupational mix calculation) that the national percentage of hospital employees in the Nurse category is 42.96 percent, and the national percentage of hospital employees in the

All Other Occupations category is 57.04 percent. At the CBSA level, the percentage of hospital employees in the Nurse category ranged from a low of 27.26 percent in one CBSA, to a high of 85.30 percent in another CBSA.

We compared the final FY 2007 occupational mix adjusted wage indices for each CBSA to the final FY 2008 wage indices adjusted for occupational mix. In implementing an occupational mix adjusted wage index based on the above calculation using 6 months of survey data for FY 2008 as opposed to 3 months of survey data used for FY 2007, the final wage index values for 20 rural areas (42.5 percent) and 188 urban areas (48.4 percent) will decrease as a result of the adjustment. Eleven rural areas (23.4 percent) and 120 urban areas (30.9 percent) will experience a decrease of 1 percent or greater in their wage index values. The largest negative impacts will be 5.91 percent and 14.85 percent for a rural and urban area, respectively. In addition, 26 rural areas (55.3 percent) and 198 urban areas (51.0 percent) will experience an increase in their wage index values. Eleven rural areas (23.4 percent) and 134 urban areas (34.5 percent) will experience an increase of 1 percent or greater in their wage index values. The largest increase for a rural area will be 13.28 percent and the largest increase for an urban area will be 11.56 percent. One rural area will be unaffected. These results indicate that a larger percentage of rural areas (55.3 percent) benefit from an occupational mix adjustment than do urban areas (51.0 percent), although the difference in these percentages is smaller than it has been in past years. Furthermore, while approximately one-third of rural CBSAs have experienced a decrease in their wage indices as a result of the occupational mix adjustment from the time the occupational mix adjustment was first implemented in FY 2005 until FY 2007, this percentage has grown to 42.5 percent for FY 2008.

The wage index values for FY 2008 (except those for hospitals receiving wage index adjustments under section 1886(d)(13) of the Act) are shown in Tables 4A, 4B, 4C, and 4F in the Addendum to this final rule with comment period.

Tables 3A and 3B in the Addendum to this final rule with comment period list the 3-year average hourly wage for each labor market area before the redesignation of hospitals based on FYs 2006, 2007, and 2008 cost reporting periods. Table 3A lists these data for urban areas and Table 3B lists these data for rural areas. In addition, Table 2 in the Addendum to this final rule with comment period includes the adjusted average hourly wage for each hospital from the FY 2002 and FY 2003 cost reporting periods, as well as the FY 2004 period used to calculate the FY 2008 wage index. The 3-year averages are calculated by dividing the sum of the dollars (adjusted to a common reporting period using the method described previously) across all 3 years, by the sum of the hours. If a hospital is missing data for any of the previous years, its average hourly wage for the 3-year period is calculated based on the data available during that period.

The wage index values in Tables 2, 4A, 4B, 4C, and 4F and the average hourly wages in Tables 2, 3A, and 3B in the Addendum to this final rule with comment period include the occupational mix adjustment as well as the budget neutrality adjustment for the rural floor.

I. Revisions to the Wage Index Based on Hospital Redesignations

1. General

Under section 1886(d)(10) of the Act, the Medicare Geographic Classification Review Board (MGCRB) considers applications by hospitals for geographic reclassification for purposes of payment under the IPPS. Hospitals must apply to the MGCRB to reclassify by September 1 of the year preceding the year during which reclassification is sought. Generally, hospitals must be proximate to the labor market area to which they are seeking reclassification and must demonstrate characteristics similar to hospitals located in that area. The MGCRB issues its decisions by the end of February for reclassifications that become effective for the following fiscal year (beginning October 1). The regulations applicable to reclassifications by the MGCRB are located in §§ 412.230 through 412.280.

Section 1886(d)(10)(D)(v) of the Act provides that, beginning with FY 2001, a MGCRB decision on a hospital reclassification for purposes of the wage index is effective for 3 fiscal years, unless the hospital elects to terminate the reclassification. Section 1886(d)(10)(D)(vi) of the Act provides that the MGCRB must use the 3 most recent years' average hourly wage data in evaluating a hospital's reclassification application for FY 2003 and any succeeding fiscal year.

Section 304(b) of Pub. L. 106–554 provides that the Secretary must establish a mechanism under which a statewide entity may apply to have all of the geographic areas in the State treated as a single geographic area for purposes of computing and applying a single wage index, for reclassifications beginning in FY 2003. The implementing regulations for this provision are located at § 412.235.

Section 1886(d)(8)(B) of the Act requires the Secretary to treat a hospital located in a rural county adjacent to one or more urban areas as being located in the MSA to which the greatest number of workers in the county commute, if the rural county would otherwise be considered part of an urban area under the standards for designating MSAs and if the commuting rates used in determining outlying counties were determined on the basis of the aggregate number of resident workers who commute to (and, if applicable under the standards, from) the central county or counties of *all* contiguous MSAs. In light of the new CBSA definitions and the Census 2000 data that we implemented for FY 2005 (69 FR 49027), we undertook to identify those counties meeting these criteria. The eligible counties are identified under section III.I.8. of the preamble of this final rule with comment period.

2. Effects of Reclassification/Redesignation

Section 1886(d)(8)(C) of the Act provides that the application of the wage index to redesignated hospitals is dependent on the hypothetical impact that the wage data from these hospitals would have on the wage index value for the area to which they have been redesignated. These requirements for determining the wage index values for redesignated hospitals are applicable both to the hospitals located in rural counties deemed urban under section 1886(d)(8)(B) of the Act and hospitals that were reclassified as a result of the MGCRB decisions under section 1886(d)(10) of the Act. Therefore, as provided in section 1886(d)(8)(C) of the Act, the wage index values were determined by considering the following:

- If including the wage data for the redesignated hospitals would reduce the wage index value for the area to which the hospitals are redesignated by 1 percentage point or less, the area wage index value determined exclusive of the wage data for the redesignated hospitals applies to the redesignated hospitals.
- If including the wage data for the redesignated hospitals reduces the wage index value for the area to which the hospitals are redesignated by more than 1 percentage point, the area wage index determined inclusive of the wage data for the redesignated hospitals (the combined wage index value) applies to the redesignated hospitals.
- If including the wage data for the redesignated hospitals increases the

wage index value for the urban area to which the hospitals are redesignated, both the area and the redesignated hospitals receive the combined wage index value. Otherwise, the hospitals located in the urban area receive a wage index excluding the wage data of hospitals redesignated into the area.

Rural areas whose wage index values would be reduced by excluding the wage data for hospitals that have been redesignated to another area continue to have their wage index values calculated as if no redesignation had occurred (otherwise, redesignated rural hospitals are excluded from the calculation of the rural wage index). The wage index value for a redesignated rural hospital cannot be reduced below the wage index value for the rural areas of the State in which the hospital is located.

CMS has also adopted the following policies:

- The wage data for a reclassified urban hospital is included in both the wage index calculation of the area to which the hospital is reclassified (subject to the rules described above) and the wage index calculation of the urban area where the hospital is physically located.
- In cases where urban hospitals have reclassified to rural areas under 42 CFR 412.103, the urban hospital wage data are: (a) included in the rural wage index calculation, unless doing so would reduce the rural wage index; and (b) included in the urban area where the hospital is physically located.

3. FY 2008 MGCRB Reclassifications

Under section 1886(d)(10) of the Act, the MGCRB considers applications by hospitals for geographic reclassification for purposes of payment under the IPPS. The specific procedures and rules that apply to the geographic reclassification process are outlined in § 412.230 through § 412.280.

At the time this final rule with comment period was constructed, the MGCRB had completed its review of FY 2008 reclassification requests. There were 365 hospitals approved for wage index reclassifications by the MGCRB for FY 2008. Because MGCRB wage index reclassifications are effective for 3 years, hospitals reclassified during FY 2006 or FY 2007 are eligible to continue to be reclassified based on prior reclassifications to current MSAs during FY 2008. There were 299 hospitals approved for wage index reclassifications in FY 2006 and 214 hospitals approved for wage index reclassifications in FY 2007. Some of the hospitals that reclassified for FY 2006 and FY 2007 have elected not to continue their reclassifications in FY 2008 because, under the revised labor market area definitions, they are now physically located in the areas to which they previously reclassified. Of all of the hospitals approved for reclassification for FY 2006, FY 2007, and FY 2008, 866 hospitals are in a reclassification status for FY 2008.

Prior to FY 2004, hospitals had been able to apply to be reclassified for purposes of either the wage index or the standardized amount. Section 401 of Pub. L. 108–173 established that all hospitals will be paid on the basis of the large urban standardized amount, beginning with FY 2004. Consequently, all hospitals are paid on the basis of the same standardized amount, which made such reclassifications moot. Although there could still be some benefit in terms of payments for some hospitals under the DSH payment adjustment for operating IPPS, section 402 of Pub. L. 108–173 equalized DSH payment adjustments for rural and urban hospitals, with the exception that the rural DSH adjustment is capped at 12 percent (except that rural referral centers and, effective for discharges occurring on or after October 1, 2006, MDHs have no cap). (A detailed discussion of this application appears in section IV.I. of the preamble of the FY 2005 IPPS final rule (69 FR 49085). The exclusion of MDHs from the 12 percent DSH cap under Pub. L. 109–171 was discussed under section IV.F.4. of the preamble of the FY 2007 IPPS final rule (71 FR 48066).)

Under § 412.273, hospitals that have been reclassified by the MGCRB were permitted to withdraw their applications within 45 days of the publication of the proposed rule. The request for withdrawal of an application for reclassification or termination of an existing 3-year reclassification that would be effective in FY 2008 had to be received by the MGCRB within 45 days of the publication of the proposed rule, that is, by June 18, 2007. If a hospital elected to withdraw its wage index application after the MGCRB had issued its decision, but prior to the above date, it could later cancel its withdrawal in a subsequent year and request the MGCRB to reinstate its wage index reclassification for the remaining fiscal year(s) of the 3-year period (§ 412.273(b)(2)(i)). The request to cancel a prior withdrawal or termination had to be in writing to the MGCRB no later than the deadline for submitting reclassification applications for the following fiscal year (§ 412.273(d)). For further information about withdrawing, terminating, or canceling a previous withdrawal or termination of a 3-year reclassification for wage index purposes, we refer the reader to § 412.273, as well as the August 1, 2002, IPPS final rule (67 FR 50065) and the August 1, 2001 IPPS final rule (66 FR 39887).

Changes to the wage index that result from withdrawals of requests for reclassification, wage index corrections, appeals, and the Administrator's review process are incorporated into the wage index values published in this final rule with comment period. These changes affect not only the wage index value for specific geographic areas, but also the wage index value redesignated hospitals receive; that is, whether they receive the wage index that includes the data for both the hospitals already in the area and the redesignated hospitals. Further, the wage index value for the area from which the hospitals are redesignated may have been affected.

Applications for FY 2009 reclassifications are due to the MGCRB by September 4, 2007 (the first working day of September 2007). We note that this is also the deadline for canceling a previous wage index reclassification withdrawal or termination under § 412.273(d). Applications and other information about MGCRB reclassifications were available, beginning in mid July 2007, via the CMS Internet Web site at: *http://cms.hhs.gov/providers/prrb/mgcinfo.asp*, or by calling the MGCRB at (410) 786–1174. The mailing address of the MGCRB is: 2520 Lord Baltimore Drive, Suite L, Baltimore, MD 21244–2670.

Comment: Several commenters stated that, although the reclassification rules provide some flexibility, there is a problem when a hospital qualifies for reclassification to two different areas. The commenters stated that, with fluctuations in area wage indices, the primary area might not be the higher wage index for each year of the 3-year reclassification. Thus, the commenter suggested that CMS allow hospitals to reclassify to the best eligible location based on the proposed post-reclassified wage index published in Tables 4A, 4B, and 4C in the applicable IPPS proposed rule.

Response: The Medicare regulations at § 412.230(a)(5)(ii) state that ''a hospital may not be redesignated to more than one area.'' Although wage index values may fluctuate from year to year, a hospital cannot be reclassified to a primary and secondary area at the same time in order to choose the higher area wage index value for the current year. Instead, we allow hospitals to decide, on a yearly basis, whether to withdraw, terminate, reinstate, or fallback to their existing reclassification based on the higher of the published

area wage indices. We believe that the current policy allows hospitals enough flexibility to select the wage index that would benefit them the most during each fiscal year. Therefore, we are making no changes to our policies with regards to this matter.

4. Hospitals That Applied for Reclassification Effective in FY 2008 and Reinstating Reclassifications in FY 2008

Applications for FY 2008 reclassifications were due to the MGCRB by September 1, 2006. We note that this deadline also applied for canceling a previous wage index reclassification withdrawal or termination under § 412.273(d). The MGCRB, in evaluating a hospital's request for reclassification for FY 2008 for the wage index, utilized the official data used to develop the FY 2007 wage index. The wage data used to support the hospital's wage comparisons were from the CMS hospital wage survey. Generally, the source for these data is the IPPS final rule to be published on or before August 1, 2006. However, the wage tables identifying the 3-year average hourly wage of hospitals were not available in time to include them in the FY 2007 IPPS final rule. Therefore, we made the data available subsequent to the publication of the FY 2007 IPPS final rule.

Section 1886(d)(10)(C)(ii) of the Act indicates that a hospital requesting a change in geographic classification for a fiscal year must submit its application to the MGCRB not later than the first day of the 13-month period ending on September 30 of the preceding fiscal year. Thus, the statute requires that FY 2008 reclassification applications were to be submitted to the MGCRB by no later than September 1, 2006. For this reason, we required hospitals to file an FY 2008 reclassification application by the September 1, 2006 deadline even though the average hourly wage data used to develop the final FY 2007 wage indices were not yet available. However, as outlined in § 412.256(c)(2), we also allowed hospitals with incomplete applications submitted by the deadline to request an extension beyond September 1, 2006, to complete their applications. We also allowed hospitals 30 days from the date the final wage data were posted on the CMS Web site to request to cancel a withdrawal or termination in order to reinstate a reclassification for FY 2008 or FY 2009, or both fiscal years. For a more detailed discussion of the procedures used for the FY 2008 MGCRB applications, we refer readers to the FY 2007 IPPS final rule (71 FR 48022–48023).

Comment: One commenter requested that CMS provide a special 30-day period from the publication date of the FY 2008 IPPS final rule to allow hospitals to reinstate or withdraw their reclassification requests, as CMS provided in the FYs 2005 and 2007 IPPS final rules. The commenter requested this special accommodation due to the unexpected change in the wage index calculation (see section III.G. of this preamble for the correction to Step 2 of the calculation) and the published corrections to the proposed out-migration adjustments (72 FR 31510).

Response: We understand the commenter's concern, but we believe that no additional time period is needed for hospitals to determine whether they should reinstate or withdraw their reclassifications for FY 2008 wage index. The FYs 2005 and 2007 IPPS final rules included provisions necessary to allow hospitals additional time to analyze the wage data and reassess their reclassification decisions with respect to significant changes in policies and the wage index that occurred in those years. We included a provision in the FY 2005 IPPS final rule that established an extra 30-day period after the final rule was published to allow hospitals more time to assess their situations with regards to the change in the labor market area definitions and the new policies for implementing that change. In the FY 2007 IPPS final rule, due to changes in the wage index as a result of a court decision (*Bellevue Hosp. Center* v. *Leavitt*, 443 F.3d 163, 179 (2nd Cir. 2006), CMS made reclassification decisions on behalf of hospitals and allowed hospitals a 30-day period, after the final wage data were posted on CMS's Web site, to reverse a withdrawal or to terminate a reclassification.

In the current situation, regarding the post-publication corrections to the proposed FY 2008 out-migration adjustments, CMS published these corrections on June 7, 2007. With the 45-day period for reclassification withdrawals and terminations ending on June 18, 2007, we believe that hospitals had sufficient time to reevaluate their reclassifications based on the revised published data. Regarding the correction to Step 2 of the wage index calculation, this change generally had a minor effect on area average hourly wages and wage index values. Although the average hourly wages for some hospitals were more significantly impacted, hospitals could have determined their correct average hourly wages using the wage data that were posted on our Web site and by adding the correction to Step 2 in the calculator that was also posted on our Web site. We note that the national and state hospital associations and many hospitals commented that they were aware of an error in the calculation. Therefore, we do not believe it is necessary and will not provide a 30-day period from publication of the FY 2008 IPPS final rule to allow hospitals to reinstate or withdraw their reclassification requests.

Comment: One commenter requested clarification on whether the 45-day period to withdraw reclassification requests runs from the posting of the display version of the IPPS proposed rule on the CMS Web site or from the date of its publication in the **Federal Register**.

Response: We appreciate the commenter's concern. We are clarifying in this final rule with comment period that the 45-day period to withdraw or terminate reclassification requests begins the day the proposed rule is published in the **Federal Register**.

5. Clarification of Policy on Reinstating Reclassifications

Under § 412.273(a) of our regulations, a hospital or group of hospitals may withdraw its application for reclassification at any time before the MGCRB issues its decision or, if after the MGCRB issues its decision, within 45 days after publication of CMS's annual notice of proposed rulemaking for the upcoming fiscal year. In addition, a hospital may terminate a reclassification that is already in effect within 45 days after publication of the notice of proposed rulemaking for the upcoming fiscal year. Once a withdrawal or termination has been made, the hospital or group of hospitals will not be reclassified for purposes of the wage index to the same area for that year. The hospital also will not be reclassified to the withdrawn or terminated reclassification area in subsequent fiscal years unless the hospital subsequently cancels its withdrawal or termination. The procedures for making a withdrawal or termination, as well as for canceling a withdrawal or termination are specified at § 412.273. In the FY 2003 IPPS final rule (67 FR 50065–50066), we clarified our existing policy stating that a previous 3-year reclassification may not be reinstated after a subsequent 3-year reclassification to another area takes effect. Therefore, a hospital can only have one active 3-year reclassification at a time.

We have been asked whether a hospital (or group of hospitals) can reinstate the two remaining years of a previously approved 3-year

reclassification to one area, while at the same time the individual hospital (or group) request a new 3-year reclassification from the MGCRB to a different area and be approved for both at the same time. In this case, the hospital or group of hospitals is permitted to apply to a different area than the previously approved reclassification but, as stated in § 412.273(b)(2), once they accept a newly approved reclassification, a previously terminated and reinstated 3-year reclassification would be permanently terminated.

Following the policy set forth at § 412.273(d), a hospital may cancel a previous withdrawal or termination by submitting written notice of its intent to the MGCRB no later than September 1 for reclassifications effective at the start of the second following fiscal year 13 months later. At the same time (because the deadline for geographic reclassification applications for the second following fiscal year 13 months later is also September 1), a hospital or group of hospitals could apply for reclassification to a different area. If the application is denied, the hospital or group of hospitals can select between the reinstated geographic reclassification and the home area wage index for the following fiscal year. The hospital or group of hospitals must file a written request to the MGCRB within 45 days after publication of the notice of proposed rulemaking to terminate the reinstated reclassification and receive the home area wage index. If the hospital or group of hospitals takes no action, the pending geographic reclassification will go into effect. If the new geographic reclassification application is approved, the hospital or group of hospitals will have 45 days from publication of the notice of proposed rulemaking to accept either of the two pending geographic reclassifications or revert to the home area wage index. If the hospital or group of hospitals takes no action, the most recent approved geographic reclassification will go into effect and the prior reclassification will be permanently terminated. Alternatively, the hospital or group of hospitals can withdraw the most recent approved reclassification and accept the previously approved and reinstated reclassification within 45 days of publication of the notice of proposed rulemaking. Such an action will permanently terminate the most recently approved geographic reclassification. Finally, the hospital or group hospitals can write to the MGCRB within 45 days of publication of the notice of proposed rulemaking to withdraw both geographic reclassifications in order to receive the home area wage index. In this case, the hospital or group of hospitals can only reinstate one of the two geographic reclassifications. The other geographic reclassification is permanently terminated. Once a hospital or group of hospitals makes a decision for the following fiscal year within 45 days of publication of the notice of proposed rulemaking, the hospital or group of hospitals cannot change the decision for that fiscal year. It is also important to note that the reinstatement of a reclassification only applies to those withdrawals which were made after the MGCRB issued an approved 3-year decision, not a withdrawal made prior to the MGCRB issuing an approval decision.

For example, a hospital has been reclassified to area ''A'' for FYs 2007 through 2009. The hospital accepts this geographic reclassification for FY 2007. The hospital also applies for reclassification to a different area ''B'' for FYs 2008 through 2010 by September 1, 2006. If reclassification to area ''B'' is denied, the hospital can either withdraw or terminate its reclassification to area ''A'' within 45 days of publication of the proposed rule for FY 2008 and receive the home area wage index for FY 2008 or receive the reclassification to area ''A'' for FY 2008. If the hospital does nothing, it will receive the area ''A'' reclassification. If the hospital's reclassification application to area ''B'' is approved by the MGCRB, the hospital can (1) do nothing (and, therefore, receives the reclassification to area ''B'' for FY 2008, permanently terminating the reclassification to area ''A''); (2) within 45 days of publication of the notice of proposed rulemaking, withdraw the reclassification to area ''B'' and receive the reclassification to area ''A'' for FY 2008 (permanently terminating the reclassification to area ''B''); or (3) withdraw or terminate both the reclassifications to both areas ''A'' and ''B'' and receive the home area wage index for FY 2008. If the latter option is selected, the hospital can only reinstate one of the withdrawn/terminated reclassifications by September 1, 2007 (to take effect for FY 2009). Upon the sunset of the 45-day window, the reclassification selection is final and the hospital will receive that wage index for the fiscal year, in this case for FY 2008.

6. ''Fallback'' Reclassifications

As indicated in section III.I.3. of the preamble of this final rule with comment period, the regulations at § 412.273 provide the process that a hospital wishing to withdraw or terminate a reclassification must follow. If a hospital has an existing reclassification and then applies to the MGCRB to a second area and is approved, it has a choice between two reclassifications and its home area wage index for the following fiscal year. We have been asked a procedural question about how the hospital accepts its previously approved reclassification (its ''fall back'' reclassification) or how it can ''fall back'' to its home area wage index. As the example provided in the section III.I.5. of the preamble of this final rule with comment period illustrates, a hospital will automatically be given its most recently approved reclassification (thereby permanently terminating any previously approved reclassifications) unless it provides written notice to the MGCRB within 45 days of publication of the notice of proposed rulemaking that it wishes to withdraw its most recently approved reclassification and ''fall back'' to either its prior reclassification or its home area wage index for the following fiscal year. If the hospital wishes to accept its home area wage index in preference to its previous ''fall back'' reclassification, the hospital must also state in its request to the MGCRB that it is not only withdrawing its most recently approved reclassification but also terminating its previously approved reclassification.

7. Geographic Reclassification Issues for Multicampus Hospitals

In FY 2005, we modified the reclassification rules at § 412.230(d)(2)(iii) to allow campuses of multicampus hospitals located in separate wage index areas to support a reclassification application to the geographic area in which another campus is located using the average hourly wage data submitted on the cost report for the entire hospital. This special rule applies for applications for reclassifications effective in FY 2006 through FY 2008. In the FY 2007 IPPS final rule, we decided not to extend this special rule for multicampus hospitals. However, we believe that the change to how we allocate a multicampus hospital's wage data has implications for multicampus hospitals' reclassification requests.

As stated above, we proposed to allocate the multicampus hospital's wage data across the different labor market areas where the campuses are located based upon FTEs. After consideration of the public comments received on the proposed rule, as discussed in section III.F. of the preamble of this final rule with

comment period, we are finalizing the policy that we will use FTEs or Medicare discharge data to allocate salaries and hours to the campuses of multicampus hospitals that are located in different labor market areas (although we note that, as discussed in section III.F. of the preamble of this final rule with comment period, once the cost report is revised to require reporting of FTE data by campus and such data are available for use in calculating the wage index, the wage data of a multicampus hospital will be allocated among its campuses based only on reported FTEs). For this reason, an individual campus located in a geographic area distinct from the geographic area associated with the provider number of the multicampus hospital will now have published, hospital-specific wage data that it may use to support a request for an individual reclassification. The campus' wage data will be included in a public use file, titled, ''Three Year MGCRB Reclassification Data for FY 2009 Applications'', that will be posted on the Internet at *http://www.cms.hhs.gov/AcuteInpatientPPS/WIFN/list.asp#TopOfPage,* concurrent with the publication of this final rule with comment period. The campus-specific data will also be provided to the MGCRB. These data will be considered appropriate wage data under § 412.230, because they will be part of the CMS hospital wage survey used to construct the wage index. Furthermore, we consider these data to constitute ''published hospital wage survey data'' under section 1886(d)(10)(D)(vi) of the Act. We received no public comments regarding our proposal in the proposed rule. Therefore, we are finalizing the policy that a hospital may use this campus-specific data (derived from allocating hospital wage data among campuses based on Medicare discharges or FTEs) to support a request for reclassification. Thus, our policy allowing the allocation of wage data using FTE or Medicare discharge data is somewhat different from our prior policy on multicampus hospitals because under the policy being finalized in this final rule with comment period, an individual campus of a multicampus hospital will be considered to have campus-specific data to support an individual reclassification request. In addition, we note that when a multicampus hospital's wage data are divided by FTEs or Medicare discharges, the ratio of wages to hours remains constant. Thus, the effect of our policy, in some sense, is that the individual campus of a multicampus hospital effectively uses the average hourly wage of the entire multicampus institution to support its individual reclassification request (see campus-specific average hourly wages in Table 2 of the Addendum to this final rule with comment period). However, as stated above, an individual campus of a multicampus hospital will now be considered to have hospital-specific data to support an individual reclassification request. We are revising our regulations at § 412.230(d)(2) to reflect this final policy.

In the FY 2008 IPPS proposed rule, we noted that where a multicampus hospital spanning two or more geographic areas does not provide us with appropriate FTE data, its campus-specific data would not be included in the public use file we use to construct the wage index. We stated that, for this reason, unless a multicampus hospital has provided us with FTE data, we would not have appropriate campus-specific wage data that could be used to support an individual reclassification under § 412.230, and the reclassification request for the individual campus would be denied. However, because we have decided to automatically allocate a multicampus hospital's wages and hours among its campuses based on discharge data if a hospital fails to submit FTE or discharge data to us (as discussed in section III.F. of the preamble of this final rule with comment period), a hospital campus located in a geographic area distinct from the geographic area associated with the provider number of the multicampus hospital will now automatically have appropriate campus-specific wage data that could be used to support an individual reclassification.

Under current policy, an individual campus of a multicampus hospital located in a different area than the one associated with the provider number does not have to provide any official wage index data to join a group reclassification. However, given that we are allocating a portion of the average hourly wage of the hospital's data to the labor market area that includes this campus, we also proposed that this same data be used as part of a group reclassification application. We are adopting this policy as final in this final rule with comment period. Again, these data will be published in a public use file and will be considered appropriate wage data under §§ 412.232 and 412.234. We are amending our regulations at § 412.232 and § 412.234 to reflect this final policy. As we stated above, because we have decided to automatically allocate a multicampus hospital's wages and hours among its campuses based on discharge data if a hospital fails to submit FTE or discharge data to us (as discussed in section III.F. of the preamble of this final rule with comment period), a hospital campus located in a geographic area distinct from the geographic area associated with the provider number of the multicampus hospital will now automatically have official wage data to include in a group reclassification application.

8. Redesignations of Hospitals Under Section 1886(d)(8)(B) of the Act

Beginning October 1, 1988, section 1886(d)(8)(B) of the Act required us to treat a hospital located in a rural county adjacent to one or more urban areas as being located in the MSA if certain criteria were met. Prior to FY 2005, the rule was that a rural county adjacent to one or more urban areas would be treated as being located in the MSA to which the greatest number of workers in the county commute, if the rural county would otherwise be considered part of an urban area under the standards published in the **Federal Register** on January 3, 1980 (45 FR 956) for designating MSAs (and New England County Metropolitan Areas (NECMAs)), and if the commuting rates used in determining outlying counties (or, for New England, similar recognized areas) were determined on the basis of the aggregate number of resident workers who commute to (and, if applicable under the standards, from) the central county or counties of *all* contiguous MSAs (or NECMAs). Hospitals that met the criteria using the January 3, 1980 version of these OMB standards were deemed urban for purposes of the standardized amounts and for purposes of assigning the wage data index.

Effective beginning FY 2005, we use OMB's 2000 CBSA standards and the Census 2000 data to identify counties qualifying for redesignation under section 1886(d)(8)(B) for the purpose of assigning the wage index to the urban area. Hospitals located in these counties have been known as ''Lugar'' hospitals and the counties themselves are often referred to as ''Lugar'' counties. We provide the chart below with the listing of the rural counties designated as urban under section 1886(d)(8)(B) of the Act that we are using for FY 2008. For discharges occurring on or after October 1, 2007, hospitals located in the rural county in the first column of this chart will be redesignated for purposes of using the wage index of the urban area listed in the second column.

RURAL COUNTIES REDESIGNATED AS URBAN UNDER SECTION 1886(d)(8)(B) OF THE ACT (BASED ON CBSAS AND CENSUS 2000 DATA)

Rural county	CBSA
Cherokee, AL	Rome, GA.
Macon, AL	Auburn-Opelika, AL.
Talladega, AL	Anniston-Oxford, AL.
Hot Springs, AR	Hot Springs, AR.
Windham, CT	Hartford-West Hartford-East Hartford, CT.
Bradford, FL	Gainesville, FL.
Hendry, FL	West Palm Beach-Boca Raton-Boynton, FL.
Levy, FL	Gainesville, FL.
Walton, FL	Fort Walton Beach-Crestview-Destin, FL.
Banks, GA	Gainesville, GA.
Chattooga, GA	Chattanooga, TN-GA.
Jackson, GA	Atlanta-Sandy Springs-Marietta, GA.
Lumpkin, GA	Atlanta-Sandy Springs-Marietta, GA.
Morgan, GA	Atlanta-Sandy Springs-Marietta, GA.
Peach, GA	Macon, GA.
Polk, GA	Atlanta-Sandy Springs-Marietta, GA.
Talbot, GA	Columbus, GA-AL.
Bingham, ID	Idaho Falls, ID.
Christian, IL	Springfield, IL.
DeWitt, IL	Bloomington-Normal, IL.
Iroquois, IL	Kankakee-Bradley, IL.
Logan, IL	Springfield, IL.
Mason, IL	Peoria, IL.
Ogle, IL	Rockford, IL.
Clinton, IN	Lafayette, IN.
Henry, IN	Indianapolis-Carmel, IN.
Spencer, IN	Evansville, IN-KY.
Starke, IN	Gary, IN.
Warren, IN	Lafayette, IN.
Boone, IA	Ames, IA.
Buchanan, IA	Waterloo-Cedar Falls, IA.
Cedar, IA	Iowa City, IA.
Allen, KY	Bowling Green, KY.
Assumption Parish, LA.	Baton Rouge, LA.
St. James Parish, LA.	Baton Rouge, LA.
Allegan, MI	Holland-Grand Haven, MI.
Montcalm, MI	Grand Rapids-Wyoming, MI.
Oceana, MI	Muskegon-Norton Shores, MI.
Shiawassee, MI	Lansing-East Lansing, MI.
Tuscola, MI	Saginaw-Saginaw Township North, MI.
Fillmore, MN	Rochester, MN.
Dade, MO	Springfield, MO.
Pearl River, MS	Gulfport-Biloxi, MS.
Caswell, NC	Burlington, NC.
Davidson, NC	Greensboro-High Point, NC.
Granville, NC	Durham, NC.
Harnett, NC	Raleigh-Cary, NC.
Lincoln, NC	Charlotte-Gastonia-Concord, NC–SC.
Polk, NC	Spartanburg, NC.
Los Alamos, NM	Santa Fe, NM.
Lyon, NV	Carson City, NV.
Cayuga, NY	Syracuse, NY.
Columbia, NY	Albany-Schenectady-Troy, NY.
Genesee, NY	Rochester, NY.
Greene, NY	Albany-Schenectady-Troy, NY.
Schuyler, NY	Ithaca, NY.
Sullivan, NY	Poughkeepsie-Newburgh-Middletown, NY.
Wyoming, NY	Buffalo-Niagara Falls, NY.
Ashtabula, OH	Cleveland-Elyria-Mentor, OH.
Champaign, OH	Springfield, OH.
Columbiana, OH	Youngstown-Warren-Boardman, OH-PA.
Cotton, OK	Lawton, OK.
Linn, OR	Corvallis, OR.
Adams, PA	York-Hanover, PA.
Clinton, PA	Williamsport, PA.
Greene, PA	Pittsburgh, PA.
Monroe, PA	Allentown-Bethlehem-Easton, PA-NJ.
Schuylkill, PA	Reading, PA.
Susquehanna, PA	Binghamton, NY.
Clarendon, SC	Sumter, SC.
Lee, SC	Sumter, SC.
Oconee, SC	Greenville, SC.
Union, SC	Spartanburg, SC.
Meigs, TN	Cleveland, TN.
Bosque, TX	Waco, TX.
Falls, TX	Waco, TX.
Fannin, TX	Dallas-Plano-Irving, TX.
Grimes, TX	College Station-Bryan, TX.
Harrison, TX	Longview, TX.
Henderson, TX	Dallas-Plano-Irving, TX.
Milam, TX	Austin-Round Rock, TX.
Van Zandt, TX	Dallas-Plano-Irving, TX.
Willacy, TX	Brownsville-Harlingen, TX.
Buckingham, VA	Charlottesville, VA.
Floyd, VA	Blacksburg-Christiansburg-Radford, VA.
Middlesex, VA	Virginia Beach-Norfolk-Newport News, VA.
Page, VA	Harrisonburg, VA.
Shenandoah, VA	Winchester, VA-WV.
Island, WA	Seattle-Bellevue-Everett, WA.
Mason, WA	Olympia, WA.
Wahkiakum, WA	Longview, WA.
Jackson, WV	Charleston, WV.
Roane, WV	Charleston, WV.
Green, WI	Madison, WI.
Green Lake, WI	Fond du Lac, WI.
Jefferson, WI	Milwaukee-Waukesha-West Allis, WI.
Walworth, WI	Milwaukee-Waukesha-West Allis, WI.

As in the past, hospitals redesignated under section 1886(d)(8)(B) of the Act are also eligible to be reclassified to a different area by the MGCRB. Affected hospitals are permitted to compare the reclassified wage index for the labor market area in Table 4C in the Addendum to this final rule with comment period into which they have been reclassified by the MGCRB to the wage index for the area to which they are redesignated under section 1886(d)(8)(B) of the Act. Hospitals could withdraw from an MCGRB reclassification within 45 days of the publication of the proposed rule.

Comment: One hospital commented that its county should have been listed as a Lugar county in the proposed rule and inquired about their absence on the Lugar county list. The commenter stated it had used 2002 and 2003 Census data to calculate the commuting exchange between counties.

Response: Section 1886(d)(8)(B) of the Act requires the Secretary of Health and Human Services to determine Lugar counties using the standards published in the **Federal Register** by the Director of the Office of Management and Budget based on the most recent decennial census. The most recent decennial census was completed in 2000. The law does not permit us to use 2003 Census data to determine the Lugar status for FY 2008. Davidson County must qualify for Lugar status based on 2000 Census data. We reviewed the 2000 Census data and determined that Davidson County, NC does meet the criteria to be a Lugar county. Therefore, in this final rule with comment period, we added Davidson County, NC to the above list of rural counties that are redesignated as urban for FY 2008 under section 1886(d)(8)(B) of the Act. Thus, for FY 2008, the hospitals in Davidson County, NC will receive the wage index for hospitals that are reclassified to Greensboro-High Point, NC in Table 4C of the Addendum to this final rule with comment period.

9. Reclassifications Under Section 1886(d)(8)(B) of the Act

We have been asked whether Lugar hospitals and counties (discussed above in section III.H.8. of the preamble of this final rule with comment period) are considered urban or rural for MGCRB reclassification purposes. As stated in the regulations at 42 CFR 412.64(b)(3), as well as in section 1886(d)(8)(B) of the Act, Lugar hospitals are deemed to be located in an urban area. Therefore, because they are physically located in a rural area and are deemed urban, they receive the reclassified wage index (Table 4C in the Addendum to this final rule with comment period) for the urban area to which they have been redesignated. Because Lugar hospitals are treated like reclassified hospitals, when they are seeking reclassification by the MCGRB, they are subject to the rural reclassification rules set forth at

§ 412.230. The procedural rules set forth at § 412.230 list the criteria which a hospital must meet in order to reclassify as a rural hospital. Lugar hospitals will be subject to the proximity criteria and payment thresholds that apply to rural hospitals. Specifically, the hospital will have to be no more than 35 miles from the area to which it seeks reclassification (§ 412.230(b)(1)); the hospital will have to show that its average hourly wage is at least 106 percent of the average hourly wage of all other hospitals in the area in which the hospital is located (§ 412.230(d)(1)(iii)(C)); and the hospital will have to demonstrate that its average hourly wage is equal to at least 82 percent of the average hourly wage of hospitals in the area to which it seeks redesignation (§ 412.230(d)(1)(iv)(C)).

Hospitals not located in a Lugar county seeking reclassification to the urban area where the Lugar hospitals have been redesignated are not permitted to measure to the Lugar county to demonstrate proximity (no more than 15 miles for an urban hospital, and no more than 35 miles for a rural hospital or the closest urban or rural area for RRCs or SCHs) in order to be reclassified to such urban area. These hospitals must measure to the urban area exclusive of the Lugar County to meet the proximity or nearest urban or rural area requirement.

10. New England Deemed Counties

Our regulations at 42 CFR 412.64(b)(1)(ii)(B) list New England counties that are deemed to be parts of urban areas under section 601(g) of the Social Security Amendments of 1983 (Pub. L. 98–21, 42 U.S.C. 1395ww(note)). These counties include Litchfield County, Connecticut; York County, Maine; Sagadahoc County, Maine; Merrimack County, New Hampshire; and Newport County, Rhode Island. OMB standards designate and define two categories of CBSAs: Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas (65 FR 82235). For our labor market area definitions, we treat micropolitan areas as rural.

Of these five counties, three (York County, Sagadahoc County, and Newport County) are also included in metropolitan areas by OMB, whereas the remaining two, Litchfield County and Merrimack County, are located in micropolitan statistical areas and would be treated as rural under our labor market area definitions were they not deemed urban under § 412.64(b)(1)(ii)(B) of the regulations. Litchfield County and Merrimack County have been listed as being part of urban CBSA 25540 Hartford-West Hartford East Hartford, CT, and urban CBSA 31700 Manchester-Nashua, NH, respectively. Even though hospitals located in Litchfield County and Merrimack County are in micropolitan statistical areas, they have been treated as urban for reclassification purposes. Under our regulations, we have deemed both of these two New England counties and the hospitals within them as urban. Because the counties themselves were deemed urban, the hospitals within them have also been treated as urban for reclassification purposes, even though Litchfield and Merrimack counties are in micropolitan statistical areas. However, upon further consideration of this issue, we believe the hospitals located within these New England counties should be treated the same as Lugar hospitals. That is, the area would be considered rural but the hospitals within them would be deemed to be urban.

Comment: Many commenters opposed the proposed change to treat the two New England deemed counties (Litchfield, CT and Merrimack, NH) as rural. The commenters stated that the statute requires continuing the 1979 urban classifications of these New England hospitals in determining if a hospital is in an urban or rural area for purposes of section 1886(d) of the Act. Most of the commenters believed the change is not warranted and is contrary to the meaning of the statute. However, some commenters stated that they would be willing to accept the policy change if their published proposed statewide rural wage index does not change in the final rule as a result of this policy change.

Response: We appreciate the commenters' concerns regarding our proposed policy. We believe that our proposed policy change is consistent with section 601(g) of Pub. L. 98–21, which requires certain hospitals located in New England to be classified as being located in an urban area. The statute does not require that the counties in which these hospitals are located be deemed urban. Furthermore, the proposed change to how New England deemed counties are to be treated in the wage index calculation was not designed to reduce the statewide rural floor. Rather, it was to promote consistency within the regulations with regard to how we treat rural hospitals that are redesignated to urban areas for purposes of the wage index. That is, we found that there is no practical difference between the purpose of the ''Lugar'' and deemed urban counties provisions of the statute with regard to the IPPS. Both provisions treat hospitals that are geographically rural as urban for the purposes of section 1886(d) of the Act. For this reason, we believe that Medicare should have a consistent policy between these two types of rural counties with respect to how the hospitals located in such counties are treated for geographic reclassification purposes and for purposes of calculating pre- and post-reclassified wage indices.

We note that section 1886(d)(8)(C) of the Act protects rural area IPPS wage indices from reductions that will occur due to the effects of reclassifications. That is, a rural area IPPS wage index can not decrease as a result of hospitals reclassifying in or out of the area. Therefore, the rural IPPS wage index will not change as a result of this policy change. However, we cannot ensure that the IPPS wage index that is published in the proposed rule will not change in the final rule. The wage index correction process is not finalized each year until after the proposed rule is published. During the correction process, a hospital's wage index data can change and cause the area wage index to fluctuate up or down. Therefore, any change to the area or national average hourly wage as a result of the wage data correction process may cause a change between the proposed and final rule in an area wage index. If any change occurred between the proposed and final rule in the wage index for rural Connecticut or New Hampshire, it happened as a result of corrections to the wage data and not this policy.

After consideration of the public comments received, we are adopting as final, without modification, the proposed policy to treat New England deemed counties that are still considered rural by OMB as rural under IPPS, and the hospitals within them as being reclassified to their deemed urban area and subject to the rural reclassification rules. As we proposed, we are changing our policy and considering Litchfield County and Merrimack County as rural but will continue to consider the hospitals within them as being redesignated to urban CBSA 25540 Hartford-West Hartford-East Hartford, CT, and urban CBSA 31700 Manchester-Nashua, NH, respectively. Under our policy, hospitals located in these counties—like the Lugar hospitals described in section III.I.8. of the preamble of this final rule with comment period—must meet the rural requirements set forth at § 412.230 for individual reclassifications and § 412.232 for group reclassifications. We are revising § 412.64(b)(1)(ii)(B) accordingly. Hospitals not located inside one of these deemed New

England counties are not permitted to measure to these counties to demonstrate close proximity in order to be reclassified to the CBSA(s) to which the hospitals in Litchfield and Merrimack counties are redesignated. Due to policies in place that protect the rural wage index from decreasing as a result of hospital reclassifications, the proposed policy would have no effect on the rural wage index for IPPS hospitals. However, non-IPPS payment systems (SNF, IRF, and HHA, among others) that use the pre-reclassified wage index may be affected by this policy change. However, we are limiting this policy change for deemed New England counties only to IPPS hospitals because it was only discussed in the FY 2008 IPPS proposed rule. Any change to non-IPPS provider wage indices would be addressed in the respective payment rules for those payment systems.

11. Reclassifications under Section 508 of Pub. L. 108–173

Under section 508 of Pub. L. 108–173, a qualifying hospital could appeal the wage index classification otherwise applicable to the hospital and apply for reclassification to another area of the State in which the hospital is located (or, at the discretion of the Secretary, to an area within a contiguous State). We implemented this process through notices published in the **Federal Register** on January 6, 2004 (69 FR 661), and February 13, 2004 (69 FR 7340). Such reclassifications were applicable to discharges occurring during the 3-year period beginning April 1, 2004, and ending March 31, 2007. Section 106(a) of the MIEA–TRHCA (Pub. L. 109–432), extended any geographic reclassifications of hospitals that were made under section 508 and that would expire on March 31, 2007, by 6 months until September 30, 2007. On March 23, 2007, we published a notice in the **Federal Register** (72 FR 13799) that indicated how we are implementing section 106(a) of the MIEA–TRHCA through September 30, 2007. Because the section 508 provision will expire on September 30, 2007, and will not be applicable in FY 2008, in this final rule with comment period, we are not making any changes related to the provision.

Comment: A number of commenters expressed support for the reclassification opportunities provided by provisions in section 508 of Pub. L. 108–173 (MMA). The commenters highlighted the necessity to preserve these provisions to allow certain hospitals to continue to compete for labor in markets they would not be able to reclassify to under prior reclassification standards.

Response: Provisions in section 508 of Pub. L. 108–173 allocated a capped amount of funding to allow some hospitals that otherwise would not qualify to do so to seek a form of geographic reclassification. The section 508 provisions were mandated by Congressional action and were originally set to expire on March 31, 2007. However, section 106(a) of the MIEA–TRHCA extended any geographic reclassifications that were set to expire on March 31, 2007, by 6 months, through September 30, 2007. Further extension of section 508 would require a change in the Medicare statute.

Comment: One commenter addressed the use of our special exceptions and adjustment authority under section 1886(d)(5)(I)(i) in the FY 2007 IPPS final rule to grant a hospital a reclassified wage index for FY 2008 (we refer readers to 71 FR 48070 for more information). The commenter stated that a special exception was granted to this hospital because it was not reclassified under section 508 of Pub. L. 108–173, although multiple hospitals in neighboring areas were so reclassified. (In FY 2007, the Secretary invoked the special exceptions and adjustments authority to allow this hospital to receive the same reclassified wage index as the neighboring hospitals on the grounds that the reclassifications of neighboring hospitals under section 508 of Pub. L. 108–173, in combination with other factors, created unique circumstances making such an exception appropriate in this situation.) The commenter believed that, while this special exception allowed the hospital to increase employee salaries, another one-year extension is necessary to allow the hospital to further overcome competitive disadvantages. The commenter added that, prior to the Secretary's action, neighboring hospitals had a period of 2½ years of enhanced wage indices due to section 508 provisions. Because the hospital has limited ability under current rules to seek a higher wage index reclassification, the commenter stated that further action is needed to allow the hospital to compete with its peers.

Response: In the FY 2007 final rule, CMS cited the unique circumstances surrounding the section 508 reclassifications in granting the adjustment to this hospital. We stated that it was appropriate to give the hospital in the single hospital urban area the same wage index as the nearby section 508 hospitals until the expiration of the provision on March 31, 2007. As the MIEA–TRHCA extended any geographic reclassifications that were set to expire on March 31, 2007, by 6 months, through September 30, 2007, we also extended the special exception and gave this hospital the same wage index as the neighboring section 508 hospitals through the end of FY 2007. By law, the section 508 reclassifications will expire on September 30, 2007. Therefore, the basis for providing this hospital with a special wage index will end with the expiration of section 508 on September 30, 2007.

12. Other Issues

We have been advised of a reclassification scenario of concern to a particular hospital. In this scenario, two hospitals were approved by the Medicare Geographic Classification Review Board (MGCRB) for a 3-year group reclassification. Prior to the second year of the 3-year reclassification, one of the hospitals reclassified individually to another area. Consistent with our policy, the second hospital retained its group geographic reclassification for the two remaining years (66 FR 39888, August 1, 2001). However, once the group reclassification expires, the second hospital does not qualify to reclassify individually to another area. We have been asked to consider potential regulatory options that would allow this hospital to either reclassify or receive a declining blend of its home area and reclassified wage index as a transition to its post-reclassified wage index.

In the proposed rule, we indicated that there are no options under our current regulations that would allow this hospital to reclassify individually or as a group. The hospital does not meet the well established wage data comparison criteria to reclassify as an individual hospital. In order for a group reclassification to be approved, all hospitals in the county must apply as a group. We have been informed that one hospital will not join the group reclassification because it qualifies individually to reclassify to a different area with a higher wage index than where the group applied.

We considered whether to change our regulations for this type of situation. However, we decided not to propose a change to our regulations, given the need to gather additional information and better understand the policy issues in such a case. In this regard, we solicited public comments on whether such a situation is consistent with the purpose of reclassification. In particular, we requested comments on how a hospital that is applying to reclassify would demonstrate similarity to

hospitals in the neighboring area when the hospital would qualify to be part of a group reclassification if all other hospitals in the county in which the hospital is located agreed to apply.

In addition, we requested comments on how we could make a determination that a hospital's own area wage index is inappropriate when the hospital does not meet the current criteria for reclassification on its own, but would meet the criteria for a group reclassification in the event all hospitals in the county in which the hospital is located would agree to submit a group application. Finally, given that reclassifications are in effect for three years, we requested comments on whether or how we could address this situation while simultaneously maintaining the distinction between group and individual reclassifications—particularly the rule that all members of a group must apply for a group reclassification.

For all the above reasons, we decided, as noted, not to propose changes to the regulations to address the situation brought to our attention. Rather, we believe it is appropriate to gather additional information and seek comment on this or similar situations. We indicated that if commenters wished to raise issues with the points described in this section or comment on other issues we did not consider in the questions raised above, we welcomed such public comments.

Comment: One commenter requested that CMS exercise caution when expanding reclassification options or adding exceptions to the current wage index process. The commenter suggested that CMS collect additional information on similar situations and should consider the matter when considering global wage index reform for FY 2009.

Response: We appreciate the commenter's suggestions. At this time, CMS has made no policy proposal to address this particular issue. As indicated above, section 106(b)(2) of Pub. L. 109–432 instructs the Secretary of Health and Human Services, taking into account MedPAC's recommendations on the Medicare wage index classification system, to include in the FY 2009 IPPS proposed rule one or more proposals to revise the wage index adjustment applied under section 1886(d)(3)(E) of the Act for purposes of the IPPS. The proposal (or proposals) must consider a variety of issues including ''the modification or elimination of geographic reclassifications and other adjustments.'' We will consider this issue and many others as part of our comprehensive review of the wage index and geographic reclassification for FY 2009.

Under section 1886(d)(10)(C)(iii) of the Act, the MGCRB's decision may be appealed to the Secretary and the ''decision of the Secretary shall be final and shall not be subject to judicial review.'' Under § 412.276(b) of our regulations, the decision of the MGCRB is final and binding on the parties unless it is reviewed by the Administrator and the decision is changed by the Administrator based on the hospital's appeal or the Administrator's discretionary review of the decision. Under the statute and regulations, the Administrator's review must take place within certain timeframes. After those timeframes have expired, the decision is final.

We are concerned about the role that an error in the average hourly wage might have had on a reclassification decision by the MGCRB. We seek comment on the appropriateness of prospectively addressing situations where there is an error made in a hospital's average hourly wage that is later used for a geographic reclassification application. For example, if we became aware or were made aware through subsequent public input that an error existed in the average hourly wage of a hospital that can be used in a geographic reclassification application prior to it being awarded, we might republish the wage data from the IPPS final rule. If significant, we might also consider prospective adjustments to the 3-year average hourly wage for future reclassifications if some or all of those 3 years span the time period that the hospital was reclassified based on erroneous data. We welcome ideas from the public on this and other suggestions for addressing this issue.

J. FY 2008 Wage Index Adjustment Based on Commuting Patterns of Hospital Employees

In accordance with the broad discretion under section 1886(d)(13) of the Act, as added by section 505 of Pub. L. 108–173, beginning with FY 2005, we established a process to make adjustments to the hospital wage index based on commuting patterns of hospital employees. The process, outlined in the FY 2005 IPPS final rule (69 FR 49061), provides for an increase in the wage index for hospitals located in certain counties that have a relatively high percentage of hospital employees who reside in the county but work in a different county (or counties) with a higher wage index. Such adjustments to the wage index are effective for 3 years, unless a hospital requests to waive the application of the adjustment. A county will not lose its status as a qualifying county due to wage index changes during the 3-year period, and counties will receive the same wage index increase for those 3 years. However, a county that qualifies in any given year may no longer qualify after the 3-year period, or it may qualify but receive a different adjustment to the wage index level. Hospitals that receive this adjustment to their wage index are not eligible for reclassification under section 1886(d)(8) or section 1886(d)(10) of the Act. Adjustments under this provision are not subject to the budget neutrality requirements under section 1886(d)(3)(E) of the Act.

Hospitals located in counties that qualify for the wage index adjustment are to receive an increase in the wage index that is equal to the average of the differences between the wage indices of the labor market area(s) with higher wage indices and the wage index of the resident county, weighted by the overall percentage of hospital workers residing in the qualifying county who are employed in any labor market area with a higher wage index. To date, we have used pre-reclassified wage indices when determining the out-migration adjustment. In the FY 2005 IPPS final rule (69 FR 49061 through 49063), we stated that it was reasonable to interpret the term ''wage index'' in section 1886(d)(13)(D) of the Act to mean the pre-reclassified, pre-adjusted wage index. At the time, we stated that it was unclear whether to use the pre- or post-reclassified wage index as the basis for comparison to determine the out-migration adjustment. We also cited complicating factors such as the use of blended wage indices as a result of the labor market area transition as another reason to base the out-migration adjustment on the pre-reclassified wage index. However, we indicated that we will continue to examine the possibility of employing post-reclassification wage indices as we refine our policy for future adjustments.

We have reconsidered our policy in this final rule with comment period and as proposed, we are calculating the out-migration adjustment using the post-reclassified wage index. First, the labor-market area transition has ended and the use of blended wage indices is no longer a complicating factor in determining whether to use pre- or post-reclassified wage indices to determine the out-migration adjustment. Second, we are applying budget neutrality for application of the rural floor to area wage indices rather than to the standardized amount beginning in FY 2008. The budget neutrality adjustment

for the rural floor is being applied to the post-reclassification wage indices and is a component of the wage index that is being used to adjust for area differences in wages. Therefore, we believe the out-migration adjustment should be determined using the post-reclassified wage index that reflects the budget neutrality adjustment for application of the rural floor.

We are using the same formula described in the FY 2005 final rule (69 FR 49064), with the addition of now using the post-reclassified wage indices, to calculate the out-migration adjustment. This adjustment is calculated as follows:

Step 1. Subtract the wage index for the qualifying county from the wage index of each of the higher wage area(s) to which hospital workers commute.

Step 2. Divide the number of hospital employees residing in the qualifying county who are employed in such higher wage index area by the total number of hospital employees residing in the qualifying county who are employed in any higher wage index area. For each of the higher wage areas, multiply this result by the result obtaining in Step 1.

Step 3. Sum the products resulting from Step 2 (if the qualifying county has workers commuting to more than one higher wage area).

Step 4. Multiply the result from Step 3 by the percentage of hospital employees who are residing in the qualifying county and who are employed in any higher wage index area.

These adjustments will be effective for each county for a period of 3 fiscal years. Hospitals that received the adjustment in FY 2007 will be eligible to retain that same adjustment for FY 2008. For hospitals in newly qualified counties, adjustments to the wage index are effective for 3 years, beginning with discharges occurring on or after October 1, 2007.

Hospitals receiving the wage index adjustment under section 1886(d)(13)(F) of the Act are not eligible for reclassification under sections 1886(d)(8) or (d)(10) of the Act unless they waive the out-migration adjustment. Consistent with our FY 2005, 2006, and 2007 final rules, we are specifying that hospitals redesignated under section 1886(d)(8) of the Act or reclassified under section 1886(d)(10) of the Act will be deemed to have chosen to retain their redesignation or reclassification. Section 1886(d)(10) hospitals that wish to receive the out-migration adjustment, rather than their reclassification, had to follow the termination/withdrawal procedures specified in 42 CFR 412.273 and section III.I.3. of the preamble of this final rule with comment period. Otherwise, they were deemed to have waived the out-migration adjustment. Hospitals redesignated under section 1886(d)(8) of the Act were deemed to have waived the out-migration adjustment, unless they explicitly notified CMS that they elected to receive the out-migration adjustment instead within 45 days from the publication of the proposed rule.

Comment: Several commenters expressed concern about using post-reclassified wage data instead of the current policy of using pre-reclassified wage data for the out-migration adjustment. The commenters stated that the out-migration adjustment is not subject to budget neutrality requirements set forth at section 1886(d)(3)(E) of the Act and using pre-reclassified wage data is more technically correct. Another commenter suggested that use of the post-reclassified wage indices would result in a ''mismatch of the wage indices compared to the commuting patterns of employees.'' According to the commenters, the use of the attaching area wage index that includes the wage data of reclassified hospitals would mean that the adjustment includes ''counties that are not included in the underlying census data.''

Response: The out-migration adjustments are not included in any budget neutrality calculations and there is no adjustment to either the standardized amount or the wage index to make the additional payments under section 1886(d)(13) of the Act budget neutral. Under section 1886(d)(13) of the Act, the home area wage index for hospitals eligible for an out-migration adjustment is increased based on the weighted average of the difference between the wage index for the higher wage index MSA(s) to which its hospital employees commute and the wage index of the labor market area in which the qualifying county is located, multiplied by the overall percentage of hospital workers residing in the qualifying county who are employed in any MSA with a higher wage index. This adjustment to the wage index for all eligible hospitals increases aggregate Medicare payments and does not result in any redistribution of payments as would occur if there were a budget neutrality adjustment to either the standardized amount or the wage index like there is for revisions to area wage indices, geographic reclassification, and application of the rural floor. Application of the out-migration adjustment remains a nonbudget neutral policy as it has always been in the past.

Use of a post-reclassified area wage index does have the potential to result in the out-migration adjustment being determined using wage data for hospitals geographically located in the labor market area as well as other hospitals reclassified into the area. Under section 1886(d)(8)(C) of the Act, an area wage index may increase as a result of including the wage data of hospitals that are reclassified to the area (the same section precludes an area wage index from decreasing as a result of hospitals reclassifying into the area). However, for most labor market areas, the post-reclassified area wage index and the pre-reclassified area wage index are the same and reflect only the wage data of hospitals that are geographically located in the area. This result occurs because hospitals generally reclassify to areas that have similar wage levels as their own, so the data for reclassifying hospitals rarely affect the area wage index. Therefore, we believe that the post-reclassified wage index accurately reflects an area's wage levels, even though it may sometimes include the data for hospitals that are reclassified to the area. We also believe that using the post-reclassified wage index instead of the pre-reclassified wage index is technically more appropriate for computing the out-migration adjustment. Because the out-migration adjustment is an add-on to the post-reclassified wage index adjusted for rural floor budget neutrality, consistently, the out-migration adjustment itself should be computed using post-reclassified wage indices adjusted for rural floor budget neutrality. Under the new policy that we are adopting in this final rule with comment period, the out-migration adjustment is calculated based on the post-reclassified area wage index values in Tables 4A and 4B of the Addendum to this final rule with comment period. The attaching area wage index values in Table 4C of the Addendum to this final rule with comment period are not used in computing the adjustment.

Further, we note that in the FY 2005 final rule (69 FR 49063), we originally stated that we were concerned about using the post-reclassification wage index as a basis for determining the out-migration adjustment because, in some counties, not all hospitals are receiving the same wage index due to individual hospital reclassifications (for example, in the FY 2005 final rule, we stated that, in one county, there may be two hospitals that receive different wage indexes because one hospital has been reclassified). We stated that, given the differing wage indexes in this situation,

it was unclear which wage index would be most appropriate to use as the basis for comparison for this county. After further considering this issue, we no longer believe that use of the post reclassification wage index presents a concern in this situation. If a hospital reclassifies to another labor market area, the reclassified hospital may raise the wage index of that labor market area (creating a new, higher post-reclassification wage index), but there is still only one wage index for each county in that specific geographic area. Under section 1886(d)(8)(C) of the Act, a reclassified hospital may receive a separate wage index that is different from the wage index of the area to which the hospital reclassified. However, under section 1886(d)(13)(G) of the Act, a reclassified hospital is not eligible to receive the out-migration adjustment. Therefore, it is not possible for two hospitals in the same county to qualify for the out-migration adjustment and yet have different wage indices. In addition, we acknowledge that, due to the application of the rural floor, a CBSA could have more than one wage index value. Specifically, if a CBSA crosses State lines, and the rural floor is applied in some counties and not others in the CBSA, hospitals in the CBSA could receive different wage indices, depending on the State in which they are geographically located. However, even in this situation, there is only one wage index for a particular county. For labor market areas that have more than one wage index, both the computation and the application of the out-migration adjustment would be based on the wage index of the qualifying county in which the hospital workers reside and the county to which the workers are commuting.

Comment: Commenters expressed concern about a New England hospital not qualifying to receive an out-migration adjustment. The commenters stated that the reason for a change in the county's eligibility for the out-migration adjustment is due to CMS' proposed policy to use the post-reclassified wage data instead of pre-reclassified wage data.

Response: Some hospitals that previously qualified for an out-migration adjustment may not qualify in FY 2008 because we recalculate the out-migration adjustment every 3 years for all hospitals. In recalculating the out-migration adjustment, there is a possibility that a hospital that previously received an out-migration adjustment may no longer qualify for the adjustment because its count no longer meets the 10-percent commuting threshold to a higher wage index area (that is, less than 10 percent of the county's hospital employees commute to a labor market area with a higher wage index (or wage indices)). Another criterion for qualifying for the out-migration adjustment is that the 3-year average hourly wage of the hospital(s) in the county where the hospital is located must equal or exceed the 3-year average hourly wage of all hospitals in the labor market area in which the county is located. The New England hospital in question is in a single county CBSA. Therefore, the 3-year average hourly wage of the hospitals in the county equals the 3-year average hourly wage of all hospitals in the CBSA in which the county is located. However, the county does not meet the 10-percent threshold, which requires that at least 10 percent of the county's hospital employees commute to higher wage index areas. The county no longer qualifies for the out-commuting adjustment because of changes in the wage indices for the areas to where its hospital workers commute. The use of post-reclassified wage index had no effect on this hospital no longer qualifying for an out-migration adjustment.

Comment: One commenter expressed confusion regarding a county that was once eligible for the out-migration adjustment but, for FY 2008, the county is no longer eligible.

Response: We understand the concern for counties that previously were eligible for the out-migration adjustment but were not included on Table 4J of the Addendum to the proposed rule to receive an adjustment. Eligibility for the out-migration adjustment is affected by the percentage of a county's hospital employees who commute to areas with higher wage indices, and the difference between the 3-year average hourly wage of the hospitals in the county and the 3-year average hourly wage of all hospitals in the labor market area in which the county is located. The amount of the out-migration adjustment is affected by the percentage of hospital employees who commute to areas with higher wage indices, and the difference between the wage index of each higher wage index area to which the county's hospital employees commute and the wage index of the labor market area in which the county is located. Thus, eligibility for the out-migration adjustment and the out-migration percentage for each county is a function of both the commuting data and changes in the wage index values. Because the wage indices associated with each resident county and the labor market areas to which county residents commute change each year, a county's out-migration percentage can vary each 3-year period that a county is qualified for the out-migration adjustment because a higher wage index area in one year might not be a higher wage index area in the next year. These normal changes in wage index values could also result in a county not deemed a qualifying county in one year becoming a qualifying county at a later point, or vice versa. A county could, therefore, not be listed in the proposed rule and be listed in the final rule due to the county wage data fluctuating. Therefore, if a county is not listed as eligible for receiving the out-migration adjustment on Table 4J of the Addendum to this final rule with comment period, the county's wage data or commuting patterns did not warrant an adjustment.

Table 4J in the Addendum to this final rule with comment period lists the out-migration wage index adjustments for FY 2008. Hospitals that are not otherwise reclassified or redesignated under section 1886(d)(8) or section 1886(d)(10) of the Act will automatically receive the listed adjustment. In accordance with the procedures discussed above, redesignated/reclassified hospitals were deemed to have waived the out-migration adjustment unless CMS was otherwise notified. Hospitals that were eligible to receive the out-migration wage index adjustment and that withdrew their application for reclassification will automatically receive the wage index adjustment listed in Table 4J in the Addendum to this final rule with comment period.

K. Process for Requests for Wage Index Data Corrections

The preliminary Worksheet S–3 wage data and occupational mix survey data files (1st and 2nd quarter 2006) for the FY 2008 wage index were made available on October 6, 2006, through the Internet on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/WIFN/list.asp#TopOfPage.* In a memorandum dated October 6, 2006, we instructed all fiscal intermediaries/MAC to inform the IPPS hospitals they service of the availability of the wage index data files and the process and timeframe for requesting revisions (including the specific deadlines listed below). We also instructed the fiscal intermediaries/MAC to advise hospitals that these data were also made available directly through their representative hospital organizations.

If a hospital wished to request a change to its data as shown in the October 6, 2006 wage and occupational mix data files, the hospital was to submit corrections along with complete,

detailed supporting documentation to its fiscal intermediary by December 4, 2006. Hospitals were notified of this deadline and of all other possible deadlines and requirements, including the requirement to review and verify their data as posted on the preliminary wage index data file on the Internet, through the October 6, 2006 memorandum referenced above.

In the October 6, 2006 memorandum, we also specified that a hospital could request revisions to 1st and/or 2nd quarter occupational mix survey data if they missed the previous deadlines (June 1, 2006, for the 1st quarter data collection and August 31, 2006, for the 2nd quarter collection) for submitting occupational mix survey data to their fiscal intermediaries. A hospital requesting revisions to its 1st and/or 2nd quarter occupational mix survey data was to copy its record(s) from the CY 2006 occupational mix preliminary files posted to our Web site in October, highlight the revised cells on its spreadsheet, and submit its spreadsheet(s) and complete documentation to its fiscal intermediary no later than December 4, 2006.

The fiscal intermediaries (or, if applicable, the MAC) notified the hospitals by mid-February 2007 of any changes to the wage index data as a result of the desk reviews and the resolution of the hospitals'' early-December revision requests. The fiscal intermediaries/MAC also submitted the revised data to CMS by mid-February 2007. CMS published the proposed wage index public use files that included hospitals' revised wage data on February 23, 2007. In a memorandum also dated February 23, 2007, we instructed fiscal intermediaries/MAC to notify all hospitals regarding the availability of the proposed wage index public use files and the criteria and process for requesting corrections and revisions to the wage index data. Hospitals had until March 12, 2007 to submit requests to the fiscal intermediaries/MAC for reconsideration of adjustments made by the fiscal intermediaries/MAC as a result of the desk review, and to correct errors due to CMS's or the fiscal intermediary's (or, if applicable, the MAC's) mishandling of the wage index data. Hospitals were also required to submit sufficient documentation to support their requests.

After reviewing requested changes submitted by hospitals, fiscal intermediaries/MAC were required to transmit any additional revisions resulting from the hospitals' reconsideration requests by April 13, 2007. The deadline for a hospital to request CMS intervention in cases where the hospital disagreed with the fiscal intermediary's (or, if applicable, the MAC's) policy interpretations was April 20, 2007.

Hospitals were given the opportunity to also examine Table 2 in the Addendum to the proposed rule. Table 2 of the proposed rule contained each hospital's adjusted average hourly wage used to construct the wage index values for the past 3 years, including the FY 2004 data used to construct the proposed FY 2008 wage index. We noted that the hospital average hourly wages shown in Table 2 only reflected changes made to a hospital's data and transmitted to CMS by February 21, 2007.

We released the final wage index data public use files in early May 2007 on the Internet at *http:/www.cms.hhs.gov/AcuteInpatientPPS/WIFN/list.asp#TopOfPage*. The May 2007 public use files were made available solely for the limited purpose of identifying any potential errors made by CMS or the fiscal intermediary/MAC in the entry of the final wage index data that result from the correction process described above (revisions submitted to CMS by the fiscal intermediaries/MAC by April 13, 2007). If, after reviewing the May 2007 final files, a hospital believed that its wage or occupational mix data were incorrect due to a fiscal intermediary or MAC or CMS error in the entry or tabulation of the final data, the hospital had to send a letter to both its fiscal intermediary or MAC and CMS that outlined why the hospital believed an error existed and to provide all supporting information, including relevant dates (for example, when it first became aware of the error). CMS and the fiscal intermediaries (or, if applicable, the MAC) had to receive these requests no later than June 8, 2007.

Each request also had to be sent to the fiscal intermediary or the MAC. The fiscal intermediary or the MAC reviewed requests upon receipt and contacted CMS immediately to discuss its findings.

At this point in the process, that is, after the release of the May 2007 wage index data files, changes to the wage and occupational mix data were only made in those very limited situations involving an error by the fiscal intermediary or the MAC or CMS that the hospital could not have known about before its review of the final wage index data files. Specifically, neither the fiscal intermediary or the MAC nor CMS approved the following types of requests:

- Requests for wage index data corrections that were submitted too late to be included in the data transmitted to CMS by fiscal intermediaries or the MAC on or before April 13, 2007.
- Requests for correction of errors that were not, but could have been, identified during the hospital's review of the February 23, 2007 wage index public use files.
- Requests to revisit factual determinations or policy interpretations made by the fiscal intermediary or the MAC or CMS during the wage index data correction process.

Verified corrections to the wage index data received timely by CMS and the fiscal intermediaries or the MAC (that is, by June 8, 2007) were incorporated into the final wage index in this final rule with comment period, which will be effective October 1, 2007.

We created the processes described above to resolve all substantive wage index data correction disputes before we finalize the wage and occupational mix data for the FY 2008 payment rates. Accordingly, hospitals that did not meet the procedural deadlines set forth above will not be afforded a later opportunity to submit wage index data corrections or to dispute the fiscal intermediary's (or, if applicable the MAC's) decision with respect to requested changes. Specifically, our policy is that hospitals that do not meet the procedural deadlines set forth above will not be permitted to challenge later, before the Provider Reimbursement Review Board, the failure of CMS to make a requested data revision. (See *W. A. Foote Memorial Hospital* v. *Shalala,* No. 99–CV–75202–DT (E.D. Mich. 2001) and *Palisades General Hospital* v. *Thompson,* No. 99–1230 (D.D.C. 2003).) We refer the reader also to the FY 2000 final rule (64 FR 41513) for a discussion of the parameters for appealing to the PRRB for wage index data corrections.

Again, we believe the wage index data correction process described above provides hospitals with sufficient opportunity to bring errors in their wage and occupational mix data to the fiscal intermediary's (or, if applicable, the MAC's) attention. Moreover, because hospitals had access to the final wage index data by early May 2007, they had the opportunity to detect any data entry or tabulation errors made by the fiscal intermediary or the MAC or CMS before the development and publication of the final FY 2008 wage index by August 1, 2007, and the implementation of the FY 2008 wage index on October 1, 2007. If hospitals availed themselves of the opportunities afforded to provide and make corrections to the wage and occupational mix data, the wage index implemented on October 1 should be accurate. Nevertheless, in the event that

errors are identified by hospitals and brought to our attention after June 8, 2007, we retain the right to make midyear changes to the wage index under very limited circumstances.

Specifically, in accordance with § 412.64(k)(1) of our existing regulations, we make midyear corrections to the wage index for an area only if a hospital can show that: (1) the fiscal intermediary or the MAC or CMS made an error in tabulating its data; and (2) the requesting hospital could not have known about the error or did not have an opportunity to correct the error, before the beginning of the fiscal year. For purposes of this provision, ''before the beginning of the fiscal year'' means by the June deadline for making corrections to the wage data for the following fiscal year's wage index. This provision is not available to a hospital seeking to revise another hospital's data that may be affecting the requesting hospital's wage index for the labor market area. As indicated earlier, since CMS makes the wage index data available to hospitals on the CMS Web site prior to publishing both the proposed and final IPPS rules, and the fiscal intermediaries or the MAC notify hospitals directly of any wage index data changes after completing their desk reviews, we do not expect that midyear corrections will be necessary. However, under our current policy, if the correction of a data error changes the wage index value for an area, the revised wage index value will be effective prospectively from the date the correction is made.

In the FY 2006 IPPS final rule (70 FR 47385), we revised § 412.64(k)(2) to specify that, effective on October 1, 2005, that is beginning with the FY 2006 wage index, a change to the wage index can be made retroactive to the beginning of the Federal fiscal year only when: (1) the fiscal intermediary (or, if applicable, the MAC) or CMS made an error in tabulating data used for the wage index calculation; (2) the hospital knew about the error and requested that the fiscal intermediary (or if applicable the MAC) and CMS correct the error using the established process and within the established schedule for requesting corrections to the wage index data, before the beginning of the fiscal year for the applicable IPPS update (that is, by the June 08, 2007 deadline for the FY 2008 wage index); and (3) CMS agreed that the fiscal intermediary (or if applicable, the MAC) or CMS made an error in tabulating the hospital's wage index data and the wage index should be corrected.

In those circumstances where a hospital requested a correction to its wage index data before CMS calculates the final wage index (that is, by the June deadline), and CMS acknowledges that the error in the hospital's wage index data was caused by CMS's or the fiscal intermediary's (or, if applicable, the MAC's) mishandling of the data, we believe that the hospital should not be penalized by our delay in publishing or implementing the correction. As with our current policy, we indicated that the provision is not available to a hospital seeking to revise another hospital's data. In addition, the provision cannot be used to correct prior years' wage index data; it can only be used for the current Federal fiscal year. In other situations where our policies would allow midyear corrections, we continue to believe that it is appropriate to make prospective-only corrections to the wage index.

We note that, as with prospective changes to the wage index, the final retroactive correction will be made irrespective of whether the change increases or decreases a hospital's payment rate. In addition, we note that the policy of retroactive adjustment will still apply in those instances where a judicial decision reverses a CMS denial of a hospital's wage index data revision request.

Comment: One commenter suggested that, for future wage indices, CMS should provide an additional public use file that reflects the data that are actually used in computing the wage index that is published in the proposed rule. The commenter noted that after CMS posts the February public use file, CMS makes revisions and corrections to the file and includes the updates in the proposed wage index. The commenter expressed support for CMS' decision to use the latest available data to compute the proposed wage index and for the timing and purpose of the February and May public use files. However, the commenter opined that a data file that matches the proposed wage index would be particularly helpful to the public for review and comments on the proposed rule, and CMS could release the file strictly for this purpose. The commenter also noted that releasing this new wage data file would be consistent with CMS releasing an up-to-date version of the MedPAR file along with each proposed rule.

Response: We believe that the commenter's suggestion is reasonable. In the interest of meeting the data needs of the public, beginning with the FY 2009 wage index, we will post an additional public use file on our Web site that reflects the actual data that are used in computing the proposed wage index. The release of this new file will not alter the current wage index process or schedule. We will notify the hospital community of the availability of these data as we do with the current public use wage data files through our Hospital Open Door forum. We encourage hospitals to sign up for automatic notifications of information about hospital issues and the scheduling of the Hospital Open Door forums at: *http://www.cms.hhs.gov/OpenDoorForums/.*

L. Labor-Related Share for the Wage Index for FY 2008

Section 1886(d)(3)(E) of the Act directs the Secretary to adjust the proportion of the national prospective payment system base payment rates that are attributable to wages and wage-related costs by a factor that reflects the relative differences in labor costs among geographic areas. It also directs the Secretary to estimate from time to time the proportion of hospital costs that are labor-related: ''The Secretary shall adjust the proportion (as estimated by the Secretary from time to time) of hospitals' costs which are attributable to wages and wage-related costs of the DRG prospective payment rates * * *'' We refer to the portion of hospital costs attributable to wages and wage-related costs as the labor-related share. The labor-related share of the prospective payment rate is adjusted by an index of relative labor costs, which is referred to as the wage index.

Section 403 of Pub. L. 108–173 amended section 1886(d)(3)(E) of the Act to provide that the Secretary must employ 62 percent as the labor-related share unless this ''would result in lower payments to a hospital than would otherwise be made.'' However, this provision of Pub. L. 108–173 did not change the legal requirement that the Secretary estimate ''from time to time'' the proportion of hospitals' costs that are ''attributable to wages and wage-related costs.'' We believe that this reflected Congressional intent that hospitals receive payment based on either a 62-percent labor-related share, or the labor-related share estimated from time to time by the Secretary, depending on which labor-related share resulted in a higher payment.

We have continued our research into the assumptions employed in calculating the labor-related share. Our research involves analyzing the compensation share separately for urban and rural hospitals, using regression analysis to determine the proportion of costs influenced by the area wage index, and exploring alternative methodologies to determine whether all or only a portion of professional fees and

nonlabor intensive services should be considered labor-related.

In the FY 2006 IPPS final rule (70 FR 47392), we presented our analysis and conclusions regarding the frequency and methodology for updating the labor-related share for FY 2006. We also recalculated a labor-related share of 69.731 percent, using the FY 2002 based PPS market basket for discharges occurring on or after October 1, 2005. In addition, we implemented this revised and rebased labor-related share in a budget neutral manner, but consistent with section 1886(d)(3)(E) of the Act, we did not take into account the additional payments that would be made as a result of hospitals with a wage index less than or equal to 1.0 being paid using a labor-related share lower than the labor-related share of hospitals with a wage index greater than 1.0.

The labor-related share is used to determine the proportion of the national PPS base payment rate to which the area wage index is applied. In this final rule with comment period, we are not making any changes to the national average proportion of operating costs that are attributable to wages and salaries, fringe benefits, professional fees, contract labor, and labor intensive services. Therefore, we are continuing to use a labor-related share of 69.731 percent for discharges occurring on or after October 1, 2007. Tables 1A and 1B in the Addendum to this final rule with comment period reflect this labor-related share. We note that section 403 of Pub. L. 108–173 amended sections 1886(d)(3)(E) and 1886(d)(9)(C)(iv) of the Act to provide that the Secretary must employ 62 percent as the labor-related share unless this employment ''would result in lower payments to a hospital than would otherwise be made.''

We also are continuing to use a labor-related share for the Puerto Rico specific standardized amounts of 58.7 percent for discharges occurring on or after October 1, 2007. Consistent with our methodology for determining the national labor-related share, we added the Puerto Rico-specific relative weights for wages and salaries, fringe benefits, contract labor, nonmedical professional fees, and other labor intensive services to determine the labor-related share. Puerto Rico hospitals are paid based on 75 percent of the national standardized amounts and 25 percent of the Puerto Rico-specific standardized amounts. For Puerto Rico hospitals, the national labor-related share will always be 62 percent because the wage index for all Puerto Rico hospitals is less than 1.0. A Puerto Rico-specific wage index is applied to the Puerto Rico-specific portion of payments to the hospitals. The labor-related share of a hospital's Puerto Rico specific rate will be either 62 percent or the Puerto Rico-specific labor-related share depending on which results in higher payments to the hospital. If the hospital has a Puerto Rico-specific wage index of greater than 1.0, we will set the hospital's rates using a labor-related share of 62 percent for the 25 percent portion of the hospital's payment determined by the Puerto Rico standardized amounts because this amount will result in higher payments. Conversely, a hospital with a Puerto Rico-specific wage index of less than 1.0 will be paid using the Puerto Rico-specific labor-related share of 58.7 percent of the Puerto Rico-specific rates because the lower labor-related share will result in higher payments. The Puerto Rico labor-related share of 58.7 percent for FY 2007 is reflected in the Table 1C of the Addendum to this final rule with comment period.

M. Wage Index Study Required Under Pub. L. 109–432

Section 106(b)(1) of the MIEA–TRHCA (Pub. L. 109–432) requires MedPAC to submit to Congress, not later than June 30, 2007, a report on the Medicare wage index classification system applied under the Medicare Inpatient Prospective Payment System. Section 106(b) of MIEA-TRHCA requires the report to include any alternatives that MedPAC recommends to the method to compute the wage index under section 1886(d)(3)(E) of the Act.

In addition, section 106(b)(2) of the MIEA TRHCA instructs the Secretary of Health and Human Services, taking into account MedPAC's recommendations on the Medicare wage index classification system, to include in the FY 2009 IPPS proposed rule one or more proposals to revise the wage index adjustment applied under section 1886(d)(3)(E) of the Act for purposes of the IPPS. The proposal (or proposals) must consider each of the following:

- Problems associated with the definition of labor markets for the wage index adjustment;
- The modification or elimination of geographic reclassifications and other adjustments;
- The use of Bureau of Labor of Statistics data or other data or methodologies to calculate relative wages for each geographic area;
- Minimizing variations in wage index adjustments between and within MSAs and statewide rural areas;
- The feasibility of applying all components of CMS' proposal to other settings;
- Methods to minimize the volatility of wage index adjustments while maintaining the principle of budget neutrality;
- The effect that the implementation of the proposal would have on health care providers on each region of the country;
- Methods for implementing the proposal(s) including methods to phase in such implementations; and
- Issues relating to occupational mix such as staffing practices and any evidence on quality of care and patient safety including any recommendation for alternative calculations to the occupational mix.

In the proposed rule, we indicated that we look forward to reviewing the MedPAC report on the wage index later this year. As required by the law, we will consider MedPAC's recommendations and each of the factors specified above in making a proposal (or proposals) in the FY 2009 IPPS proposed rule.

Comment: Many commenters provided comments and suggestions on the MIEA–TRHCA requirements to study the wage index.

Response: We appreciate the commenters' ideas and suggestions on the wage index in response to the statutory requirements under Pub. L. 109–432. We plan to consider all of the comments we received when developing our FY 2009 proposed rule.

We note that MedPAC released its June 2007 report to Congress on June 15, 2007. As the statute requires, the report includes MedPAC's analysis and recommendations on alternatives to the method to compute the wage index. The full report can be downloaded from MedPAC's Web site at *http://www.medpac.gov/documents/Jun07_EntireReport.pdf*.

N. Proxy for the Hospital Market Basket

In the FY 2006 IPPS final rule (70 FR 47387), we changed the base year cost structure for the IPPS hospital index for the hospital market basket for operating costs from FY 1997 to FY 2002. As discussed in that final rule, the IPPS hospital index primarily uses the BLS data as price proxies, which are grouped in one of the three BLS categories. The categories are Producer Price Indexes (PPIs), Consumer Price Indexes (CPIs), and Employment Cost Indexes (ECIs), discussed in detail in the FY 2006 IPPS final rule (70 FR 47388 through 47391). We evaluate the price proxies using the criteria of reliability, timeliness, availability, and relevance. The PPIs, CPIs, and ECIs selected by us and used for this proposed rule meet these criteria as described in the FY 2006 IPPS final

rule. We believe they continue to be the best measures of price changes for the cost categories.

Beginning April 2006 with the publication of March 2006 data, the BLS' ECI began using a different classification system, the North American Industrial Classification System (NAICS), instead of the Standard Industrial Codes (SIC), which no longer exist. We have consistently used the ECI as the data source for our wages and salaries and other price proxies in the IPPS market basket and are not making any changes to the usage at this time. Thus, we used the BLS–NAICS-based ECIs as price proxies in the market basket.

IV. Other Decisions and Changes to the IPPS for Operating Costs and GME Costs

A. Reporting of Hospital Quality Data for Annual Hospital Payment Update (§ 412.64(d)(2))

1. Background

Section 5001(a) of the Deficit Reduction Act of 2005, Pub. L. 109–171 (DRA), set out new requirements for the Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) program. We established the RHQDAPU program in order to implement section 501(b) of Pub. L. 108–173. It builds on our ongoing voluntary Hospital Quality Initiative, which is intended to empower consumers with quality of care information to make more informed decisions about their health care while also encouraging hospitals and clinicians to improve their quality of care.

Section 5001(a) of the DRA revised the mechanism used to update the standardized amount for payment for hospital inpatient operating costs. Specifically, sections 1886(b)(3)(B)(viii)(I) and (II) of the Act provide that the payment update for FY 2007 and each subsequent fiscal year be reduced by 2.0 percentage points for any ''subsection (d) hospital'' (that is, a hospital paid under the IPPS) that does not submit certain quality data in a form and manner, and at a time, specified by the Secretary.

Sections 1886(b)(3)(B)(viii)(III) and (IV) of the Act required that we expand the ''starter set'' of 10 quality measures established by the Secretary as of November 1, 2003, provided that certain requirements were met. In expanding this set of measures, section 1886(b)(3)(B)(viii)(IV) of the Act provides that we must begin to adopt the baseline set of performance measures as set forth in a 2005 report issued by the Institute of Medicine (IOM) of the National Academy of Sciences under section 238(b) of the MMA, [28] effective for payments beginning with FY 2007.

The IOM measures include: Hospital Quality Alliance (HQA) quality measures (the HQA is a public-private collaboration to improve the quality of care provided by the nation's hospitals by measuring and publicly reporting on that care), the HCAHPS patient perspective survey, and three structural measures. The structural measures are: (1) implementation of computerized provider order entry for prescriptions, (2) staffing of intensive care units with intensivists, and (3) evidence-based hospital referrals. These structural measures constitute the Leapfrog Group's original ''three leaps,'' and are part of the National Quality Forum's 30 Safe Practices for Better Healthcare.

Sections 1886(b)(3)(B)(viii)(V) and (VI) of the Act require that, effective for payments beginning with FY 2008, we add other quality measures that reflect consensus among affected parties, and provide the Secretary with the discretion to replace any quality measures or indicators in appropriate cases, such as where all hospitals are effectively in compliance with a measure, or the measures or indicators have been subsequently shown to not represent the best clinical practice. Thus, the Secretary has broad discretion to replace measures on the basis that they are not appropriate.

Section 1886(b)(3)(B)(viii)(VII) of the Act requires that we establish procedures for making quality data available to the public after ensuring that a hospital has the opportunity to review, in advance, its data that are to be made public. In addition, this section requires that we report quality measures of process, structure, outcome, patients' perspective on care, efficiency, and costs of care that relate to services furnished in inpatient settings on the CMS Web site.

Section 1886(b)(3)(B)(viii)(I) of the Act also provides that any reduction in a hospital's payment update will apply only with respect to the fiscal year involved, and will not be taken into account for computing the applicable percentage increase for a subsequent fiscal year.

The ''starter set'' of 10 quality measures we established as of November 1, 2003 are as follows:

Heart Attack (Acute Myocardial Infarction or AMI)

- Was aspirin given to the patient upon arrival to the hospital?
- Was aspirin prescribed when the patient was discharged?
- Was a beta-blocker given to the patient upon arrival to the hospital?
- Was a beta-blocker prescribed when the patient was discharged?
- Was an ACE inhibitor given for the patient with heart failure?

Heart Failure (HF)

- Did the patient get an assessment of his or her heart function?
- Was an ACE inhibitor given to the patient?

Pneumonia (PNE)

- Was an antibiotic given to the patient in a timely way?
- Had the patient received a pneumococcal vaccination?
- Was the patient's oxygen level assessed?

We adopted these measures after the Secretary of HHS joined in a partnership with several collaborators intended to promote hospital quality improvement and public reporting of hospital quality information. These collaborators included the American Hospital Association, the Federation of American Hospitals, the Association of American Medical Colleges, the Joint Commission on Accreditation of Healthcare Organizations (the Joint Commission), the National Quality Forum (NQF), the American Medical Association, the Consumer-Purchaser Disclosure Project, the AARP, the American Federation of Labor-Congress of Industrial Organizations, the Agency for Healthcare Research and Quality (AHRQ), as well as CMS and others. This collaboration, originally known as the National Voluntary Hospital Reporting Initiative, is now known as the HQA.

This starter set of 10 quality measures was endorsed by the NQF. The NQF is a voluntary consensus standard setting organization established to standardize health care quality measurement and reporting through its consensus development process. In addition, this starter set is a subset of measures currently collected for the Joint Commission as part of its certification program.

We chose these 10 quality measures in order to collect data that will: (1) provide useful and valid information about hospital quality to the public; (2) provide hospitals with a sense of predictability about public reporting expectations; (3) begin to standardize

[28] Institute of Medicine, ''Performance Measurement: Accelerating Improvement,'' December 1, 2005, available at *http://www.iom.edu/CMS/3809/19805/31310.aspx.*

data and data collection mechanisms; and (4) foster hospital quality improvement.

Hospitals submit quality data through the QualityNet Exchange secure Web site (*www.qnetexchange.org*). We believe that this Web site meets or exceeds all current Health Insurance Portability and Accountability Act requirements for security of personal health information. Data from this initiative are used to populate the *Hospital Compare* Web site, *www.hospitalcompare.hhs.gov.* This Web site assists beneficiaries and the general public by providing information on hospital quality of care for consumers who need to select a hospital. It further serves to encourage consumers to work with their doctors and hospitals to discuss the quality of care they provide to patients, thereby providing an additional incentive to improve the quality of care they provide.

In the FY 2007 IPPS final rule (71 FR 48137), we amended our regulations at § 412.64(d)(2) to reflect the 2.0 percentage point reduction in the payment update for FY 2007 and subsequent fiscal years for hospitals that do not comply with requirements for reporting quality data as provided for under section 5001(a) of the DRA. We also added 11 additional quality measures to the 10 measure starter set to establish an expanded set of 21 quality measures (71 FR 48029 through 48037). These 21 measures are as follows:

Topic	Quality measure
Heart Attack (Acute Myocardial Infarction)	• Aspirin at arrival.* • Aspirin prescribed at discharge.* • ACE inhibitor (ACE–I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction.* • Beta blocker at arrival.* • Beta blocker prescribed at discharge.* • Fibrinolytic (thrombolytic) agent received within 30 minutes of hospital arrival. • Percutaneous Coronary Intervention (PCI) received within 120 minutes of hospital arrival. • Adult smoking cessation advice/counseling.
Heart Failure (HF)	• Left ventricular function assessment.* • ACE inhibitor (ACE–I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction.* • Discharge instructions. • Adult smoking cessation advice/counseling.
Pneumonia (PNE)	• Initial antibiotic received within 4 hours of hospital arrival.* • Oxygenation assessment.* • Pneumococcal vaccination status.* • Blood culture performed before first antibiotic received in hospital. • Adult smoking cessation advice/counseling.
Surgical Care Improvement Project (SCIP)—named SIP for discharges prior to July 2006 (3Q06).	• Appropriate initial antibiotic selection. • Influenza vaccination status.* • Prophylactic antibiotic received within 1 hour prior to surgical incision. • Prophylactic antibiotics discontinued within 24 hours after surgery end time.

*Measure included in 10 measure starter set.

In addition, in the FY 2007 IPPS final rule (71 FR 48031 through 48044), we set out RHQDAPU program procedures for data submission, program withdrawal, data validation, attestation, public display of hospitals' quality data, and reconsiderations. In response to public comments, we required that reporting of the expanded quality measures begin with discharges occurring on or after the third calendar quarter of 2006 (July through September discharges). We also responded to public comments regarding whether we should establish more structured reconsideration procedures for FY 2008 and what such procedures might include.

Under section 1886(b)(3)(B)(viii)(V) of the Act, for payments beginning with FY 2008, we are required to add other measures that reflect consensus among affected parties, and, to the extent feasible and practicable, we must include measures set forth by one or more national consensus building entities.

2. FY 2008 Quality Measures

Commenters on the FY 2007 IPPS proposed rule requested that we notify the public as far in advance as possible of any proposed expansions of the measurement set and program procedures in order to encourage broad collaboration and to give hospitals time to prepare for any anticipated change. Taking these concerns into account, in the CY 2007 OPPS final rule (71 FR 68201), we adopted additional quality measures for the FY 2008 update. The six additional measures we adopted are as follows:

- HCAHPS survey
- SCIP Quality Measures

—SCIP–VTE 1: Venous thromboembolism (VTE) prophylaxis ordered for surgery patient

—SCIP–VTE 2: VTE prophylaxis within 24 hours pre/post surgery

—SCIP Infection 2: Prophylactic antibiotic selection for surgical patients

- Mortality (Medicare Patients)

—Acute Myocardial Infarction 30-day mortality Medicare patients

—Heart Failure 30-day mortality Medicare patients

For the FY 2008 payment determination, we are requiring hospitals to report the following 27 measures:

Topic	Quality measure
Heart Attack (Acute Myocardial Infarction)	• Aspirin at arrival.* • Aspirin prescribed at discharge.* • ACE inhibitor (ACE–I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction.* • Beta blocker at arrival.* • Beta blocker prescribed at discharge.* • Fibrinolytic (thrombolytic) agent received within 30 minutes of hospital arrival.** • Percutaneous Coronary Intervention (PCI) received within 120 minutes of hospital arrival.** • Adult smoking cessation advice/counseling.**
Heart Failure (HF)	• Left ventricular function assessment.* • ACE inhibitor (ACE–I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction. • Discharge instructions.** • Adult smoking cessation advice/counseling.**
Pneumonia (PNE)	• Initial antibiotic received within 4 hours of hospital arrival.* • Oxygenation assessment.* • Pneumococcal vaccination status.* • Blood culture performed before first antibiotic received in hospital.** • Adult smoking cessation advice/counseling.** • Appropriate initial antibiotic selection.** • Influenza vaccination status.**
Surgical Care Improvement Project (SCIP)—named SIP for discharges prior to July 2006 (3Q06).	• Prophylactic antibiotic received within 1 hour prior to surgical incision.** • Prophylactic antibiotics discontinued within 24 hours after surgery end time.** • SCIP–VTE 1: Venous thromboembolism (VTE) prophylaxis ordered for surgery patients.*** • SCIP–VTE 2: VTE prophylaxis within 24 hours pre/post surgery.*** • SCIP Infection 2: Prophylactic antibiotic selection for surgical patients.***
Mortality Measures (Medicare patients)	• Acute Myocardial Infarction 30-day mortality Medicare patients.*** • Heart Failure 30-day mortality Medicare patients.***
Patients' Experience of Care	• HCAHPS patient survey.***

*Measure included in 10 measure starter set.
**Measure included in 21 measure expanded set.
***Measure added in CY 2007 OPPS final rule.

Comment: One commenter stated that CMS' proposal to expand the surgical infection set, add a 30-day mortality measure, and add patient experience (HCAHPS) are consistent with priorities it suggested for the hospital measure set.

Response: CMS adopted the SCIP Infection 2 measure, the HCAHPS survey measure, AMI and Heart Failure 30-Day Mortality for Medicare Patients in the CY 2007 OPPS final rule (71 FR 68201) for the FY 2008 update.

Comment: One commenter applauded CMS' decision to add two additional SCIP measures, SCIP–VTE 1 and SCIP–VTE 2, to the RHQDAPU program. The commenter believed that the addition of these measures will help improve quality of care for Medicare beneficiaries and reduce the risk of postoperative complications associated with VTE (venous thromboembolism) occurring after approximately 25 percent of all major surgical procedures performed without prophylaxis. The commenter noted that VTE is preventable through the use of well-researched measures of established efficacy and believed such prophylactic measures should be applied in settings beyond surgical ones. For example, the commenter encouraged CMS to include safety measures relating to VTE as medical prophylaxis to the RHQDAPU program.

Response: We appreciate the commenter's support of CMS' decision to add SCIP VTE–1 and SCIP VTE–2 to the RHQDAPU program. CMS recognizes the commenter's suggestion that CMS should include safety measures relating to VTE as medical prophylaxis to the RHQDAPU program. The NQF is currently conducting an evaluation of VTE measures that was sponsored by the Joint Commission. A variety of VTE measures are currently being evaluated and tested and we are supportive of this evaluation to test additional VTE measures. CMS hopes that these evaluations will result in VTE measures that may be considered for RHQDAPU in the future.

Comment: One commenter asked that CMS clarify the AMI topic. The commenter stated that under the Joint Commission's requirements, starting with 3rd quarter 2006, hospitals are required to submit data on PCI received within 90 minutes of hospital arrival versus the 120 minute criteria for the AMI topic. However, the current document lists RHQDAPU program measures for 2007 (72 FR 24804) and 2008 and 2009 (72 FR 24804) and includes the criteria of 120 minutes instead of 90 minutes.

Response: We acknowledge NQF has changed its endorsement of the PCI measure from 120 minutes to 90 minutes of hospital arrival. We also acknowledge that the Joint Commission has changed its reporting requirement for the PCI measure to correspond with the NQF endorsement. Although we generally look to the NQF as an appropriate consensus-building entity that endorses many quality measures we believe would be appropriate for inclusion in the RHQDAPU program, NQF endorsement of a particular measure, or an NQF change regarding endorsement of a particular measure, does not automatically lead to an immediate adoption of a measure or a change in our definition of a measure for purposes of the RHQDAPU program. At this time, we are not adopting this change in this final rule with comment period. However, if we believe that the

NQF change is an appropriate change for the RHQDAPU program, we would expect to adopt this change through a future rulemaking.

Comment: One commenter commended CMS for publishing the FY 2008 reporting measures as part of the CY 2007 OPPS final rule. The commenter finds the ability to comment and plan a year in advance very helpful. The FY 2008 IPPS proposed rule included five new measures for FY 2009—four process and one outcome measure. The commenter commended CMS for putting these measures forth in the proposed rule because it will give hospitals time to plan and establish proper data collection mechanisms.

Response: We appreciate the commenter's support and we will continue to provide the public with as much notice as possible when adopting new measures in the future.

Comment: One commenter believed that the current Heart Attack (Acute Myocardial Infarction) measures do not reflect the current standard of care. The commenter believes that these measures require some modification in order to reflect available clinical evidence. The commenter also encouraged CMS to consider adopting a system whereby hospitals that participate in heart registries are deemed to have submitted and met necessary baselines for the AMI measures.

Response: The current performance measures for assessing quality of care for acute myocardial infarction were endorsed by the National Quality Forum, and based on the joint performance measurement recommendations of the American College of Cardiology and the American Heart Association, two well-respected consensus-building entities. As clinical science changes, CMS will align and modify our performance measures.

We agree that registries hold much potential to reduce data collection burden. However, before we could ''deem'' a hospital that participates in a registry to have met the RHQDAPU requirements for the AMI measures, as the commenter suggests, we would have to ensure that the specifications, including data definitions of the registry were sufficiently comparable to those used in the RHQDAPU program.

Comment: One commenter stated that although the RHQDAPU AMI measures are important in improving AMI outcomes, studies have shown that they are not very effective at capturing the variation in short-term 30-day mortality rates.

Response: We acknowledge that many of the current process of care measures, including the AMI measures, are based on studies showing the relationship between the process of care and long-term patient outcomes (not necessarily 30-day mortality rates). We believe that, at the patient level, the measures are very important because they are positively related to outcomes. One reason why the current RHQDAPU program process measures are weakly correlated with the 30-day mortality measures is because there is a low variation of the process measures to explain the variation of the mortality measures. More importantly, the current set of process measures is only a small part of a broad spectrum of measures or factors that are relevant to outcomes. They are not expected to capture completely the variation in 30-day mortality rates.

Comment: One commenter stated that in addition to the current process measures, CMS should consider adopting measures that reflect a greater variety of processes and also outcomes. To that end, the commenter suggested that CMS should take a leadership role with stakeholders to develop consensus recommendations regarding the addition of new AMI quality measures under the RHQDAPU program. As the leading Federal agency in the development of quality measures for hospitals, the commenter believed CMS has a responsibility to keep abreast of changes in the standard of care, bring together the relevant stakeholders to build consensus, and act quickly and appropriately to update the quality measures for the RHQDAPU program.

Response: In selecting the measures for the RHQDAPU program, CMS makes every effort to remain abreast of changes in clinical guidelines and standards of care. We work closely with the Joint Commission, the HQA, and the NQF, among others, in this effort. Specifically, we collaborate with technical expert panels that include clinician experts, specialty societies, practice guideline committees, and others. We work with relevant stakeholders in developing performance measures that reflect current standards of care. For example, the performance measures selected by CMS for inclusion in the RHQDAPU program to assess quality of care for acute myocardial infarction not only were endorsed by the National Quality Forum, but CMS also considered the recommendations of a joint performance measurement committee of the American College of Cardiology and the American Heart Association. Similar technical panels exist for all of the current RHQDAPU process measure sets.

We are not adopting any other new RHQDAPU measures for FY 2008.

3. New Quality Measures and Program Requirements for FY 2009 and Subsequent Years

a. New Quality Measures for FY 2009 and Subsequent Years

In the FY 2008 IPPS proposed rule (72 FR 24805), we proposed to add 1 outcome measure and 4 process measures to the existing 27 measure set to establish a new set of 32 quality measures to be used for the FY 2009 annual payment determination. We proposed to adopt these measures a year in advance in order to provide additional time for hospitals to prepare for changes related to the RHQDAPU program. We proposed to add the following quality measures for the FY 2009 RHQDAPU program:

- Pneumonia 30-day Mortality (Medicare patients)
- SCIP Infection 4: Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose
- SCIP Infection 6: Surgery Patients with Appropriate Hair Removal
- SCIP Infection 7: Colorectal Patients with Immediate Postoperative Normothermia
- SCIP Cardiovascular 2: Surgery Patients on a Beta-Blocker Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period

We stated that the above measures reflect our continuing commitment to quality improvement in both clinical care and patient safety. These additional measures also demonstrate our commitment to include in the RHQDAPU program only those quality measures that reflect consensus among the affected parties and that have been reviewed by a consensus building process. The proposed measures have been put forth by the HQA for inclusion in its public reporting set, contingent on endorsement by the NQF. (In the case of SCIP Infection 7, the HQA recently withdrew its previous support unless the measure receives NQF endorsement.) We stated that we anticipated that the NQF would endorse these measures prior to the publication of this final rule with comment period. Notwithstanding, we indicated that any measure that was not endorsed by that time would not be finalized in this final rule with comment period.

We requested public comment on these five measures and indicated that we would finalize the FY 2009 RHQDAPU measure set in this final rule with comment period. However, as we explained, at this time we are only finalizing one of the additional measures we proposed to add as part of the complete FY 2009 measure set. We will further address adding additional

measures to the final FY 2009 measure set for the RHQDAPU program in the CY 2008 Outpatient Prospective Payment System (OPPS) final rule scheduled for publication in November 2007 and, if necessary, in the FY 2009 IPPS proposed and final rules.

Comment: Numerous commenters stated that they support CMS' continued focus on quality measures and value-based purchasing. In addition, the commenters stated that they were aware that the Deficit Reduction Act of 2005 expanded quality reporting requirements for hospitals and provided the Secretary with the discretion to add additional quality measures that reflect consensus among affected parties. In the proposed rule, CMS proposed to add five new measures and described the process for adding additional measures, and the commenters supported CMS' proposed addition of these five measures because they align with CMS' focus on measures that can be implemented successfully and which represent aspects of care that are important to patients, efficiency, effectiveness, and patient-centered care.

Response: We appreciate the commenters' support of our continued focus on quality measures and value-based purchasing. Indeed, in adopting additional measures, we aim to choose measures that promote efficiency, effectiveness, and patient-centered care.

Comment: One commenter stated that including four more SCIP measures will be time-consuming and will require more training for the data collectors and medical records coders. As for the fifth measure, Pneumonia 30-day mortality, the commenter noted that this will require no additional effort on its part since the data will come from Medicare claims data. The new risk adjustment methodology utilized for the AMI and HF 30-day mortality measures is an improvement on earlier methodology used for CMS mortality measures published in the 1980's. The commenter assumed the new risk adjustment methodology will be utilized for Pneumonia mortality.

Response: We appreciate the time and effort required to abstract medical record information for quality measures while recognizing the vital utility of the information derived from abstraction to improve our nation's healthcare services. Throughout, we have encouraged hospitals to leverage the primary intent of the SCIP measures, namely, systems level change through the institution. For this reason, we believe that the optimal effect of SCIP will be to change the processes of care for surgical patients making the act of data acquisition a consequence of the delivery of care rather than an afterthought. To be specific, the additional measures require the answer to 10 questions: The answers to six questions are known prior to incision, the answers to two more are known in the post-anesthesia care unit (PACU), and the answers to the final two, required only for cardiac surgery patients, are known by postoperative day number two. In brief, the documentation of these questions should be coordinated with the entire surgical team to make collection easier and to serve as checks on the quality of surgical services.

The commenter's assumption that AMI, HF, and pneumonia measures share common new risk adjustment methodology and confidence intervals for estimating three possible categories for calculation is correct. The three categories into which a hospital can fall based on this methodology are displayed on *Hospital Compare* as ''Better than U.S. National Rate,'' ''No Different than U.S. National Rate,'' and ''Worse than U.S. National Rate.''

Comment: Several commenters appreciated and supported the focus on quality but opined strongly that CMS does not understand the resources and internal systems requirements not only to report but to actually do the work of improving care. The commenters stated that the number of measures is growing too quickly, from 10 to 21 to 27 to 32, in 4 years time, without any recognition for the work it takes to report and improve care. While the commenters appreciated the full year notice for new measures, the commenters were very concerned about the number of new measures added each year and suggested that CMS consider what it means for hospitals to garner the resources necessary to assess and improve care processes and to influence clinical practice changes to align with the evidence and to be able to report the measures.

Response: We are aware of the burden on hospitals to abstract data to report the current measures of quality. There are ongoing efforts to define measures that can be based on claims (for example, AMI mortality), to reduce the burden of data collection on current process of care measures, and to learn how currently reported measures might be collected from a functional electronic medical record system. However, it is important for hospitals to continue to incorporate the process of data collection for the current measures into their routine of care. The incorporation of data collection into the hospitals' daily routine will ultimately reduce their overall burden. When making decisions about future measure requirements, CMS intends to continue to carefully consider the resources and internal systems a hospital will need to report measures and implement them into their standard of care.

Comment: One commenter stated that adding monitoring of these measures does not help improve patient care, instead, it just makes sure that hospitals have good documentation. The commenter believed that organizations with small sample size can be at a disadvantage with the implementation of these measures.

Response: We believe that careful and complete documentation is a very important facet of delivering quality and safe health care. Many quality improvement experts believe that even a few performance measure ''failures'' provide enough information to develop quality improvement interventions. A single case that fails a performance measure may identify a flaw in the system of care that prevented the patient from receiving evidence-based care. In addition, we continue to look for ways to address concerns related to small sample sizes.

Comment: One commenter did not believe that quality improvement has been addressed with the first set of 27 measures and that the data collection burdens of the current 27 and the five additional proposed for FY 2009 had not been addressed. The commenter noted that not every provider has all of this documentation electronically and that to gather this data requires more time and cost. The commenter requested that CMS evaluate whether the quality of care has been improved with the current measures before adding additional measures that may or may not improve quality.

Response: We believe that there is substantial evidence that quality of care and patient outcomes have improved over the years that CMS has focused on hospital quality. Multiple published studies as well as the annual National Healthcare Quality Report that the Agency for Healthcare Research and Quality produces for Congress have highlighted the improvements in processes of care. These processes are very important at the patient-level in reducing mortality, improving quality of life, and reducing readmission. The NQF endorsement process also considers the impact of process measures on outcomes. NQF endorses process measures that possess a considerable evidence base between the process measure and patient outcomes. There has been a steady decline in hospital and 30-day rates of mortality for conditions such as AMI and

pneumonia which may be due in part to improvements in care for the current RHQDAPU process measures.

We are aware that there is a burden of data collection for all of the RHQDAPU process measures. Few institutions have the ability to capture this data electronically and even those with fully integrated electronic medical records often have to resort to manual data collection to capture the information for the performance measures. There are ongoing efforts to work with vendors of electronic record systems to incorporate the data elements for the RHQDAPU process measures into their tools.

Comment: Two commenters stated that CMS should continue to allow private sector organizations to have full access to provider performance information (numerator and denominator) from the *Hospital Compare* Web site. Many plans rely heavily on the all-payer data to populate their provider selection tools; withholding or limiting access to granular performance data would impose additional reporting requirements on providers.

Response: A downloadable Microsoft Access database is available on *Hospital Compare* Web site and it is updated on a quarterly basis. It contains counts of each hospital's patients actually receiving each measure's process of care (that is, numerators) and counts of each hospital's patients eligible to receive each measure's process of care (that is, denominators) for hospitals represented on *Hospital Compare.* There are no plans to discontinue this service.

Comment: One commenter supported the CMS RHQDAPU program that provides hospitals the opportunity to submit quality data. The commenter continued to support the reportable measures under the pneumonia topic, in particular the provision of adult smoking cessation counseling services, a clinical intervention in which respiratory therapists are acknowledged experts.

Response: CMS continues to believe that the provision of preventive services such as smoking cessation counseling are important to improving patient outcomes and we encourage hospitals to develop systems approaches that would include team members such as respiratory therapists to provide this patient education.

Comment: One commenter proposed that CMS study application of an exclusionary criterion to the 30-day pneumonia mortality measure in the presence of this ICD–9 Diagnosis Code for the index admission for pneumonia. Otherwise, the commenter believed that a hospital's pneumonia 30-day mortality rate will be unfairly represented in public reporting and annual payment determination because they may be caring for many pneumonia patients who are actually receiving CMO (comfort measures only).

Response: We addressed this concern by taking each patient's health status on admission into consideration. Using inpatient and outpatient claims data for the year prior to admission, the pneumonia 30-day mortality measure model adjusts for a number of factors associated with the likelihood that patients are at the end of their lives, including protein-calorie malnutrition, metastatic cancer, dementia, and age. Hospitals with very sick patients, therefore, will be expected to have more deaths, and the model will adjust their risk-standardized mortality rate (RSMR) accordingly.

In addition, we were careful in our approach to include information about each patient's status at admission and to not adjust for possible complications of the admission. Although some codes, by definition, represent conditions that are present before admission (for example cancer), other codes and conditions cannot be differentiated from complications that occur during the hospitalization (for example infection, shock, and transition to comfort care-only or hospice status). Excluding patients from the analysis who transition to comfort care or hospice may inadvertently reward hospitals that poorly manage their patients.

Comment: One commenter supported CMS' decision to add a SCIP measure related to glycemic control, SCIP Infection 4: Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose and noted that there is clinical evidence to support the importance and contribution of postoperative glycemic control for cardiac surgery patients. The commenter also suggested that CMS work with the quality organizations and other stakeholders to develop measures to assess glycemic control in all hospital inpatients.

Response: We appreciate the supportive comment and we look forward to continuing to review the evidence base for glycemic control to potentially expand the suite of measures to accommodate other patient populations. With respect to SCIP infection 4, we are deferring finalizing this measure until it receives NQF endorsement and will further address its inclusion in the FY 2009 RHQDAPU measurement set (effective with discharges CY 2008 discharges) in the CY 2008 OPPS final rule which is scheduled for publication in November 2007.

Comment: Two commenters strongly supported the expansion of the quality items to include additional anti-infection process measures. For FY 2008, the commenter supported the inclusion of SCIP Infection 4, SCIP Infection 6, and SCIP Infection 7.

Response: We appreciate the comment and support for the proposed inclusion of SCIP Infection 4, SCIP Infection 6, and SCIP Infection 7 in the FY 2009 RHQDAPU measurement set (effective with CY 2008 discharges). However, we are not adding these measures in this final rule with comment period, because they have yet received the endorsement of a consensus building entity such as the NQF, which we rely upon to ensure that our selection of each RHQDAPU measure is an appropriate one for the program. We intend to add SCIP Infection 4 and SCIP Infection 6 to the FY 2009 measurement set (effective with CY 2008 discharges) in the CY 2008 OPPS final rule which is scheduled for publication in November 2007, if these measures have received NQF endorsement. With regard to SCIP Infection 7, we believe it is feasible and appropriate to wait to adopt this measure until the NQF endorses it.

Comment: Three commenters recommend that SCIP Infection 7 be withheld from the RHQDAPU program until it is NQF approved.

Response: We appreciate the importance of relying on the endorsement of a consensus building entity such as the NQF to assure broad consensus and reliability for our measures. SCIP Infection 7 is still pending NQF endorsement, and as a result, we are not finalizing the adoption of this measure for the RHQDAPU program at this time. We believe it is feasible and appropriate to wait to adopt this measure until a consensus building entity such as the NQF endorses it. When CMS determines adoption of this measure is timely, we will do so through the rulemaking process. We will address the status of this measure in the CY 2008 OPPS final rule.

Comment: One commenter requested that SCIP-Cardiovascular-2 not be required. The commenter indicated that this measure has good intentions but, as written, is very difficult to abstract. The commenter added that if the definition of perioperative end time is edited to be more consistent, the commenter would welcome this measure. Until then, the commenter feared it would only cause more problems then it would solve. The commenter gives beta-blockers after

surgery—but not likely within the nebulous end time of the perioperative period. Because the commenter believed that this definition was a convoluted definition, it stated that there was no easy way to create policies or procedures to address this measure in a reasonable and logical manner.

Response: We are not adopting this measure at this time because it has not yet received the endorsement of a consensus building entity such as the NQF. However, we continue to believe that this measure is appropriate because the peri-operative period for the SCIP cardiac measures is defined as 24 hours prior to surgical incision through discharge from the post anesthesia care/recovery area. Beta blockers have been shown to reduce complications in patients at risk for cardiovascular complications. Patients with a history of myocardial infarction who have beta blocker therapy initiated and maintained show a 20–30 percent reduction in subsequent cardiac events. Studies show that mortality from cardiac events is reduced substantially when beta blocker therapy is given in the peri-operative period. If SCIP Cardiovascular-2 receives NQF endorsement, we intend to add it for purposes of the FY 2009 RHQDAPU program in the CY 2008 OPPS final rule.

After careful consideration of the public comments received, we are taking the following actions with respect to the five proposed measures: We are adopting as final the Pneumonia 30-day Mortality measure we proposed. We intend to add SCIP Infection 4, SCIP Infection 6 and SCIP Cardiovascular-2 to the FY 2009 RHQDAPU measurement set (effective with CY 2008 discharges) in the CY 2008 OPPS final rule which is scheduled for publication in November 2007 if these measures have received NQF endorsement. We are not adopting the proposed SCIP Infection 7 measure in this final rule with comment period. We believe it is feasible and appropriate to wait to adopt this measure until the NQF endorses it. When CMS determines adoption of this measure is timely, we will finalize its adoption for the RHQDAPU program through the rulemaking process.

The following table contains a list of 18 measures and 8 measure sets from which we proposed that additional quality measures could be selected for inclusion in the RHQDAPU program. It includes measures and measure sets that highlight CMS' interest in improving patient safety and outcomes of care, with a particular focus on the quality of surgical care and patient outcomes. In order to engender a broad review of potential performance measures, the list includes measures that have not yet been considered for approval by the HQA or received endorsement by the NQF consensus review process for public reporting. It also includes measures developed by organizations other than CMS as well as measures that are to be derived from administrative data (such as claims) that may need to be modified for specific use by the Medicare program if implemented under the RHQDAPU program.

We solicited public comment from a broad set of stakeholders on the measures and measure sets that were listed, as well as any critical gaps or ''missing'' measures or measure sets. We specifically requested input concerning the following:

- Which of the measures or measure sets should be included in the FY 2009 RHQDAPU program or in subsequent years?
- What challenges for data collection and reporting are posed by the identified measures and measure sets? What improvements could be made to data collection or reporting that might offset or otherwise address those challenges?

POSSIBLE MEASURES AND MEASURE SETS FOR THE RHQDAPU PROGRAM FOR FY 2009 AND SUBSEQUENT YEARS

MEASURE		
	Measure	Clinical condition
Intensive Care Unit (ICU) Critical Care Measures		
1	Stress Ulcer Disease Prophylaxis	ICU/critical care.
2	Urinary Catheter-Associated Urinary Tract Infection For Intensive Care Unit (ICU) Patients	ICU/critical care.
Readmission Measures		
3	Readmission Heart Failure (HF) Within 30 Days Rate—Medicare Only (CMS Methodology)	Efficiency/HF.
4	Readmission (same hospital) Acute Myocardial Infarction (AMI) Within 30 Days Rate	Efficiency/AMI.
5	Readmission (same hospital) PNE Within 30 Days Rate	Efficiency/PNE.
6	Readmission Within 30 Days Of Surgery—Medicare Only (SCIP Global-2)	Surgical Care.
NQF—Nursing Sensitive Condition Set (Outcomes Measures Only)		
7	Failure To Rescue—Nursing Sensitive Measure	Patient centered.
8	Pressure Ulcer Prevalence—Nursing Sensitive Measure	Patient centered.
9	Patient Falls Prevalence—Nursing Sensitive Measure	Patient centered.
10	Patient Falls With Injury—Nursing Sensitive Measure	Patient centered.
Cancer (Inpatient) Measures		
11	Patients With Early Stage Breast Cancer Who Have Evaluation Of The Axilla	Cancer—Breast.
12	College Of American Pathologists Breast Cancer Protocol	Cancer—Breast.
13	Surgical Resection Includes At Least 12 Nodes (ACOS–02)	Cancer—Colon.
14	College Of American Pathologists Colon And Rectum Protocol	Cancer—Colon.
15	Completeness Of Pathologic Reporting (CCO–04)	Cancer—Colon.
Leapfrog Leaps, identified by IOM and Deficit Reduction Act		
16	Use Of Computerized Physician Order Entry (CPOE) Systems	Patient Safety.
17	Use of Intensivists in ICUs/ ICU Physician Staffing (IPS)	Patient Safety.
18	Evidence-Based Hospital Referrals	Patient Safety.

POSSIBLE MEASURES AND MEASURE SETS FOR THE RHQDAPU PROGRAM FOR FY 2009 AND SUBSEQUENT YEARS MEASURE—Continued

	Measure	Clinical condition
Measure Sets of Potential Interest Sets Under Active Review by National Quality Forum (NQF)		
1	Healthcare-Associated Infection measures—under consideration by the NQF National Voluntary Consensus Standards for Reporting of Healthcare-associated Infections Data Project.	Patient Safety.
2	Readmission Rates by Condition—under consideration by NQF National Voluntary Consensus Standards for Hospital Care: Additional Priorities, 2007 Project.	Efficiency.
3	Average Length of Stay (ALOS) by Condition—under consideration by NQF National Voluntary Consensus Standards for Hospital Care: Additional Priorities, 2007 Project.	Efficiency.
4	AHRQ Quality Indicators, including Patient Safety Indicators—under consideration by NQF National Voluntary Consensus Standards for Hospital Care: Additional Priorities, 2007 Project.	Patient Safety, various conditions.
Measure Sets/Practices Previously Endorsed by NQF		
5	Safe Practices for Better Healthcare	Patient Safety.
6	Serious Reportable Events in Healthcare (“Never Events”)	Patient Safety.
Other Hospital Measure Sets		
7	Hospital Emergency Department Measures	Various.
8	Vascular Surgery Complications (for Carotid Endarterectomy, Lower Extremity Bypass, Open Surgery Abdominal Aortic Aneurysm Repair, Endovascular Abdominal Aortic Aneurysm Repair).	Surgical Care.

Comment: Numerous commenters stated that CMS should only choose measures that have been selected by these two groups (NQF-endorsed, HQA-adopted).

Response: We are committed to adopting NQF-endorsed and HQA-adopted measures whenever possible. Currently, the only measures that are publicly reported or tied to the annual payment update are those measures that are NQF-endorsed and HQA-adopted.

Comment: Numerous commenters stated that CMS should look to the NQF goals as a framework for the types of measures that should be included in the RHQDAPU program.

Response: NQF goals, priorities and measurement frameworks have been, and will continue to be, considered when we select measures to adopt for the RHQDAPU program.

Comment: One commenter stated that CMS should also reiterate that it will follow the goals of the NQF in considering new measures in connection with future reporting under other voluntary initiatives. Included for future consideration should be measures that span multiple populations, for instance, pediatric asthma measures. By including these measures on the list of reportable measures, hospitals can submit the data to the Quality Improvement Organization (QIO) Clinical Warehouse, and report them on Hospital Compare even though the measures will not be included in the RHQDAPU program.

Response: It is our intent to consider NQF goals and priorities when identifying measures for future reporting. In terms of reporting measures that are not RHQDAPU-required, we have in the past, and will most likely in the future, make public on *Hospital Compare* data pertaining to measures that we have asked hospitals to report under another voluntary reporting initiative but that are not, at the time, RHQDAPU-required. Since CMS plays an important role in the provision of health care services to multiple populations though the Medicare and Medicaid programs, the development of standardized performance measures that promote care for all populations is important, whether or not those measures are included in the RHQDAPU program.

Comment: One commenter fully supported the mortality rate reporting and would like to see mortality measures for additional diagnoses included in the RHQDAPU program. The commenter stated that its hospitals would appreciate receiving reports on a quarterly basis to further inform care improvement efforts.

Response: The methodology used to calculate the current risk-standardized mortality rates requires one year of inpatient Medicare claims data plus one year of data on the patient's prior hospitalizations and outpatient care (Part A and Part B data). Quarterly reporting using the current methodology is not feasible and would likely not provide useful information on trends in mortality. Additional work is also needed to include additional diagnoses beyond AMI, HF, and pneumonia to validate the risk adjustment models using claims-based data.

Comment: One commenter was concerned that CMS has not yet implemented hospital reporting for three Leapfrog Leap measures identified by the Institute of Medicine and included in the DRA—use of computerized physician order entry (CPOE) systems, use of intensivists in ICUs/ICU physician staffing, and evidence-based hospital referrals. The commenter urged that CMS implement these important measures of patient safety in FY 2008.

Response: The Leapfrog measures are under consideration for inclusion in the RHQDAPU program in FY 2010 and subsequent years. However, while we believe that these measures are important in large institutions or academic centers, it is unclear that they are broadly applicable to the more than 3000 PPS hospitals that participate in the RHQDAPU program. In addition, these measures of structure have broad financial implications for hospitals such as the costs of implementing CPOE systems, the availability of trained intensivists in many communities, and the need for access to healthcare services in many regions of the country. For the majority of surgical services and almost all medical diagnoses, there is limited evidence to support improved patient outcomes based on hospital referral to high-volume hospitals. For a small number of operations or diagnoses, it may be reasonable to develop metrics for ''evidence-based referrals.'' We will continue to study these issues and will propose to adopt the Leapfrog measures if we believe they

are appropriate for the RHQDAPU program.

Comment: Two commenters opposed the inclusion of the three structural measures supported by The Leapfrog Group. They indicated that these structural standards are best viewed as ''aspirational best practices'' (as The Leapfrog Group itself intended), as opposed to a national standard of care. Because the proposed standards represent ''leaps'' beyond normal practices, the commenters stated that rural hospitals have not been asked by the Leapfrog Group to comply with the standards. In addition, they indicated that these measures are not NQF endorsed and HQA recommended for inclusion in the program.

Response: We appreciate this comment. The purpose of the list of possible measures for FY 2009 and beyond is to elicit comment from a wide array of stakeholders. As we have stated, we are committed to using measures that are endorsed by a consensus building entity such as the NQF and supported by the HQA. We will consider this comment in future decisions about measures expansion.

Comment: One commenter stated that it is not clear from the information provided in the proposed rule, how the patient safety measures 16, 17, and 18 would be reported and whether they would be reported on an annual basis. The commenter also stated that all measures currently reported for RHQDAPU are at the patient level, and these Leapfrog Leap Measures address structural components and, therefore, would require a different infrastructure to collect.

Response: We appreciate these comments, and they highlight important operational questions that CMS must answer before it considers adding these measures in the future. We will consider data collection frequency and data infrastructure needs of these structural measures in our future measures expansion decisions.

Comment: One commenter stated that it is critical to include the Joint Commission Mortality measure for ICUs in the RHQDAPU measure set. The Leapfrog Group Intensivist Physician Staffing Leap could be augmented by use of the Joint Commission ICU mortality measure now in the field.

Response: We do not believe that the Joint Commission ICU mortality measure has been endorsed by a consensus building entity such as the NQF. CMS strives to use consensus based measures for inclusion in the RHQDAPU measure set, and NQF endorsement is only one of many possible methods to demonstrate this consensus basis.

Comment: One commenter stated that a glaring weakness of the Leapfrog data is that they are self-reported and becoming ever more complicated, which will certainly lead to disparities in data interpretation. While it is a useful exercise for an individual provider to work through the Leapfrog questions, the commenter believed that it was ridiculous to assume that providers' responses can be compared to each other meaningfully.

Response: The Leapfrog survey data is not one of the measures recommended by the IOM report, and we are not otherwise considering adopting it for the RHQDAPU program.

Comment: Two commenters asked that as CMS moves forward with the initial expansion of these quality measures, as well as future measures, CMS be cognizant of the need for appropriate recognition of imaging technology within these measures. For example, the commenters supported CMS' efforts in adopting the current quality measures, such as the measure requiring that patients receiving a percutaneous coronary intervention receive the intervention within the first 120 minutes of admission for myocardial infarction. The commenters state that Medicare beneficiaries can benefit greatly from this life-saving procedure and imaging equipment is intrinsic to performing this procedure. As CMS looks to the future and implements its value based purchasing program for Medicare, the commenters asked that appropriate imaging used during specific diagnostic and therapeutic procedures be properly addressed within the measures.

Response: We are aware of the role that imaging technology can play in the delivery of quality healthcare and will, as appropriate, consider these technologies as measure sets and priority areas expand in the future. However, we are not aware of specific quality metrics that have focused on the type of imaging equipment that is used related to the current performance measures for hospital quality.

Comment: One commenter believed that wherever possible, quality measures developed as part of the RHQDAPU program should be applied in other care settings through inclusion in the Physician Quality Reporting Initiative (PQRI) and the outpatient quality reporting program measure sets. The commenter believed it made sense for CMS' quality measures to be consistent across provider settings.

Response: We agree and are involved in efforts to do just that. In particular, we are participating in an NQF group dealing with harmonization of measures across settings. In the future, we intend, as often as possible, to adopt measures that have been developed for one setting (for example, physician practices) in other appropriate and feasible settings (for example, hospital outpatient department). It makes sense to align the incentives for high quality care.

Comment: One commenter urged CMS to take the leadership role with stakeholders to develop consensus recommendations for care coordination quality measures for adoption into the RHQDAPU program. In the absence of care coordination, patient safety issues, medication errors, and miscommunication can lead to suboptimal outcomes and increased costs, as documented by numerous studies. Care coordination is particularly important for vulnerable populations that have chronic health care needs, although everyone that suffers acute illness will need at least temporary care coordination on some level. The commenter believed that CMS should take the lead in encouraging the development of measures in this area because it likely would improve the outcomes among patients who receive care across different types of facilities and also should help reduce unnecessary expenditures for duplicative care as patients move between care settings.

Response: This is an important comment and we could not agree more. There are ongoing efforts to develop a standard framework for quality improvement and quality assessment that addresses care transitions that is in part based on recently NQF-endorsed measures of care transition.

Hospital performance on the 30-day mortality measures reflects both the quality of care during patients'' hospitalizations and the coordination of their care at discharge or transfer. By addressing 30-day (rather than in-hospital) mortality and assigning the outcome for transfer patients to the first admitting hospital, the measures hold hospitals accountable for transitions in care to other settings and discharge planning. Actions taken at the admitting hospital, during a transfer, at a receiving hospital, and in outpatient settings after discharge all can affect 30-day mortality. CMS hopes this approach will encourage coordination between hospitals and their provider networks. CMS is also developing a readmission measure that will complement the mortality measure by promoting efforts to reduce unnecessary readmissions. Readmission rates are influenced by the quality of inpatient and outpatient care,

availability and use of effective disease management programs and the capacity of the health care system. Short-term readmission is almost always an adverse event for patients and expensive for the health care system. Measurement and dissemination of readmission rates, which are the joint responsibility of hospitals and clinicians, will create incentives to invest in interventions to facilitate transitions in care and improve patient outcomes.

Comment: One commenter recommended that in order to ensure that patient needs are met across multiple providers, CMS should encourage consensus organizations to develop appropriate measures at the practice, group, hospital, or organizational level and that CMS should encourage the development of measures that address each of the following areas, identified by the NQF as ''essential components and subcomponents for which performance measures should be developed if care coordination is to be comprehensively measured and improved:''

- Medical home for each patient;
- Proactive plan of care and follow-up for each patient;
- Use of standardized, integrated information systems;
- Standardized data elements for patient's personal medication records;
- Standardized data elements for medication reconciliation; and
- Standardized care guidelines for transitions between care settings that include medication reconciliation and care plan and communication plan between medical team members, patients, and caregivers.

Response: We appreciate this thoughtful comment. Although the recommendations are challenging to implement, we are committed to moving forward to develop measures that incorporate these types of goals and frameworks. Again, there are ongoing efforts to develop a standard quality framework based on measures of care transition between the hospital and the post-acute setting that are endorsed by one or more consensus building entities such as the NQF.

Comment: One commenter stated that from an administrative point of view, it was worth pointing out that not all the potential new measures are included in the medical records consistently, for example, Stress Ulcer Disease Prophylaxis, Community Acquired Pneumonia, and American College of Surgeons protocols. Readmission rates would have to be captured from Medicare claims data.

Response: For stress ulcer prophylaxis, since these medications do require a physician's signed order, we believe that they can always be found in the chart. Antibiotics for pneumonia or for prevention of surgical site infections also require a physician's order and we also believe they can be found in the chart. We agree that readmission rates would most likely be captured from Medicare claims data.

Comment: One commenter stated that among the AHRQ data measures, Failure to Rescue is a poor measure of quality. The data come from administrative files, are subject to coding disparities, and do not adequately consider co-morbid or chronic conditions.

Response: We proposed this measure and other AHRQ data measures for potential inclusion in future years to solicit public comment. We thank the commenter and will consider this comment in measure selection for future years.

Comment: One commenter stated that for some of the possible measures identified for inclusion in the RHQDAPU program for FY 2009 and subsequent years, the documentation exists in the medical record now but is not currently being abstracted. Thus, it would take considerable extra effort to find and report it. Another commenter had concerns regarding two ICU critical care measures—stress ulcer disease prophylaxis and urinary catheter-associated urinary tract infection. The commenter agreed that both are worthy subjects. However, in this commenter's institution, this information is on the medical chart and would require chart extraction, which is time-consuming and costly. The commenter stated that as CMS continues to expand the measures for hospital quality, it is import that it be recognized that there are costs to this process.

Response: We recognize the burden and resources required for collection of data to report the measures of hospital quality included in the RHQDAPU program and will consider the burden when we select additional measures to adopt in the future. We also note that there are ongoing efforts to develop measures that do not require chart abstraction (for example, claims-based measures of mortality), efforts to streamline data collection tools, and efforts to incorporate the data requirements for many of these performance measures into electronic medical record tools.

Comment: One commenter urged CMS to proceed to adopt additional infection prevention measures, regardless of whether they have been formally agreed to through the sometimes over-lengthy consensus process. Specifically, the commenter supported the inclusion of urinary catheter-associated urinary tract infection (UTI) for ICU patients as an outcome measure.

Response: Whenever possible, we use measures that are based on high-quality scientific evidence, widely accepted clinical guidelines, and consensus recommendations endorsed by the National Quality Forum. We realize that at times this can create delays in implementing measures, but it ensures that all the relevant stakeholders, including relevant medical experts, have adequately reviewed the measures.

Comment: One commenter urged CMS to turn its focus on outcome measures relating to issues other than hospital-acquired infections. The commenter supported the 30 day morality measures for AMI and Heart Failure for inclusion in the FY 2008 rule. The commenter also supported the other outcome measures listed for possible inclusion in FY 2009 and future. Specifically, the commenter supported the 30-day Pneumonia mortality measure, the four 30-day readmission measures, and the AHRQ quality and patient safety indicators.

Response: This year, CMS will be publicly reporting data on measures of 30-day mortality for AMI and HF, and beginning next year will report the hospital 30-day pneumonia mortality we are adopting as final in this rule. There are ongoing efforts to develop measures of outcome such as hospital readmission and measures of inpatient care that focus on patient safety.

Comment: One commenter was concerned about the readmission measures for acute myocardial infarction and pneumonia within 30 days at the same hospital and believed that by restricting these measures to the same hospital, an inappropriate incentive is created for these cases to be referred to a different hospital. The commenter believed that these measures should apply to both readmission to the same hospital or to another hospital where the readmission has occurred and believed that only by reviewing both statistics will one have a balanced view of what is happening with patients returning to any hospital within 30 days for the same condition.

Response: We are considering readmission to any hospital in connection with the readmission measures that were identified in the proposed rule as possible measures for the RHQDAPU program for FY 2009 and subsequent years.

Comment: One commenter stated that, as with previous measures now being reported under the RHQDAPU program, it is important to have an initial data

collection period prior to a public reporting period to assess the reliability and validity of the measures and data collection processes. During the initial data collection period, many problems are uncovered and details can be worked through. The commenter believed that a number of the measures listed for consideration, however, remain far from being ready for field-testing.

Response: We agree that the measures and measure set in the list of possible measures for FY 2009 and beyond are at different stages of development, and that not all can be used as early as FY 2009 without additional development.

Comment: Two commenters requested that CMS address the deficit of measures relating to medical prophylaxis of VTE. Given the effectiveness of available prophylactic measures, the commenter also asks that CMS promote the development of a measure relating to VTE readmission. The commenters also asked CMS to promote the development of measures related to glycemic control for all inpatients. In recognition of the importance of coordinating care for a single patient across an array of providers, the commenters encouraged CMS to consider taking an active role in encouraging the development of measures relating to care coordination.

Response: We appreciate this comment. The NQF is currently conducting an evaluation of VTE measures that was sponsored by the Joint Commission. A variety of VTE measures are being evaluated and tested and CMS is supportive of this effort.

Comment: Several commenters strongly encouraged CMS to adopt measure 13, one of the possible cancer (inpatient) measures, for implementation under the RHQDAPU program in FY 2009, if not sooner. The commenters believed that incorporation of measure 13 would send the message that adequate lymph node evaluation of at least 12 nodes is critical to patient care and would result in better outcome with increased survival for stage II and III colon cancer patients and noted that the evaluation of at least 12 lymph nodes is critical in determining colon cancer patient prognosis, planning for treatment options, and is associated with increased survival. One commenter supported the consideration of the number of lymph nodes evaluated as a measure of the quality of colon cancer care.

Response: We appreciate these comments, and agree that this measure shows much potential for future adoption in the program to improve quality of care for colon cancer patients. As we have stated, we are committed to using measures that are endorsed by a consensus building entity such as the NQF and supported by the HQA. Our current process for measure adoption includes consideration of measures that can be implemented nationally and have been endorsed by the NQF. We are constantly reviewing and updating our portfolio of quality measures to incorporate such new and innovative measures that speak directly to our goal of improving the quality of care for our beneficiaries.

Comment: Two commenters stated that CMS should consider computer-assisted navigation of surgical procedure measures. The commenters also state that CMS encourages hospitals to report the computer assisted surgery codes (00.31; 00.32; 00.33; and 00.34) when the technology is used with total joint procedures. The commenters also encouraged CMS to remind hospitals to code for computer-assisted navigation surgery when it is used to encourage more accurate billing and charges for computer-assisted surgery for total joint procedures and more complete data for analysis and DRG assignment. This is important because of the need for more accurate data to analyze the impact of navigation on improved patient outcomes.

Response: We will consider this measure in future measures expansion decisions. Computer-assisted surgery is in its infancy and we are sure there will be opportunity to design quality measures for this adjunctive technique as the evidence base grows. We encourage complete and accurate coding for all procedures and CMS has a very proactive program to promote that at many levels. Accurate coding is also critical to producing valid measure estimates of surgical process measures, since these surgical procedure codes are used as one data element to define the population of patients eligible to receive surgical processes of care measured. We agree that the claims database represents a tremendous opportunity to understand clinical patterns in computer-assisted surgery.

Comment: One commenter stated that in keeping with the continued expansion of quality measures and the appropriate criteria that CMS has specified, CMS should add computer-assisted surgery to the list of inpatient quality measures. The commenter indicated that computer-assisted surgery improves outcomes and often reduces length of stay. However, the commenter added, the capital equipment needed for these procedures requires an initial investment from the hospital. The commenter believed that the new quality measures are therefore ideally suited for this situation; creating a quality measure for computer-assisted surgery will award hospitals for prioritizing patient care, clinical outcomes, and long-term efficiency over short term financial interests.

Response: Computer-assisted surgery is in its infancy and we are sure there will be opportunity to design quality measures for this adjunctive technique as the evidence-base grows. For the most part, CMS SCIP measures are designed to improve the quality of systems of perioperative care delivery. As we have stated, we are committed to adopting consensus-based and evidence-based measures for the RHQDAPU program.

Comment: Three commenters recommended that CMS evaluate whether the measures currently utilized are capturing improvements in quality and ensure that additional measures will result in meaningful quality improvements rather than merely increased administrative burden by hospitals without measurable improvement in patient care or results.

Response: The current RHQDAPU process measures are based on strong evidence linking the process measure (for example, giving an aspirin at arrival) to improved patient outcomes. The individual process of care measures are based on studies that have shown, at the patient level, that providing the process improves patient outcomes. The 30-day mortality measures have been validated against medical record based estimates of 30-day patient mortality. The HCAHPS measures have been extensively tested in pilot studies. All of the process and mortality measures that are currently utilized have been reviewed through technical expert panels made up of representatives of topic-specific specialty societies and clinical experts in the field. The NQF has endorsed all the current RHQDAPU measures that are publicly reported. We agree that there is a need to focus on additional measures that evaluate overall quality of the entire system providing care to the patient (for example, readmission, care transitions).

Comment: Two commenters strongly agreed with CMS' consideration of the ICU measures for FY 2009 and subsequent years, however, they strongly disagreed with the following measures:

- Readmission Measures—this represents a burdensome data collection for hospitals. Data must be derived from medical records as there is not an effective mechanism for identifying readmissions using administrative data.

• Nursing Sensitive Condition Set—these measures require chart abstraction to verify and are far from ready for implementation.

• Inpatient Cancer Measures—inpatient cancer treatment is low volume and would result in small numbers of reported cases. This leads to low statistical value.

• Leapfrog Measures—hospitals have been reporting these measures for some time, yet they have limited value in assessing quality.

Response: The readmission measures will most likely be produced using Medicare administrative data. We are considering the other issues raised by the commenters as we evaluate these measures for subsequent years.

Comment: One commenter believed that health care quality improvement programs should adopt standard quality measures that are developed with the involvement of pharmacists, are evidence-based, and promote the demonstrated role of pharmacists in improving patient outcomes.

Response: We agree that pharmacists play an important role in the provision of high quality care to patients. Representatives of the American Society of Healthsystem Pharmacists have played an important role in the development of the Surgical Infection Prevention Project and the subsequent Surgical Care Improvement Project. Pharmacists play an important role on many of the guideline committees upon which many of the evidence-based performance measures for national implementation are developed.

Comment: Three commenters urged CMS to carefully evaluate the value of the measures considered for future reporting and recommended that measures be evidence-based, contribute to the comprehensiveness of performance measurement, be under a hospital's control, and account for potential unintended consequences.

Response: Whenever possible, we use only measures which have a strong evidence base and have been endorsed by a consensus building entity such as the NQF. We maintain the evidence base by conducting frequent literature reviews. If new literature shows the measure is no longer valid or is leading to unintended consequences, we will take appropriate action to modify or suppress the measure or to retire the measure through future rulemaking. We maintain a process for continued enhancements and updates as clinical evidence changes.

Comment: One commenter commended CMS for considering whether to include breast cancer as one of the clinical conditions under the proposed new quality measures for FY 2009 and subsequent years and requested that CMS allow manufacturers of advanced therapies involved in the treatment of breast cancer to be involved in the development of the quality measures.

Response: Any performance measures that are developed will be based on published evidence and guidelines for care, with the input of clinical experts.

Comment: One commenter encouraged the development and application of measures of resource use, such as the 30-day readmission rates that are included in the proposed table of possible measures and measure sets for FY 2009 and subsequent years. The commenter believed that reducing potentially avoidable readmissions should be a part of the efforts to increase the value of health care because it reduces unnecessary spending for the Medicare program and enhances the quality of care for beneficiaries.

Response: We agree that measures such as readmission rate provide additional information, in combination with the other quality measures, on the quality of care provided in hospitals.

Comment: One commenter was concerned about the choice of length of stay as a resource use measure because it does not necessarily align with improving transitions from the inpatient setting to other care settings or to home. The commenter believed that, ideally, Medicare's payment systems should provide an incentive to use the most efficient mix of services possible during and after a hospital stay. The commenter added that rewarding below-average hospital lengths of stay through a quality incentive payment program would strengthen the incentive to transfer patients to a post-acute setting as quickly as possible, without regard for whether this is the most efficient course of treatment for the overall episode of care. The commenter believed that such a measurement may conflict with hospitals' efforts to avoid readmissions, if doing so would lengthen patients' initial stays.

Response: We appreciate this comment, and will consider in future measures expansion decisions. We understand that a comprehensive estimate of hospital quality and efficiency would assess both length of stay and balancing measures that addressed hospital readmission and utilization of ambulatory care resources.

Comment: One commenter recommended that HQA determine the measures or measure sets to be included in FY 2009, and develop an implementation schedule for subsequent years. One commenter believed that in order for it to provide comments and recommendations on measure sets of potential interest within the table, more information would be needed than was available in the proposed rule (for example, Nursing Sensitive Condition Set).

Response: CMS ultimately decides on the measures for inclusion in the RHQDAPU program. However, CMS solicits input from the HQA before setting selected priorities for hospital performance measure implementation in the RHQDAPU program. The HQA has proposed to CMS potential measures on a timeline for implementation in the future.

Comment: One commenter urged CMS to rapidly incorporate additional measures for FY 2009 to offer a more robust dashboard of publicly reported measures and strongly supported the infusion of efficiency, outcome, outpatient, care coordination, patient safety, and structural measures into the RHQDAPU program. The commenter also strongly supported the development of measures to assess equity in order to reduce health care disparities and encouraged the provision of quality care for at-risk populations.

Response: We agree with the commenter. There are ongoing efforts to develop new measures to address efficiency of care, outpatient department performance, care coordination, and patient safety. Because there are few measures that have been developed and thoroughly tested for validity and reliability on a national scale, it will take some time to adequately test new measures and obtain the endorsement of these measures from a consensus building entity. We also have considerable interest in reducing disparities in care through performance measurements and incentives. There are ongoing evaluations to determine if some of the disparities on performance for the hospital quality measures represent disparities by group within a specific hospital, or disparities across all groups between hospitals.

Comment: One commenter stated that composite measures increase the meaningfulness of health care performance information and are critical to help consumers integrate complex information into their decision making and that CMS should move rapidly to report composite measures on the *Hospital Compare* Web site while retaining the ''drill down'' function to permit a more granular assessment of performance.

Response: We interpret the term composite measures to mean single combined measures calculated from

multiple individual measures submitted by hospitals. Composite measures might include both measures listed in RHQDAPU requirements and non-RHQDAPU measures voluntarily reported by hospitals. While it seems that composite measures may provide information that is more meaningful to consumers, there has not been extensive testing of this premise. CMS is soliciting input from the HQA on the issue of reporting composite measures of care on the *Hospital Compare* Web site. For the RHQDAPU program, CMS expects to continue to require hospitals to submit individual measures that would comprise any composite measure calculated from these individual measures. CMS and its partners expect to benefit from the work on composite measures that has been done in the Premier Hospital Quality Incentive Demonstration and elsewhere.

Comment: Two commenters stated that the NQF Nursing Sensitive Measurement Set and measures that access the care provided to ''transfer patients'' may be applicable to small and rural hospitals, and hoped that CMS will act favorably on such measures to broaden the ability of all hospitals to participate in public reporting and to increase the consumer appeal of the Web site. The commenter also believed that reporting measures for the outpatient setting-Emergency Room and ambulatory surgery on the *Hospital Compare* Web site would be responsive to consumer and purchaser needs.

Response: We are engaged in efforts to broaden the hospital quality measure set to include measures appropriate to the outpatient hospital setting, including care provided to ''transfer patients'' currently excluded from RHQDAPU heart care measures. We believe that these measures are useful for all hospitals that treat and subsequently transfer, regardless of hospital size and urban/rural setting. CMS plans to begin reporting outpatient/ambulatory care measure results on the *Hospital Compare* Web site in the near future.

Comment: One commenter believed that CMS needed to evaluate the resource impact on providers by requiring the collection and reporting of additional abstracted measures such as the Intensive Care and Cancer measures and that these specifications are old and were not implemented due to complexity of data extraction. The commenter believed that CMS should not require hospitals to collect additional measures on top the current requirements. The commenter stated that hospital spend all available resources to collect data on Heart Attack, Heart Failure, Pneumonia, and SCIP measures. The commenter wanted CMS to consider the retirement and/or rotation of measures to lessen future data collection burden on hospitals.

Response: We are aware of the burden of data collection for all of the RHQDAPU measures. The burden of data collection is considered with the implementation of any new measure set. Few institutions have the ability to capture most quality data electronically and even those with fully integrated electronic medical records often have to resort to manual data collection to capture the information for the performance measures. There are ongoing efforts to work with vendors of electronic record systems to incorporate the data elements for the RHQDAPU measures into their tools. There are ongoing discussions about how to retire measures from reporting when high rates of improvement have been achieved.

Comment: One commenter stated that CMS should consider prioritizing the implementation of administrative measures over measures requiring abstracted data from the medical record and that CMS needs to continue to test these administrative measures prior to the public reporting. The commenter believed that the process for introducing public reporting with a dry run hospital preview period for Heart Attack (AMI) and Heart Failure 30-day mortality measures should continue as standard practice.

Response: We recognize that adopting measures for the RHQDAPU program that use administrative data, instead of abstracted data, has its advantages, including decreased data collection cost. However, there are also many challenges associated with using administrative data for quality measurement and reporting, including risk adjustment, differentiating performance between hospitals, and minimizing time lag between delivery of care and public reporting. We plan to develop additional administrative data-based measures.

Comment: One commenter asks that CMS consider adding the stroke measure set developed by the Stroke Performance Measures Consensus Group to the RHQDAPU program for FY 2009 and to the new hospital value based purchasing program when it is approved and implemented by CMS.

Response: We agree that the stroke measure set is a potentially useful addition to the RHQDAPU program. The quality measurement collaboration between the American Heart Association/American Stroke Association, along with CDC and the Joint Commission has agreed to a common set of 10 performance measures that were designed for certification of stroke centers. We are currently evaluating the list of 10 measures to determine if any are suitable for inclusion in the RHQDAPU program and the *Hospital Compare* Web site. We note, however, that the RHQDAPU program applies to all IPPS hospitals, not just certified stroke centers.

Comment: One commenter urged CMS to develop a policy to harmonize measures which relate to payment, such as the NQF's move from a four hour timeframe for initial antibiotic administration for pneumonia patients to a six hour timeframe. The commenter believed that CMS is still requiring four hours. NQF made this change due to clinical concerns that patients whose pneumonia diagnoses were not yet confirmed were receiving unnecessary antibiotics, which is a national healthcare problem.

Response: We appreciate this comment, and are aware of the current NQF endorsement status of the six hour pneumonia measure. This endorsement occurred after publication of the FY 2008 IPPS proposed rule. CMS will evaluate this change, and if we believe it is an appropriate one for the RHQDAPU program, will align this measure with the NQF's current endorsed measure.

Comment: Several commenters expressed concerns with the abstraction instruction in the CMS/The Joint Commission National Hospital Quality Measure Specifications Manual that the medical charts be abstracted at ''face-value.'' The medical chart is written for medical persons and should be taken in the context of medical care. The most troublesome aspect of the ''face value'' rule is that the commenter was alerted to it in April and told that it would apply back to October discharges. The rule change caused substantial rework for the chart abstractors. A commenter suggested that providers receive the specifications for abstraction before the time period for which they apply.

Response: The ''face value'' instruction cited by the commenter was included in the specifications manual published in June 2006, approximately 120 days prior to the initial October 1, 2006 discharges. The later communication by CMS was intended to alert hospitals about the existing abstraction instructions already published on the QualityNet Web site. The RHQDAPU chart audit validation requirement uses independent reabstraction of medical charts by CMS contractor abstractors to assess abstraction accuracy. The CMS

abstraction contractor is not associated with the hospital and is not intimately involved in providing the care to the patient referenced in the medical chart, and must abstract the data elements using only the documentation included in the medical record. CMS and The Joint Commission coauthor the specifications manual to provide the same set of explicit instructions to all parties, hospitals and CMS abstraction contractors. The ''face value'' provides explicit instruction that matches the instructions that CMS provides to its abstractors.

Comment: One commenter suggested that CMS add the NQF-endorsed measure ''Anti-platelet medications at discharge for Cardiac Surgery'' to the hospital data reporting requirements for FY 2008. This measure is very different from the measures SCIP Cardiovascular-2: Surgery Patients on a Beta-Blocker Prior to Arrival, and the two AMI measures Aspirin at Arrival, and Aspirin Prescribed at Discharge. Aspirin and anti-platelet therapy are clinically very different. NQF has endorsed ''Anti-platelet medications at discharge for Cardiac Surgery.''

Response: We will consider this comment in our future decisions to expand the RHQDAPU program's list of measures. We understand that current SCIP initiatives related to cardiac surgery do not focus on discharge medications at this time, and must consider factors including the following: the number of surgeries affected by the measure; the relative strength of evidence related to improving outcomes, and relative data collection burden.

Comment: One commenter recommended that CMS continue to expand to new disease states (cancer measures) as well as focus on efficiency measures (Average Length of Stay by Condition), surgical care, and patient safety measurement.

Response: CMS is continuously working on developing new measures and is considering the pros and cons of expanding RHQDAPU measures to include measures related to disease processes such as ESRD, diabetes, asthma, and cancer.

After careful consideration of the comments received regarding the 18 measures and eight measure sets we set out in the FY 2008 IPPS proposed rule that could be included in the RHQDAPU program for FY 2009 or subsequent years, we have decided not to adopt any of these measures or measure sets for FY 2009. As discussed above, we will continue to consider some of these measures and measure sets for future years.

b. Data Submission

In order to be eligible for the full FY 2009 market basket update, we proposed that hospitals be required to submit data on 32 measures (the 27 existing measures plus the 5 proposed new measures). The technical specifications for this requirement are published in the CMS/Joint Commission Specifications Manual for National Hospital Quality Measures. This manual can be found on the QualityNet.org Web site.

For the additional SCIP measures that we proposed to add in the FY 2008 IPPS proposed rule, (SCIP Infection 4, 6, and 7 and SCIP-Cardiovascular-2), hospitals would be required to submit data to the QIO Clinical Warehouse starting with discharges that occur in CY 2008. We proposed that the deadline for hospitals to submit this data for first calendar quarter of 2008 would be August 15, 2008. Data must be submitted for each subsequent quarter by 4.5 months after the end of the quarter.

We proposed this time period to allow hospitals sufficient time to prepare for the data collection. The three SCIP Infection measures that we proposed to include for FY 2009 were added to the Manual in version 2.0, effective with third calendar quarter of 2006 (3Q06) and the proposed SCIP Cardiovascular measure was added in version 2.1d of the Manual, effective with fourth calendar quarter of 2006 (4Q06). Hospitals may report data on these measures for discharges prior to CY 2008 discharges, if they so choose.

For the proposed Pneumonia 30-day mortality measure, we proposed to use claims data that are already being collected for index hospitalizations to calculate the mortality rates. As is the case with the other 30-day mortality (outcome) measures already associated with the RHQDAPU program (AMI, HF), hospitals would not need to submit additional data. Claims data submitted to CMS for index hospitalizations occurring from July 2006 through June 2007 (3Q06 through 2Q07) would be used to calculate the Pneumonia 30-day mortality rate that will be used for FY 2009 annual payment determination.

As noted above, we are not adopting the SCIP infection or cardiovascular measures for the FY 2009 RHQDAPU program at this time, but intend to adopt SCIP Infection 4, SCIP Infection 6 and SCIP Cardiovascular 2 measures in the CY 2008 OPPS final rule, if these measures have been NQF endorsed. If the measures are endorsed, we intend to finalize our proposal to require their reporting under the RHQDAPU program effective with CY 2008 discharges and we anticipate that the submission deadlines for the first quarter of CY 2008 discharges will be August 15, 2008. We are not adopting the proposed SCIP Infection 7 in this final rule with comment period. We intend to adopt this measure after the NQF endorses it. When we determine to adopt this measure, we will do so through the rulemaking process and we will include data submission timeframes. We are finalizing our proposal to use the claims data submitted to CMS for index hospitalizations occurring from July 2006 through June 2007 (3Q06 through 2Q07) to calculate the Pneumonia 30-day mortality rate that will be used for FY 2009 annual payment determination.

Comment: One commenter did not believe it was reasonable to assume billing, including the reprocessing and resubmission of any corrected bills, will be complete for 100 percent of cases to allow for data submission to begin within 60 days post-discharge.

Response: We appreciate this comment. We interpret your comment to refer to the 60 day submission deadline as proposed in the Value Based Purchasing listening session held in April 2007. The current CMS RHQDAPU quarterly submission deadline is currently about 135 days after the last discharge date of the quarter. This submission deadline schedule is published on the QualityNet Web site.

All measures that we have previously finalized, and that we finalize in the future through the rulemaking process, will be required for the RHQDAPU program annual payment determination each year until further notice. CMS, working in conjunction with the Joint Commission, maintains the specifications for the set of measures used both for the RHQDAPU program and for reporting under the HQA initiative. The specifications are updated semiannually and changes are made prospectively, except in exceptional circumstances. Revised specifications can be found at *www.qualitynet.org.*

4. Retiring or Replacing RHQDAPU Program Quality Measures

Over time, CMS expects that the set of measures used for the RHQDAPU program will evolve and change. New measures will be added to reflect clinical and other program goals. Measures that are no longer supported by clinical evidence will be modified or dropped. Through its public reporting and RHQDAPU program activities, CMS seeks to balance the competing goals of assuring the development of a comprehensive yet parsimonious set of

quality measures while reducing the reporting burden on hospitals. Section 1886(b)(3)(B)(viii)(VI) of the Act gives the Secretary authority to replace any measures or indicators in appropriate cases, such as where all hospitals are effectively in compliance, or the measures or indicators have been subsequently shown not to represent the best clinical practice. CMS recognizes the need to develop a process related to the retirement and/or replacement of measures that comprise the RHQDAPU program measure set. In the FY 2008 IPPS proposed rule (72 FR 24807), we solicited public comment and suggestions concerning the criteria and mechanism for a process that would identify and, where appropriate, retire or replace measures that comprise the RHQDAPU program measure set.

Comment: Two commenters recognized the need to retire or replace measures. However, in doing so, they stated that CMS should guard against a decrease in hospital measure rates once a theoretical or real maximum has been achieved, since the removal of public reporting might lessen hospital attention on these processes of care.

Response: We also understand that there is a risk in retiring measures that have ''topped out'' and will attempt to mitigate that risk if any measures are retired, including possible monitoring of these measure rates to ensure continued high performance.

Comment: One commenter stated that CMS should decide to drop a measure if it finds that hospitals have exhibited and maintained a high quality of care per that particular quality measure.

Response: We appreciate this comment and will consider the comment when it makes future proposals regarding the RHQDAPU measure set. In the future, CMS and its contractors plan to periodically review measures and make recommendations regarding, among other possibilities, retirement of measures for future proposed RHQDAPU measure sets.

Comment: Numerous commenters stated that CMS should develop a policy for suspending measure when there is a change in science or an implementation issue arises during a reporting period and needs to be addressed immediately.

Response: We have a history of suspending measures for public reporting purposes only due to changes in science or implementation issues. Examples include suspending public reporting of the influenza vaccination measure at times of national shortage or national delays in vaccine delivery, and suspension of SCIP Infection 2 (prophylactic antibiotic selection for surgery) when there were shortages of recommended antimicrobials for colorectal surgery prophylaxis. Specifically, we review measures on a continuous basis and can react if there is a change in science or if an error in the technical specifications is identified. If immediate revision of the measure is not feasible, we would suspend the measure for public reporting purposes until it can be reintroduced into the measure set. CMS utilizes the Measure Management System to maintain and retire measures. There are currently no plans to retire any measures utilized for RHQDAPU.

Comment: One commenter stated that some measures that may no longer differentiate top performers from low performance over time, continue to have value for public reporting. Sustainability for key quality measures is important from a patient and a hospital perspective. For this reason, the commenter recommended that measures that are closely linked to patient outcomes, such as measures related to drug treatment of acute myocardial infarction and congestive heart failure, be retained and not retired, despite improved performance on these measures.

Response: We are aware of these issues, in particular, the idea that a measure may be suited for one purpose but not another. CMS will take into consideration the clinical importance of a measure when continued, across the board high performance occurs. CMS currently does not have any plans to retire any of the process measures.

Comment: One commenter stated that the primary goal is to ensure that the measures are keeping pace with the science and that a process is developed that can respond to these changes in a timely manner. At the same time, there is also a need to balance the yearly requirements for the payment programs based on these exact measures. The commenter recommended that a multi-stakeholder group be convened to identify an appropriate and equitable process. This group should be tasked with developing a process for when a measure needs to be temporarily removed from public reporting as well as eliminated from any payment determination due to changes in clinical science.

Response: CMS, with input from the Joint Commission and in cooperation with the HQA of which the NQF is a member, devotes a large amount of resources to measure maintenance.

Currently, updating performance measure is a continuous process that is based on concurrent reviews of medical literature, input from topic-specific technical expert panels, and input from specialty societies and practice guideline committees. We evaluate all proposed changes, in part by vetting them through a joint committee made up of representatives of CMS, CMS contractors and the Joint Commission, with input from the HQA. There are a number of examples where we have temporarily removed from public reporting hospital quality measures because of circumstances outside of the control of hospitals (for example, delays in influenza vaccine delivery, shortages of antibiotics for surgical prophylaxis).

Comment: One commenter suggested that CMS remove from the RHQDAPU program measures that have been topped out, that is, measures where the data shows that a large majority of the participating hospitals have achieved very high levels of performance. However, the commenter recommended that hospitals continue to report results on *Hospital Compare.* By taking the measures out of the RHQDAPU program, it allows hospitals and CMS to focus their respective resources on those areas where patient care can benefit most.

Response: We appreciate this comment. While it is true that some measures appear to have ''topped out'' for some hospitals, we still see considerable variation in performance between top performers and low performers for most measures. It is also not clear how having a hospital continue to report results on *Hospital Compare* for topped out measures would reduce resource requirements for an individual hospital. For example, the three RHQDAPU SCIP infection measures on timing, appropriate administration, and discontinuation of antibiotic prophylaxis use many of the same data elements, such as a list of antibiotics and their administration times. More relative data collection burden is saved when measures with no duplicative data elements are removed, as opposed to measures using many of the same data elements as other RHQDAPU measures. We are also continuing to consider how we may be able to develop a process to decide when to retire a performance measure that has truly topped out.

5. Procedures for the RHQDAPU Program for FY 2008 and FY 2009

a. Procedures for Participating in the RHQDAPU Program

The ''Reporting Hospital Quality Data for Annual Payment Update Reference Checklist'' section of the QualityNet Exchange Web site contains all of the forms to be completed by hospitals participating in the program. In order to

participate in the hospital reporting initiative for FY 2008, hospitals must follow these steps:

• Identify a QualityNet Exchange Administrator who will follow the registration process and submit the information through the QIO Clinical Warehouse. This must be done regardless of whether the hospital uses a vendor for transmission of data.

• Complete the revised ''Reporting Hospital Quality Data for Annual Payment Update Notice of Participation'' form. Hospitals must send this form to their QIO, no later than August 15, 2007. In an effort to alleviate the burden associated with submitting this form annually, we consider that a hospital that submits this form is an active RHQDAPU program participant until such time as the hospital submits a withdrawal form to CMS.

In addition, before participating hospitals initially begin reporting data, they must register with the QualityNet Exchange, regardless of the method used for submitting data.

• Collect and report data for each of the required measures except the Medicare mortality measures (Acute Myocardial Infarction, Heart Failure, and Pneumonia 30-day Mortality for Medicare Patients). A hospital must report these data for discharges occurring in or after first quarter CY 2007. Hospitals must submit the data to the QIO Clinical Warehouse using the CMS Abstraction & Reporting Tool (CART), the JCAHO ORYX® Core Measures Performance Measurement System, or another third party vendor tool that has met the measurement specification requirements for data transmission to QualityNet Exchange. All submissions will be executed through QualityNet Exchange. Because the information in the QIO Clinical Warehouse is considered QIO information, it is subject to the stringent QIO confidentiality regulations in 42 CFR Part 480. The QIO Clinical Warehouse will submit the data to CMS on behalf of the hospitals.

• For each quality measure that requires hospitals to collect and report data, submit complete data regarding the quality measures in accordance with the joint CMS/Joint Commission sampling requirements located on the QualityNet Exchange Web site. These requirements specify that hospitals must submit a random sample or complete population of cases for each of the topics covered by the quality measures. Hospitals must meet the sampling requirements for these quality measures for discharges in each quarter.

• Submit to CMS on a quarterly basis aggregate population and sample size counts for Medicare and non-Medicare discharges for the four topic areas (AMI, HF, PNE, and SCIP)).

• Continuously collect HCAHPS data, beginning with July 2007 discharges, in accordance with the HCAHPS Quality Assurance Guidelines, Version 2.0, located at *www.hcahpsonline.org.* The CY 2007 OPPS rule required HCAHPS-eligible hospitals to participate in the March 2007 dry run of the HCAHPS survey, if they had not already participated in a previous dry run. Hospitals must submit HCAHPS dry run data to the QIO Clinical Warehouse by July 13, 2007. As part of the March 2007 dry run, hospitals were required to survey HCAHPS-eligible discharges between 48 hours and 6 weeks following hospital discharge. CMS has become aware that, because they treat very few patients, a very small percentage of hospitals might not have had any HCAHPS-eligible discharges in March 2007. Similarly, such hospitals might not have any HCAHPS-eligible discharges in any month from July 2007 forward. The clinical data warehouse is being modified to accept zero HCAHPS-eligible discharges in the future but until this modification is complete, these hospitals should contact CMS by sending an email to *hcahps@azqio.sdps.org.*

• For the AMI 30-day and HF 30-day mortality measures, CMS uses Part A and Part B claims for Medicare fee-for-service patients to calculate the mortality measures. For FY 2008, hospital inpatient claims (Part A) from July 1, 2005 to June 30, 2006, will be used to identify the relevant patients and the index hospitalizations. Inpatient claims for the index hospitalizations and Part A and Part B claims for all inpatient, outpatient, and physician services received 1 year prior to the index hospitalizations are used to determine patient comorbidity, which is used in the risk adjustment calculation (see *http://www.qualitynet.org/dcs/ContentServer?cid=1163010398556&pagename=QnetPublic%2FPage%2FQnetTier2&c=Page*). No other hospital data submission is required to calculate the mortality rates.

Comment: Several commenters stated that CMS needs to release new and revised measure and programming specifications in an expedited manner. Specifically, the data specifications need to be articulated well in advance of the start of data collection so that both the vendors that assist hospitals in collecting and formatting data for submission and the QIO Clinical Warehouse have an appropriate amount of time to adjust their software and test it to ensure it functions properly.

Response: The current 120 day advance release of the specification manual is jointly implemented by CMS and the Joint Commission. We will consider adding more time to this advance release in the future. Additionally, we will strive to minimize the number of post-update clarifications that further reduce the lead time needed for vendor software programming. We believe that a continued coordination with the Joint Commission is the most efficient and feasible method to ensure that hospitals and data vendors receive measures specifications with sufficient advance notice.

Comment: One commenter supported coordination among vendors, CMS, and the Joint Commission, including the need for clear and definitive alignment. Hospitals and vendors will require extremely detailed guidance on what should be included in each reporting period. The commenter urged CMS to recognize the time constraints in applying the validation requirement for the FY 2008 update for the three SCIP measures that are to be included in the RHQDAPU measure set.

Response: We are continuing to work on coordinating measures updates and selection with the Joint Commission in an effort to minimize the reporting burden on hospitals. We understand the need to coordinate measure selection and corresponding abstraction and processing burden on vendors and hospitals. However, measures selection must also consider the requests by consumer groups, purchasers, and other stakeholders to increase the public reporting measure set. We also appreciate the comment on applying the validation requirement for the FY 2008 update.

Comment: Two commenters stated that when amending measures, CMS should take into account the ability of hospitals, the QIO Clinical Warehouse, and data vendors to successfully and quickly implement changes in reporting measures and that CMS should seek input from hospital data collection personnel as a part of the measure review process to understand the effects that reporting changes have on hospitals.

Response: We understand the need to consider the abstraction and processing burden on vendors and hospitals when selecting measures for the RHQDAPU program. We will consider greater vendor and hospital participation into our measure testing and development program in the future.

b. Procedures for Participating in the RHQDAPU Program for FY 2009

In the FY 2008 IPPS proposed rule (72 FR 24807), we stated that for FY 2009, the requirements for FY 2008 discussed above would apply, except that hospitals would be required to collect and report data on any additional measures that we finalize through the rulemaking process, and for which we specify that data submission is required. We also stated that mortality measures will be expanded to include pneumonia when this measure received final NQF endorsement. This measure has received NQF endorsement and, as we discussed above, we are adopting as final in this FY 2008 IPPS final rule the proposed pneumonia 30-day mortality measure for Medicare patients for the FY 2009 RHQDAPU program.

c. Chart Validation Requirements

(1) FY 2008 Chart Validation Requirements

In the FY 2008 IPPS proposed rule (72 FR 24808), we stated that for the FY 2008 update, and until further notice, we would continue to require that hospitals meet the chart validation requirements that we implemented in the FY 2006 IPPS final rule. There were no chart-audit validation criteria in place for FY 2005. Based upon our experience with the FY 2005 submissions, and our requirement for reliable and validated data, in the FY 2006 IPPS final rule we discussed additional requirements that we had established for the data that hospitals were required to submit in order to receive the full FY 2006 payment update (70 FR 47421 and 47422). These requirements, as well as additional information on validation requirements, continue and are being placed on the QualityNet Exchange Web site.

We also stated that for the FY 2008 payment update, and until further notice, hospitals must pass our validation requirement that requires a minimum of 80-percent reliability, based upon our chart-audit validation process, for the first three quarters of data from CY 2006. These data were due to the QIO Clinical Warehouse by August 15, 2006 (first quarter CY 2006 discharges), November 15, 2006 (second quarter CY 2006 discharges), and February 15, 2007 (third quarter CY 2006 discharges).

We use confidence intervals to determine if a hospital has achieved an 80-percent reliability aggregated over the three quarters. The use of confidence intervals allows us to establish an appropriate range below the 80-percent reliability threshold that demonstrates a sufficient level of reliability to allow the data to still be considered validated. We estimate the percent reliability based upon a review of five charts, and then calculate the upper 95-percent confidence limit for that estimate. If this upper limit is above the required 80-percent reliability, the hospital data are considered validated.

We are using the design-specific estimate of the variance for the confidence interval calculation, which, in this case, is a stratified single stage cluster sample, with unequal cluster sizes. (For reference, see Cochran, William G.: *Sampling Techniques,* John Wiley & Sons, New York, chapter 3, section 3.12 (1977); and Kish, Leslie.: *Survey Sampling,* John Wiley & Sons, New York, chapter 3, section 3.3 (1964).) Each quarter is treated as a stratum for variance estimation purposes.

We will use a two-step process to determine if a hospital is submitting valid data. In the first step, we calculate the percent agreement for all of the variables submitted in all of the charts. If a hospital falls below the 80-percent cutoff, we proceed to the second step and restrict the comparison to those variables associated with payment. For first and second quarter CY 2006 discharges (1Q06, 2Q06), that means we limit the calculations to the 10-measure starter set. For third quarter CY 2006 discharges (3Q06), we include 21 measures. We recalculate the percent agreement and the estimated 95-percent confidence interval, and again compare the sum to the 80-percent cutoff point. If a hospital passes under this restricted set of variables, the hospital is considered to be submitting valid data for purposes of the RHQDAPU program.

Due to time constraints, we will not apply the validation requirement for the FY 2008 update to 3 SCIP measures that are included in the RHQDAPU measure set: Infection 2, VTE 1 and VTE 2.

Comment: Three commenters stated that improvements need to be made to the validation process. They indicated that many hospitals have been notified that there have been problems validating the data they submitted. The commenters stated that in several instances, these validation problems have been due to inconsistencies in the definitions of some variables used by CMS' contractors who are re-abstracting patient-level data and comparing it to the data submitted by the hospitals. They believed that while the re-abstraction of five charts per quarter for each hospital may have been a sufficient validation strategy when only 10 measures were being collected and reported, it is insufficient to ensure the reliability of the data as we continue to expand the number of measures and the number of patients on whom data are being collected. The commenters believed that a more resilient and less resource intensive method of validation is needed. The commenters indicated that they are working with a well known research and data enterprise to explore alternatives and will share their recommendations about more effective, less cumbersome validation processes with CMS in the next few weeks.

Response: We appreciate this comment and are interested in receiving alternative proposals to improve the validation process in terms of burden and accuracy of abstracted data. The current validation process has been in place for several years, and we believe that improvements should be thoroughly tested and submitted to hospitals before we adopt them for the RHQDAPU program. We are currently considering these options and others for their burden of hospitals, resource implications for CMS, and impact on accuracy of the data.

Comment: In the event hospitals are notified of problems with their data submissions, one commenter suggested that it should have the ability to appeal those notices. The commenter stated that often these problems are a result of inconsistencies in some of the variables used by CMS' contractors and abstractors. The commenter believed that the small number of charts being abstracted also is insufficient to ensure reliability. Consequently, the commenter suggested that hospitals should be permitted to file an appeal if there is a validation problem. Any appeals process should also be timely with a clearly defined process that is published in the final rule.

Response: Hospitals falling below 80 percent agreement rate for quarterly validation are eligible to appeal their mismatched elements if they believed that the CMS CDAC contractor incorrectly abstracted the data element. This validation appeals process is outlined on the QualityNet Web site (*www.qualitynet.org*), and contains clearly defined timeframes for hospital appeals request and subsequent QIO appeals review.

Comment: One commenter stated that the quarterly submission of data would be a hardship on small providers that only have one person collecting and reporting quality measures. Nonetheless, the commenter believed that quarterly submission makes sense.

Response: We appreciate and understand the abstraction and submission burden of smaller hospitals. The quarterly submission deadline

weighs the need to frequently update the publicly reported data, data reliability, against the abstraction and submission burden placed on hospitals. We continue to coordinate these requirements with The Joint Commission for their accredited hospitals to attempt in minimizing the incremental burden placed on Joint Commission accredited hospitals, which comprise over 80 percent of all hospitals operating under the hospital IPPS payment system.

Comment: With respect to validation of data being submitted by hospitals, one commenter understood that in FY 2008, CMS would not be applying the validation requirement to three SCIP anti-infection measures (Infection 2, VTE 1 and 2). The commenter stated that since these data come from the hospitals and it can impact their business, it is imperative to include validation for these measures to assure the public that the information is accurate.

Response: We appreciate the comment. CMS proposed in the FY 2008 IPPS proposed rule (72 FR 24808) to apply the validation requirements to these measures using 2nd quarter 2007 and 3rd quarter CY 2007 discharges.

Comment: One commenter stated that CMS should consider alternative methods of data validation such as using monthly data points of each clinical measure and not relying on chart abstraction. The commenter indicated that such a method of validation might employ a process similar to the quarterly Outlier validation that the Joint Commission requires of its core measure vendors. A monthly data point that exceeds three (3) standard deviations is considered an outlier. When an outlier is identified, the hospital is requested to verify that the data are accurate. This validation process relies on inter-hospital variability.

Response: We appreciate this comment and are interested in incorporating the Joint Commission's outlier validation methodology into our current chart audit validation process of abstracted data. The two methodologies assess important and different aspects of data quality. CMS' validation methodology assesses abstraction accuracy at the element level, and The Joint Commission's methodology assesses aberrant aggregate data patterns. The current CMS validation process has been in place for several years, and we believe that improvements should be thoroughly tested and submitted to hospitals through advance notice in future proposed rules posted in the **Federal Register**.

Comment: One commenter stated that validation frequently does not relate to the quality of care provided, especially for many of the validation failures that are keying errors. The commenter stated that these errors are classified as ''invalid record selections'' which are not abstracted by CMS and not subject to appeal.

Response: The current validation methodology is designed to measure the abstraction accuracy of the hospital, not the quality of care provided. All elements that are part of the RHQDAPU measures are subject to validation. However, before validating the data elements, CMS must ensure that the chart submitted by the hospital represents the patient sampled for validation. CMS does not abstract charts in cases where the information used to identify the patient's stay contradicts the electronic submission data. CMS must definitively determine that the submitted medical record is the patient as identified in the submitted data. The patient name, admission or discharge date must match for CMS to definitively determine the medical record is the same episode of care as the submitted patient level data.

Comment: One commenter stated that all hospitals should have the ability to appeal all validation cases regardless of whether scores are below 80 percent, whenever the validation scores could affect a potential loss of the APU. The commenter believed that hospitals must have the opportunity to appeal human errors in transcription, copying or mailing medical records to the CDAC for validation.

Response: We appreciate this comment, but resources do not allow CMS to review requests from all 3,500 hospitals that participate in the RHQDAPU program for reconsideration regarding validation results if those results did not affect payment. We restrict our review to only hospitals not meeting the 80 percent threshold because payment is much more likely to be affected for these hospitals.

Comment: One commenter agreed with including ''measure match'' accuracy as part of the validation process but also asked if the hospital can correctly identify which cases received the process of care (i.e., the numerator) and belong in the process of care (i.e., the denominator), which is how the data is displayed on *Hospital Compare,* what additional value does verification of individual data element match provide? The commenter recommended that CMS evaluate only the verification of the accuracy of the cases placed into the numerator and denominator. From a patient care perspective, the commenter was interested in knowing if a patient received antibiotics in a timely manner, not if the abstractor correctly entered a specific data element.

Response: We appreciate this comment. We will consider this proposed approach in the future for the RHQDAPU program, and the lessened burden associated with this proposal. We must also consider the relative amount of information that CMS is able to provide the hospital under the proposed approach, because CMS would not be definitively able to provide the hospital with the exact data element that resulted in the validation failure for that measure. We must evaluate the need to provide this detailed information to the hospitals in our future RHQDAPU proposed validation methodology.

After careful consideration of the comments received, we are adopting in this FY 2008 IPPS final rule the validation process we proposed in the FY 2008 IPPS proposed rule. However, we will further address the final list of process measures which will be validated for the FY 2009 RHQDAPU program in the CY 2008 OPPS final rule.

For HCAHPS, hospitals and survey vendors must participate in a quality oversight process conducted by the HCAHPS project team. Prior to July 2007, the purpose of the oversight activities was to provide feedback to hospitals and survey vendors on data collection procedures. Starting in July 2007, we ask hospitals/survey vendors to correct any problems that are found and provide follow-up documentation of corrections for review within a defined time period. If the HCAHPS project team finds that the hospital has not made these corrections, CMS may determine that the hospital is not submitting HCAHPS data that meets the requirements for the RHQDAPU program. As part of these activities, HCAHPS project staff will review and discuss with survey vendors and hospitals self-administering the survey their specific Quality Assurance Plans, survey management procedures, sampling and data collection protocols, and data preparation and submission procedures. This review may take place in-person or through other means of communication.

(2) FY 2009 Chart Validation Requirements

In the FY 2008 IPPS proposed rule (72 FR 24808), we indicated that for the FY 2009 update, all FY 2008 requirements would apply, except for the following

modifications. We would modify the validation requirement to pool the quarterly validation estimates for 4th quarter CY 2006 through 3rd quarter 2007 discharges. We would also expand the list of validated measures in the FY 2009 update to add SCIP Infection-2, SCIP VTE–1, and SCIP VTE–2 starting with 4th quarter CY 2006 discharges. We would also drop the current two-step process to determine if the hospital is submitting valid data. We proposed for the FY 2009 update to pool validation estimates covering the 4 quarters (4th quarter CY 2006 discharges through 3rd quarter 2007 discharges) in a similar manner to the current 3 quarter pooled confidence interval.

Comment: One commenter recommended that CMS go to a four (4) quarter validation instead of three (3) quarters. The commenter suggested that the approach needs to be consistent for all measures, otherwise it will be administratively very difficult for the vendors.

Response: We appreciate this comment, and proposed in the FY 2008 IPPS proposed rule that we would use four quarters of validation results starting with the FY 2009 update. We made this proposal a year in advance to give hospitals ample notice of this new requirement. We will consider the consistency of our validation approach as we make improvements to this process in future years.

(3) Validation and Submission Requirements

In the FY 2008 IPPS proposed rule (72 FR 24808), we stated that we planned to apply the validation and submission requirements for the FY 2008 and FY 2009 payment determination to the quality measures. For the validation and submission requirements for the FY 2008 payment year, we stated that we plan to use the following criteria:

- The 10 measure starter set for both submission and validation for 1st through 3rd quarters CY 2006 discharges.
- The additional 11 measures that make up the expanded measure set for both submission and validation for 3rd quarter CY 2006 discharges.
- SCIP VTE 1, 2, and SCIP Infection 2 submissions only for 1Q 2007 discharges only.
- HCAHPS measures, both submission of dry run data and continuous submissions beginning with July 2007 discharges.
- AMI and HF 30-day mortality measures as described previously.

For FY 2009 payment year, we plan to use the following criteria:

- The 21 expanded measure set for submission and validation starting with 4th quarter CY 2006 (4Q06) through 3rd quarter CY 2007 (3Q07) discharges.
- SCIP VTE 1, 2, and SCIP Infection 2 submission and validation for 2nd quarter CY 2007 and 3rd Quarter CY 2007 discharges.
- HCAHPS measures, continuous submission.
- AMI, HF, and PN 30-day mortality measures as described previously.

As we have previously stated, at this time we are not finalizing the SCIP Infection 4, SCIP Infection 6, SCIP Infection 7 and SCIP Cardiovascular-2 measures for the FY 2009 RHQDAPU program because they have not yet been endorsed by the NQF. We anticipate that three of these measures will be endorsed by the NQF in the next few months (SCIP Infection 4, SCIP Infection 6 and SCIP Cardiovascular-2) and, if they are, we intend to adopt these measures in the CY 2008 OPPS final rule. We will await NQF action on SCIP Infection 7, and if it is endorsed and we determine to adopt this measure, we will do so through the rulemaking process.

As additional measures are finalized for inclusion in the FY 2009 payment decision, we stated that we would anticipate making further changes to the above plan to incorporate those measures.

Comment: Several commenters urged immediate adoption of an effective mechanism for allowing hospitals and their vendors to resubmit quality measure data if they discover an error.

Response: Quality measure data can be resubmitted before the data submission deadline; however, measure data resubmissions after the deadline and the QIO Clinical Warehouse lockdown are currently rejected. We will, however, take into consideration the commenter's suggestion to allow quality measure resubmissions to occur after the data submission deadline for public reporting purposes. For payment purposes, we believe that the requirement of submission deadlines is necessary to ensure a proper audit trail to ensure that annual requirements were accurately calculated in a timely manner.

Comment: One commenter continued to support expanding the number of measures to be included in the RHQDAPU program. However, the commenter was concerned that the program is constrained in how quickly it can expand given the capacity and capability of the current QIO Clinical Warehouse. The commenter suggested that CMS should give serious consideration to competitively bidding the QIO Clinical Warehouse to an entity with greater capacity. The commenter indicated that, ideally, the entity must be able to receive, aggregate, and calculate reliable and valid data on performance measures across all patient populations on a timely basis, supply such data to CMS, public and private payers, accreditation organizations, and entities representing providers, practitioners, and consumers, conduct ongoing assessments and make adjustments and changes to address any deficiencies. The commenter also recommended that this entity should provide effective technical assistance to entities submitting data to, and entities using data from, the QIO Clinical Warehouse.

Response: We are continuing to evaluate the capacity of our data infrastructure and contractor resources and will continue to assess and make adjustments to the QIO Clinical Warehouse in order to provide an efficient system, in a timely manner, for the submission, storage, and calculation of quality measure data. CMS will consider the commenter's suggestion as we evaluate the warehouse.

Comment: One commenter urged CMS to allow vendors access to the data during the CDAC validation process so that the vendors and hospitals together can analyze the data. The commenter indicated that shortened timeframe for reporting is acceptable so long as CMS communicates technical changes in programming in a timely manner and coordinates with the QIOs so that messages are consistent across all aspects of the agency.

Response: We will investigate and study the issues related to the possibility of allowing vendors access to these data.

Comment: Two commenters requested that CMS continue improving the ability of vendors to help their hospital clients to the fullest extent by permitting vendors to access the data of their client hospitals on Q-net with a single sign on. The commenters also believed that hospitals and vendors should be able to resubmit data in the event a problem is found during the validation process and assuming the resubmission can take place prior to the closing of the reporting period. Often the problems are technical in nature and are related to straight programming errors, not to errors or omissions by hospitals.

Response: We agree that vendors should provide efficient data submission for their hospitals. Currently, there is a single sign on for a vendor to upload data for all those providers for which the vendor is authorized to submit data. There is also

a single sign on to access the submission reports for all those providers who have given their vendor authorization to view their reports.

Regarding resubmission of data, if an error is found before the data submission deadline, hospitals and vendors can resubmit their data.

Comment: One commenter noted that recently, many hospitals have had difficulties with their data submission. The commenter indicated that these problems commonly have been due to errors in the software at the QIO Clinical Warehouse, and have caused an undue administrative burden for hospitals. The commenter believed that these difficulties have focused staff attention on data collection and reporting and away from quality improvement initiatives to provide better care to patients.

Response: The contractor responsible for the QIO Clinical Warehouse is continuing its efforts to improve warehouse processes and has added an independent verification and validation step to the testing phase in order to further ensure accuracy and reliability.

Comment: One commenter stated that it is not clear from the proposed rule what data transmission mechanism hospitals should use if they do not use the CART application. The commenter encouraged consideration of ORYX performance measurement systems for data processing and abstraction software as an existing, well-established reporting infrastructure.

Response: CART (CMS Abstraction & Reporting Tool) is a software application created by CMS, and is designed to allow hospitals, QIOs, and other organizations to abstract, edit, export, and report on the quality measures. CART and the QIO Clinical Warehouse infrastructure may be used across data collection programs and is available at no charge. Hospitals are allowed to use CART or to use ORYX vendor software to abstract data. ORYX vendor software and data processing must be purchased by hospitals.

d. Data Validation and Attestation

In the FY 2008 IPPS proposed rule we stated that for the FY 2008 update and in subsequent years, we would revise and post up to date confidence interval information on the QualityNet Exchange Web site explaining the application of the confidence interval to the overall validation results. The data are being validated at several levels. There are consistency and internal edit checks to ensure the integrity of the submitted data; there are external edit checks to verify expectations about the volume of the data received.

We also stated that we would require for FY 2008 and subsequent years that hospitals attest each quarter to the completeness and accuracy of their data, including the volume of data, submitted to the QIO Clinical Warehouse in order to improve aspects of the validation checks. We proposed to provide additional information to explain this attestation requirement, as well as provide the relevant form to be completed on the QualityNet Exchange Web site at the same time as the publication of this final rule with comment period.

Comment: One commenter supported the attestation process for the new SCIP measures. Another commenter stated that it is critical that CMS gives every provider the opportunity to attest each quarter to the completeness and accuracy of their data.

Response: We appreciate the comments. We believe that the attestation requirement for all measures for which hospitals submit data under the RHQDAPU program will increase awareness among hospitals about the abstraction and submission of accurate data because it demands explicit acknowledgement from hospitals that its data is complete and accurate. At this time, we are not finalizing the SCIP Infection 4, SCIP Infection 6, SCIP Infection 7, and SCIP Cardiovascular 2 measures. We plan to address the status of these measures in the CY 2008 OPPS final rule.

Comment: One commenter stated that without automated electronic records that interface with the billing system, the quarterly attestation of data completeness is difficult to ensure.

Response: We appreciate this comment. We will consider this comment in our future efforts to improve the attestation component of the RHQDAPU program.

e. Public Display

We proposed that we would continue to display quality information for public viewing as required by section 1886(b)(3)(B)(viii)(VII) of the Act. Before we display this information, hospitals will be permitted to review their information as recorded in the QIO Clinical Warehouse.

Currently, hospitals that share the same Medicare Provider Number (MPN) must combine data collection and submission across their multiple campuses (for both clinical measures and for HCAHPS). These measures are then publicly reported as if they apply to a single hospital. We estimate that approximately 5 to 10 percent of the hospitals reported on the *Hospital Compare* Web site share MPNs. For FY 2008 and subsequent years, we proposed that we would require hospitals to begin to report the name and address of each hospital that shares the same MPN. This information would be gathered through the RHQDAPU program Notice of Participation form, which hospitals would submit to their QIOs by August 15, 2007. To increase transparency in public reporting and improve the usefulness of the *Hospital Compare* Web site, we would note on the Web site where publicly reported measures combine results from two or more hospitals.

Comment: One commenter supported CMS' efforts to increase transparency in public reporting and the disclosure of hospitals that collectively report quality data under the same MPN and supported CMS' proposals regarding new hospital participation under the RHQDAPU program as well as the expanded quality measures for FY 2009.

Response: We agree that, by collecting information about which MPNs are being shared by multiple hospitals and publicly reporting where the quality indicators combine the experience of two or more hospitals, it can create greater transparency and increase the utility and value of the *Hospital Compare* Web site.

Comment: Two commenters stated that CMS should provide comparative performance at a hospital level on the *Hospital Compare* Web site. The commenters believed that the proposal to indicate which data reflect the performance of two or more hospitals is inadequate to aid in provider selection.

Response: We agree that, to increase the utility and value of the hospital quality information on the *Hospital Compare* Web site, information should be collected and reported at the hospital campus level. Our first step in this direction is to determine which hospitals share the same MPN. This will allow us to indicate on the Web site where the quality indicators currently combine the experience of two or more hospitals. Eventually, we intend to collect and report hospital quality information at the campus level.

Comment: One commenter believed that CMS' proposal to require hospitals to begin to report the name and address of each hospital campus that shares the same MPN would be extremely cumbersome in practice and strongly encouraged CMS to be consistent across all environments and data requirements within CMS. The commenter, therefore, recommended that only the main campus address be listed, for consistency. Although it recognized the constraints this places on *Hospital Compare* Web site and the ability to

compare specific hospital measures; the commenter believed that just including a note on the Web site where hospital scores have been combined will avoid much of the current confusion.

Response: Currently, we do not have information about which hospitals share an MPN. Thus, we cannot note that hospitals share an MPN on *Hospital Compare* without gathering this information from hospitals.

Comment: With respect to public reporting, one commenter stated that combining data across multiple campuses hides from consumers serious quality problems at a single facility. The commenter believed that as long as this grouping is in place, the public must be informed as to which facilities are falling into these groups. However, the commenter added, it is ultimately more important to address the underlying problem that is preventing CMS from reporting the performance of each individual hospital. The commenter urged CMS to report the quality measure for each specific hospital campus.

Response: We agree that ultimately to make the information most useful it should be collected and reported at the campus level. Our first step in this direction is to determine which hospitals are combining data across hospitals on *Hospital Compare*. This will allow us to indicate on the Web site where the quality indicators currently combine the experience of two or more hospitals. Eventually, we intend to collect and report hospital quality information at the campus level.

f. Reconsideration and Appeal Procedures

In the FY 2008 IPPS proposed rule, we stated that if we deny a hospital the full market basket update, the hospital may submit a request that we reconsider our decision that the hospital did not meet the RHQDAPU program requirements. For FY 2008, a hospital must submit such a request for reconsideration on or before November 1, 2007. We also are establishing additional procedural rules that will govern RHQDAPU program reconsiderations. We will post these rules on the QualityNet Exchange Web site at the same time as the publication of this final rule with comment period.

In the FY 2008 IPPS proposed rule (72 FR 24809), we again solicited public comment and suggestions related to reconsideration decisions.

Comment: Three commenters stated that CMS should use the experience in FY 2007 to construct a process (reconsideration) for adjudicating appeals in a timely fashion and should clearly lay out that process for all hospitals to see prior to publication of the final rule.

Response: We will use the experience from the FY 07 reconsideration period to develop a process that will streamline and expedite this annual process that potentially affects hospital payment.

We are concurrently posting more detailed procedural rules regarding the FY 2008 reconsideration process on the QualityNet Exchange Web site. We are also describing these rules below in this final rule with comment period.

In order to receive a reconsideration, the hospital must:

- Submit via QualityNet Exchange a Reconsideration Request form (available on the QualityNet Exchange Web site), containing the following information, to CMS:
  - Hospital Medicare ID number
  - Hospital Name
  - CMS identified reason for failure (as provided in the CMS notification of failure letter to the hospital)
  - Hospital basis for requesting reconsideration;
  - This must identify the hospital's specific reason(s) for believing it met the RHQDAPU requirements and should receive the full FY 2008 IPPS annual payment update.
  - CEO contact information, including name, email address, telephone number, and mailing address (must include physical address, not just PO box)
  - QualityNet System Administrator contact information, including name, email address, telephone number, and mailing address (must include physical address, not just PO box)
  - The request must be signed by the hospital's CEO.

For FY 2008, a hospital must submit via QualityNet Exchange such a request for reconsideration on or before November 1, 2007.

Following receipt of a request for reconsideration, CMS will:

- Provide an email acknowledgement, using the contact information provided in the reconsideration request, to the CEO and the QualityNet Administrator that the letter has been received.
- Provide a formal response to the hospital CEO, using the contact information provided in the reconsideration request, notifying the facility of the outcome of the reconsideration process. CMS expects the process to take 60–90 days from the due date of November 1, 2007.

If a hospital is dissatisfied with the result of a RHQDAPU program reconsideration decision, the hospital may file a claim under 42 CFR part 405, Subpart R (a Provider Reimbursement Review Board (PRRB) appeal).

g. RHQDAPU Program Withdrawal Requirements

For the FY 2008 update, hospitals may withdraw from the RHQDAPU program at any time up until August 15, 2007. If a hospital withdraws from the program, it will receive a 2.0 percentage point reduction in its annual payment update.

6. Electronic Medical Records

In the FY 2006 IPPS final rule, we encouraged hospitals to take steps toward the adoption of electronic medical records (EMRs) that will allow for reporting of clinical quality data from the EMRs directly to a CMS data repository (70 FR 47420). We intend to begin working toward creating measures' specifications, and a system or mechanism, or both, that will accept the data directly without requiring the transfer of the raw data into an XML file as is currently done. The Department continues to work cooperatively with other Federal agencies in the development of Federal health architecture data standards. We encouraged hospitals that are developing systems to conform them to both industry standards, and when developed, the Federal Health Architecture Data standards; taking measures to ensure that the data necessary for quality measures is captured. Ideally, such systems will also provide point-of-care decision support that enables detection of high levels of performance on the measures. Hospitals using EMRs to produce data on quality measures will be held to the same performance expectations as hospitals not using EMRs.

Due to the low volume of comments we received on this issue in response to the FY 2006 proposed IPPS rule, in the proposed IPPS rule for FY 2007 (71 FR 24095), we again invited public comment on these requirements and related options. In the FY 2007 IPPS final rule (71 FR 48045), we summarized and addressed the additional comments we received. In the FY 2008 IPPS proposed rule (72 FR 24809), we noted that we would welcome additional comments on this issue.

Comment: One commenter supported encouraging the use of electronic medical records (EMRs). The commenter indicated that the use of the EMR could assist in the initial collection of information. However, the commenter added, CMS must recognize the clear distinction between tools that are used at the point of care to record and improve medical interventions and those that are used to report and

validate quality measures. At this point, EMRs are best suited to only the former functions and not the latter of the functions. The reality is that the specifications for reporting measures change too quickly to enable EMRs to be the vehicle for quality data and reporting. Moreover, the appetite among EMR vendors to constantly update their products to incorporate new specifications is costly in terms of both time and dollars. The commenter was pleased to continue to work with CMS through the American Health Information Community (AHIC) and other agencies to develop processes through which an EMR could speed the collection and minimize the resources necessary for quality reporting.

Response: We appreciate the feedback from the commenter. We note that the AHIC is a federal advisory body, chartered in 2005 to make recommendations to the Secretary of the HHS on how to accelerate the development and adoption of health information technology. CMS plans to continue working through the AHIC and other entities to develop processes through which an EMR could speed the collection and minimize the resources necessary for quality reporting.

We acknowledge the current differentiation between tools used to record and medical intervention and the current tools used to report and validate quality measures. CMS will continue to participate in appropriate HHS studies and workgroups, as mentioned by the GAO report about hospital quality data and their use of information technology. As appropriate, CMS will inform interested parties regarding progress in the implementation of HIT for the collection and submission of hospital quality data as specific steps, including timeframes and milestones, are identified. Current mechanisms include publication in the **Federal Register** as well as ongoing collaboration with external stakeholders such as the Hospital Quality Alliance, the American Hospital Association, the Federation of American Hospitals, the Association of American Medical Colleges; and The Joint Commission. We further anticipate that as HIT is implemented, a formal plan, including training, will be developed to assist providers in understanding and utilizing HIT in reporting. In addition, we will assess the effectiveness of our communications with providers and stakeholders as it relates to all information dissemination pertinent to collecting hospital quality data as part of an independent and comprehensive external evaluation of the RHQDAPU program.

7. New Hospitals

In the FY 2008 IPPS proposed rule (72 FR 24809), we also proposed a minor change to our policies regarding new hospitals. In the FY 2006 IPPS final rule, we noted that a new hospital should begin collecting and reporting data immediately, and to complete the registration requirements for the RHQDAPU program quality measures (70 FR 47421 and 47428). We also explained that a new hospital would be held to the same standards as other established facilities when determining the expected number of discharges for the calendar quarters covered for each fiscal year. We also stated that fiscal intermediaries would provide information on new hospitals to the QIO in the state in which the hospital opened for operations as a Medicare provider, as soon as possible, so that the QIO could enter the provider information into its Program Resource System (PRS), and follow through with ensuring provider participation as the requirements for quality data reporting under this rule stipulate.

We believe that some new hospitals have found it difficult to start reporting RHQDAPU measures immediately after signing up to participate in the RHQDAPU program. Therefore, we proposed to modify our policy to reduce the burden on new hospitals. We proposed that fiscal intermediaries would continue to provide information on the new hospital to the QIO in the state in which the hospital is located, as soon as possible, so that the QIO can enter the provider information into its PRS, and follow through with ensuring provider compliance with the requirements for quality data reporting. For a new hospital that receives a provider number on or after October 1 of each year (beginning with October 1, 2007), we proposed that the hospital be required to report RHQDAPU data beginning with the first day of the quarter following the date the hospital registered to participate in the RHQDAPU program. For example, a hospital that receives its MPN on October 2, 2007, and signs up to participate in RHQDAPU on November 1, 2007, will be expected to meet all of the data submission requirements for discharges on or after January 1, 2008.

In addition, for HCAHPS we strongly recommend the hospital participants in a dry run, if feasible, prior to beginning to collect HCAHPS data on an on-going basis to meet the RHQDAPU requirements. We refer readers to the Web site at *http//www.hcahpsonline.org* for a schedule of upcoming dry runs.

Comment: One commenter supported the plan for new hospitals joining the RHQDAPU program. It is reasonable to have the hospitals begin reporting the first full quarter after inclusion in the program. The commenter recommended, however, that a clear appeals process be established should a hospital be unable to meet this standard.

Response: We appreciate the commenter's support. As we continue to assess the RHQDAPU program, we plan to consider the commenter's suggestion.

In summary, for the validation and submission requirements for the FY 2008 payment year, we plan to use the following criteria:

- The 10 measure starter set for both submission and validation for 1st through 3rd quarters CY 2006 discharges
- The additional 11 measures that make up the expanded measure set for both submission and validation for 3rd quarter CY 2006 discharges
- SCIP VTE 1, 2, and SCIP Infection 2 submissions only for 1Q 2007 discharges only
- HCAHPS measures, both submission of dry run data and continuous submissions beginning with July 2007 discharges
- AMI and HF 30-day mortality measures

For FY 2009 payment year, we plan to use the following criteria:

- The 21 expanded measure set for submission and validation starting with 4th quarter CY 2006 (4Q06) through 3rd quarter CY 2007 (3Q07) discharges
- SCIP VTE 1, 2, and SCIP Infection 2 submission and validation for 2nd quarter CY 2007 and 3rd Quarter CY 2007 discharges
- HCAHPS measures, continuous submission
- AMI, HF, and PN 30-day mortality measures

As we previously stated, we are not finalizing at this time the following measures that we proposed in the proposed IPPS FY 2008 rule:

- SCIP Infection 4: Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose
- SCIP Infection 6: Surgery Patients with Appropriate Hair Removal
- SCIP Infection 7: Colorectal Patients with Immediate Postoperative Normothermia
- SCIP Cardiovascular-2: Surgery Patients on a Beta-Blocker Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period

As previously stated, we are adopting the validation process we proposed in the FY 2008 IPPS proposed rule in this FY 2008 IPPS final rule. We are also finalizing the proposed chart validation

requirements covering FY 2009 discharges for all of the FY 2009 measures that we are finalizing in this final rule with comment period. Specifically, we will drop the current two-step process to determine if the hospital is submitting valid data starting with 1st quarter 2007 discharges. Starting with FY 2009, we will also begin to pool validation estimates covering the 4 quarters (4th quarter CY 2006 discharges through 3rd quarter 2007 discharges) in a similar manner to the current 3 quarter pooled confidence interval.

We will include the SCIP Infection 4, SCIP Infection 6, and SCIP Cardiovascular 2 measures in our chart validation requirements for FY 2009 if we finalize those measures in the CY 2008 OPPS final rule to be published in the **Federal Register** later this year. As discussed above, we also intend to adopt proposed SCIP Infection 7 if it is endorsed by NQF. When we determine to adopt this measure, we will do so through the rulemaking process.

For FY 2008 and subsequent years, we are finalizing our proposal to require hospitals to begin to report the name and address of each hospital that shares the same MPN. This information would be gathered through the RHQDAPU program Notice of Participation form, which hospitals would submit to their QIOs by August 15, 2007. To increase transparency in public reporting and improve the usefulness of the *Hospital Compare* Web site, we will note on the Web site where publicly reported measures combine results from two or more hospitals.

For FY 2008, a hospital must submit such a request for reconsideration on or before November 1, 2007. We are also establishing additional procedural rules that will govern RHQDAPU program reconsiderations. In addition to including information in this final rule with comment period, we will also post these rules on the QualityNet Exchange Web site at the same time as the publication of this final rule with comment period.

If a hospital is dissatisfied with the result of a RHQDAPU program reconsideration decision, the hospital may file a claim under 42 CFR part 405, Subpart R (a Provider Reimbursement Review Board (PRRB) appeal).

We are also finalizing our proposal that fiscal intermediaries will continue to provide information on the new hospital to the QIO in the state in which the hospital is located, as soon as possible, so that the QIO can enter the provider information into its PRS, and follow through with ensuring provider compliance with the requirements for quality data reporting. For a new hospital that receives a provider number on or after October 1 of each year (beginning with October 1, 2007), we are finalizing our proposal that the hospital will be required to report RHQDAPU data for clinical and outcome measures beginning with the first day of the quarter following the date the hospital registered to participate in the RHQDAPU program. For example, a hospital that receives its MPN on October 2, 2007, and signs up to participate in RHQDAPU on November 1, 2007, will be expected to meet all of the data submission requirements for discharges on or after January 1, 2008. In addition, for HCAHPS we strongly recommend the hospital participates in a dry run, if feasible, prior to beginning to collect HCAHPS data on an ongoing basis to meet RHQDAPU requirements. We refer readers to the Web site at *http://www.hcahpsonline.org* for a schedule of upcoming dry runs.

B. Development of the Medicare Hospital Value-Based Purchasing Plan

Section 5001(b) of the Deficit Reduction Act of 2005 (DRA) requires the Secretary of Health and Human Services to ''develop a plan to implement a value-based purchasing program for payments under the Medicare program for subsection (d) hospitals beginning with fiscal year 2009.'' Congress specified that the plan include consideration of the following issues:

- The ongoing development, selection, and modification process for measures of quality and efficiency in hospital inpatient settings.
- The reporting, collection, and validation of quality data.
- The structure of value-based payment adjustments, including the determination of thresholds or improvements in quality that would substantiate a payment adjustment, the size of such payments, and the sources of funding for the value-based payments.
- The disclosure of information on hospital performance.

In developing the plan, the Secretary must consult with relevant affected parties, and consider experience with demonstrations that are relevant to the value-based purchasing program.

To develop the mandated plan on behalf of the Secretary, CMS created an internal Hospital Value-Based Purchasing (VBP) Workgroup. The Workgroup was organized into four subgroups to address each of the required planning issues: (1) measures; (2) data collection and validation; (3) incentive structure; and (4) public reporting.

CMS hosted two public ''Listening Sessions'' in early 2007 to solicit comments from relevant affected parties on outstanding questions associated with the development of a plan. The first Listening Session was held on January 17, 2007, to consider design questions. The second Listening Session was held on April 12, 2007, to consider plan options. The perspectives expressed by stakeholders, including hospitals, consumers, and purchasers, during these sessions and in writing were used to assist the Workgroup in drafting the Medicare Hospital VBP Plan Report to Congress. Once the Report is submitted to Congress, CMS will post it on the CMS Web site.

Comment: Numerous commenters were supportive of the basic concepts included in the plan options and many commended CMS on its efforts to obtain stakeholder input during the planning process. The commenters urged CMS to continue this active dialogue once the Medicare Hospital VBP Plan is publicly released.

The commenters addressed five principal themes:

- Proposed Measure Set. Several commenters stressed the importance of maintaining a stable measure set and measure specifications to provide a consistent basis for measuring improvement. A few commenters addressed the value of focusing on health outcomes and on evaluating resource consumption in achieving desired outcomes. A number of commenters made recommendations on specific measures and on establishing thresholds and benchmarks.
- Data Submission and Validation Process. A few commenters expressed concern about the proposed accelerated timeframe for data submission, and several commenters had suggestions for further strengthening the proposed new approach to data validation.
- Phased Approach to Transition from RHQDAPU to VBP. A number of commenters stressed the importance of a phased transition so that hospitals will have notice before the first ''measurement year'' begins.
- Proposed Incentive Structure. Several commenters urged that the dollars at risk be limited, given the limited experience with VBP and encouraged CMS to distribute all unearned incentives to hospitals.
- Possible Roles for Medicare Quality Improvement Organizations (QIOs) in VBP. A few commenters recommended that QIOs support performance improvement in lower-performing

hospitals to ensure that successful practices are shared.

Response: These comments are similar to those that CMS received on the plan options during the April 12, 2007 Listening Session and in written comments. We appreciate the careful thought, and in one instance detailed analysis, devoted to providing these comments. The comments will be useful as we consider a Medicare Hospital VBP Plan. We welcome continued dialog with stakeholders regarding the challenges and opportunities in the development of a plan to implement a Medicare VBP program for hospitals.

C. Rural Referral Centers (RRCs) (§ 412.96)

Under the authority of section 1886(d)(5)(C)(i) of the Act, the regulations at § 412.96 set forth the criteria that a hospital must meet in order to qualify under the IPPS as an RRC. For discharges occurring before October 1, 1994, RRCs received the benefit of payment based on the other urban standardized amount rather than the rural standardized amount. Although the other urban and rural standardized amounts are the same for discharges occurring on or after October 1, 1994, RRCs continue to receive special treatment under both the DSH payment adjustment and the criteria for geographic reclassification.

Section 402 of Pub. L. 108–173 raised the DSH adjustment for other rural hospitals with less than 500 beds and RRCs. Other rural hospitals with less than 500 beds are subject to a 12-percent cap on DSH payments. RRCs are not subject to the 12 percent cap on DSH payments that is applicable to other rural hospitals (with the exception of rural hospitals with 500 or more beds). RRCs are not subject to the proximity criteria when applying for geographic reclassification, and they do not have to meet the requirement that a hospital's average hourly wage must exceed 106/108 percent of the average hourly wage of the labor market area where the hospital is located.

Section 4202(b) of Pub. L. 105–33 states, in part, ''[a]ny hospital classified as an RRC by the Secretary * * * for fiscal year 1991 shall be classified as such an RRC for fiscal year 1998 and each subsequent year.'' In the August 29, 1997 final rule with comment period (62 FR 45999), we reinstated RRC status for all hospitals that lost the status due to triennial review or MGCRB reclassification, but did not reinstate the status of hospitals that lost RRC status because they were now urban for all purposes because of the OMB designation of their geographic area as urban. However, subsequently, in the August 1, 2000 final rule (65 FR 47089), we indicated that we were revisiting that decision. Specifically, we stated that we would permit hospitals that previously qualified as an RRC and lost their status due to OMB redesignation of the county in which they are located from rural to urban to be reinstated as an RRC. Otherwise, a hospital seeking RRC status must satisfy the applicable criteria. We used the definitions of ''urban'' and ''rural'' specified in Subpart D of 42 CFR Part 412.

1. Annual Update of RRC Status Criteria

One of the criteria under which a hospital may qualify as RRC is to have 275 or more beds available for use (§ 412.96(b)(1)(ii)). A rural hospital that does not meet the bed size requirement can qualify as an RRC if the hospital meets two mandatory prerequisites (a minimum CMI and a minimum number of discharges), and at least one of three optional criteria (relating to specialty composition of medical staff, source of inpatients, or referral volume) (§ 412.96(c)(1) through (c)(5) and the September 30, 1988 **Federal Register** (53 FR 38513)). With respect to the two mandatory prerequisites, a hospital may be classified as an RRC if—

- The hospital's CMI is at least equal to the lower of the median CMI for urban hospitals in its census region, excluding hospitals with approved teaching programs, or the median CMI for all urban hospitals nationally; and
- The hospital's number of discharges is at least 5,000 per year, or, if fewer, the median number of discharges for urban hospitals in the census region in which the hospital is located. (The number of discharges criterion for an osteopathic hospital is at least 3,000 discharges per year, as specified in section 1886(d)(5)(C)(i) of the Act.)

a. Case-Mix Index

Section 412.96(c)(1) provides that CMS establish updated national and regional CMI values in each year's annual notice of prospective payment rates for purposes of determining RRC status. The methodology we used to determine the national and regional CMI values is set forth in the regulations at § 412.96(c)(1)(ii). The national median CMI value for FY 2008 includes all urban hospitals nationwide, and the regional values for FY 2008 are the median CMI values of urban hospitals within each census region, excluding those hospitals with approved teaching programs (that is, those hospitals receiving indirect medical education payments as provided in § 412.105(f)). These values are based on discharges occurring during FY 2006 (October 1, 2005 through September 30, 2006), and include bills posted to CMS' records through March 2007.

In the FY 2008 IPPS proposed rule (72 FR 24811), we proposed that, in addition to meeting other criteria, if rural hospitals with fewer than 275 beds are to qualify for initial RRC status for cost reporting periods beginning on or after October 1, 2007, they must have a CMI value for FY 2006 that is at least—

- 1.2258; or
- The median CMI value (not transfer-adjusted) for urban hospitals (excluding hospitals with approved teaching programs as identified in § 412.105(f)) calculated by CMS for the census region in which the hospital is located.

Based on the latest available data (FY 2006 bills received through March 2007), in addition to meeting other criteria, if rural hospitals with fewer than 275 beds are to qualify for initial RRC status for cost reporting periods beginning on or after October 1, 2007, they must have a CMI value for FY 2006 that is at least—

- 1.4049; or
- The median CMI value (not transfer-adjusted) for urban hospitals (excluding hospitals with approved teaching programs as identified in § 412.105(f)) calculated by CMS for the census region in which the hospital is located.

The final median CMI values by region are set forth in the following table:

Region	Case-mix index value
1. New England (CT, ME, MA, NH, RI, VT)	1.2348
2. Middle Atlantic (PA, NJ, NY)	1.2665
3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	1.3515
4. East North Central (IL, IN, MI, OH, WI)	1.3393
5. East South Central (AL, KY, MS, TN)	1.2904
6. West North Central (IA, KS, MN, MO, NE, ND, SD)	1.2869
7. West South Central (AR, LA, OK, TX)	1.4010
8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	1.4260
9. Pacific (AK, CA, HI, OR, WA)	1.3772

Hospitals seeking to qualify as RRCs or those wishing to know how their CMI value compares to the criteria should obtain hospital-specific CMI values (not transfer-adjusted) from their fiscal intermediaries. Data are available on the Provider Statistical and Reimbursement

(PS&R) System. In keeping with our policy on discharges, these CMI values are computed based on all Medicare patient discharges subject to the IPPS DRG-based payment.

b. Discharges

Section 412.96(c)(2)(i) provides that CMS set forth the national and regional numbers of discharges in each year's annual notice of prospective payment rates for purposes of determining RRC status. As specified in section 1886(d)(5)(C)(ii) of the Act, the national standard is set at 5,000 discharges. In the FY 2008 IPPS proposed rule, we proposed to update the regional standards based on discharges for urban hospitals' cost reporting periods that began during FY 2004 (that is, October 1, 2003 through September 30, 2004), which was the latest available cost report data we had at that time.

Therefore, in the FY 2008 IPPS proposed rule (72 FR 24811), we proposed that, in addition to meeting other criteria, a hospital, if it is to qualify for initial RRC status for cost reporting periods beginning on or after October 1, 2007, must have as the number of discharges for its cost reporting period that began during FY 2004 a figure that is at least —

- 5,000 (3,000 for an osteopathic hospital); or
- The median number of discharges for urban hospitals in the census region in which the hospital is located. (See the table set forth in the FY 2008 IPPS proposed rule at 72 FR 24811.)

Based on the latest discharge data available at this time, that is, for cost reporting periods that began during FY 2004, the final median number of discharges for urban hospitals by census region are set forth in the following table:

Region	Number of discharges
1. New England (CT, ME, MA, NH, RI, VT)	7,758
2. Middle Atlantic (PA, NJ, NY)	10,603
3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	10,627
4. East North Central (IL, IN, MI, OH, WI)	9,325
5. East South Central (AL, KY, MS, TN)	7,966
6. West North Central (IA, KS, MN, MO, NE, ND, SD)	7,986
7. West South Central (AR, LA, OK, TX)	7,225
8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	9,082
9. Pacific (AK, CA, HI, OR, WA)	8,439

We note that the median number of discharges for hospitals in each census region is greater than the national standard of 5,000 discharges. Therefore, 5,000 discharges is the minimum criterion for all hospitals.

We reiterate that, if an osteopathic hospital is to qualify for RRC status for cost reporting periods beginning on or after October 1, 2007, the hospital would be required to have at least 3,000 discharges for its cost reporting period that began during FY 2004.

Comment: Two commenters asked about the CMI values, stating that the values seem to have risen inexplicably in recent years, and the proposed FY 2008 national value is higher than the regional values, which is counter-intuitive given the national value includes teaching hospitals and the regional values do not.

Response: The method for calculating the CMI values for the RRC criteria has not changed. The rise in CMI values over the years may be due to an increase in the severity of inpatient cases and perhaps to improvements in the coding of such cases. Regarding the proposed FY 2008 national CMI value being lower than the regional CMI values, the national CMI value in the proposed rule was erroneous. The proposed FY 2008 national median CMI value should have read 1.4039. The final FY 2008 national median CMI value (1.4049) is higher than each of the regional median CMI values, except the Mountain region median CMI value, set forth in the table above. With respect to the national median CMI value being slightly lower than the Mountain region CMI value, we note that these values are medians, not means. Therefore, the national and regional medians are affected by the distribution of each hospital's CMI within each region and nationally.

2. Acquired Rural Status and RRCs (§ 412.103(g))

With the following exceptions, a hospital must be rural to qualify as an RRC:

- Consistent with section 4202(b) of Pub. L. 105–33, any hospital designated as an RRC in FY 1991 retains that status for FY 1998 and each subsequent year.
- Hospitals located in a rural county that would have lost their RRC status as a result of an OMB redesignation of the area from rural to urban were permitted to remain as RRCs (69 FR 49056).
- Hospitals located in urban areas that apply for reclassification as rural under § 412.103 (that is, the hospital is located in an urban area but it ''acquires'' rural status under the regulations) also may qualify as an RRC.

Under § 412.103(g), a hospital may cancel its rural reclassification by submitting a written request to the CMS Regional Office no less than 120 days prior to the end of its current cost reporting period. A hospital may choose to cancel its acquired rural status if it determines that it may be more financially beneficial to return to urban status and the associated IPPS payments rather than remain rural and receive the special treatments of certain rural providers such as RRCs, SCHs and CAHs. The hospital's acquired rural status is canceled beginning with its next cost reporting period. We have received inquiries asking whether a hospital retains its RRC status once it voluntarily cancels its acquired rural status.

As indicated above, a hospital generally must be rural to be classified as an RRC. However, a hospital may retain its RRC status in the special circumstances where it would have lost status due to OMB redesignation of its area from rural to urban, or where it was already designated as an RRC in 1991. In these situations, there were either special statutory provisions that require the hospital to retain its RRC status or the hospital's geographic status changed from rural to urban through no action of its own.

We do not believe that an urban hospital that acquires rural status under § 412.103 and subsequently is approved as an RRC should be able to retain the benefits of being an RRC when it voluntarily cancels that acquired rural status. In our view, it follows from the requirement that an RRC must be located in a rural area that cancellation of acquired rural status negates a hospital's RRC designation. Therefore, we believe that Medicare's policy should be that a hospital cannot continue to be classified as an RRC once it cancels acquired rural status under § 412.103. For this reason in the FY 2008 IPPS proposed rule (72 FR 24812), we stated that a hospital that cancels its acquired rural status, received under § 412.103, would also lose its RRC designation under § 412.96. In this situation, the hospital would lose its RRC designation under § 412.96 as of the date the cancellation of its acquired rural status takes effect.

As indicated above, RRCs are not subject to a maximum DSH adjustment of 12 percent that applies to other rural hospitals with less than 500 beds. Further, RRCs are not subject to the proximity criteria when applying for geographic reclassification (§ 412.230(a)(3)), and they do not have to meet certain wage comparison tests for reclassification (§ 412.230(d)(1)(iii)).

A hospital located in an urban area that cancels its acquired rural status under § 412.103 would lose its RRC status and become subject to a 12-percent cap on the DSH adjustment applicable to urban hospitals with less than 100 beds (if the hospital has 100 beds or more, it would not be subject to the cap on the DSH adjustment). Further, the hospital would also have to meet the proximity requirement for geographic reclassification at § 412.230(a)(3). We note that the hospital would maintain the benefit of being exempt from the average hourly wage criterion for geographic reclassification requiring the comparison of the hospital's wages to the wages of the area in which it is located, as stated in section 1886(d)(10)(D)(iii) of the Act.

Comment: One commenter stated that a hospital located in an urban area may also qualify as an RRC if it meets the criteria set forth in 42 CFR 412.96(b)(2). These criteria specify referral patterns the hospital's patients must meet in order for an urban hospital to be a referral center. The commenter requested that the final rule confirm that an urban hospital may also qualify as an RRC under § 412.96(b)(2).

Response: The regulations at § 412.96(b)(2) do specify criteria for a hospital to qualify as a ''referral center,'' with no requirement to be rural. However, an urban hospital that qualifies as a referral center under § 412.96(b)(2) is not a ''rural'' referral center (RRC). Section 1886(d)(5)(C)(i) of the Act states that a hospital that is classified as a ''rural hospital'' may apply to the Secretary to be classified as an RRC. Thus, an urban hospital that meets the criteria under § 412.96(b)(2) qualifies as a referral center but does not qualify as an RRC because it is not rural (unless it first reclassifies as rural under § 412.103).

Comment: One commenter stated that this policy would prohibit urban hospitals that acquire rural status from maintaining their RRC designation if they are subsequently reclassified as urban by the MGCRB. The commenter indicated that the policy creates a significant disadvantage for urban hospitals that acquire rural status and to the Medicare beneficiaries they serve, relative to their RRC counterparts that retain the status of RRC even though physically located in an urban area.

Response: We believe the commenter is generally concerned with the policy that an urban hospital that has acquired rural status cannot retain its RRC designation once it cancels its acquired rural status. As indicated above, a hospital generally must be rural to be classified as an RRC. For this reason, we believe that Medicare's policy should be that a hospital cannot continue to be classified as an RRC once it cancels acquired rural status under § 412.103. In our view, it follows from the requirement that an RRC must be located in a rural area that cancellation of acquired rural status negates a hospital's RRC designation. As discussed above, a hospital may retain its RRC status in the special circumstances where it would have lost status due to OMB's designation of its area from rural to urban, or where it was already designated as an RRC in 1991. In these situations, there were either special statutory provisions that require the hospital to retain its RRC status or the hospital's geographic status changed from rural to urban through no action of its own. Again, we do not believe that an urban hospital that acquires rural status under § 412.103 and subsequently is approved as an RRC should be able to retain the benefits of being an RRC when it voluntarily cancels that acquired rural status.

Furthermore, in response to the commenter's statement that this policy prohibits urban hospitals that acquire rural status from maintaining their RRC designation if they are subsequently reclassified as urban by the MGCRB, we note that § 412.230(a)(5)(iii) of the regulations prohibits an urban hospital that has been granted rural status under § 412.103 from receiving an additional reclassification by the MGCRB based on this acquired rural status for a year in which such redesignation under § 412.103 is in effect. Therefore, under our current regulations, an urban hospital that has acquired rural status cannot be reclassified by the MGCRB. As discussed above, if an RRC with acquired rural status cancels its acquired rural status so that it can be reclassified by the MGCRB, the hospital would lose its RRC status once it cancels its acquired rural status.

Comment: Some commenters pointed to language in the **Federal Register** (August 1, 2000; 65 FR 47087) regarding section 401 of Pub. L. 106–113, on which the regulations at 42 CFR 412.103 are based. The commenters stated that certain discussions in the preamble to that August 1, 2000 rule demonstrate that a hospital acquiring rural status should retain RRC status for all purposes, even if it subsequently cancels the acquired rural status. In addition, the commenters stated that our previous amendment of § 412.96 to eliminate the triennial review requirement indicates an intent to allow all hospitals to retain RRC status indefinitely once obtained under § 412.96.

Response: The discussion in the August 1, 2000 **Federal Register** referenced by the commenters was targeted at hospitals that had lost their RRC status through an OMB change in geographic area definitions, through triennial review, or through an MGCRB reclassification for purposes of the standardized amount. Thus, in the August 1, 2000 **Federal Register**, we discussed grandfathering into RRC status any hospital that lost RRC designation as a result of OMB's new geographic areas, due to an MGCRB standardized amount reclassification, or through triennial review. At the time, the discussion did not address hospitals that, in the future, would acquire rural status under § 412.103, only to voluntarily cancel such acquired status at a later date.

In addition, the discussion addressed the rule that hospitals acquiring rural status under § 412.103 cannot receive an additional reclassification by the MGCRB based on this acquired rural status for a year in which such a redesignation is in effect. This rule prevents an urban to rural reclassification under § 412.103 from becoming a vehicle by which a hospital navigates from one geographic location and special status as a rural provider for the purpose of a more advantageous reclassification via the MGCRB process. The prohibition against a hospital that acquires rural status from exploiting such status to further seek an MGCRB reclassification demonstrates our longstanding view that section 401 of Pub. L. 106–113 should not be used as a way of acquiring special status solely to benefit from MGCRB rules. Similarly, we do not believe that acquiring rural status and then subsequently canceling it should be used as a way to exploit MGCRB reclassification rules.

Rather, in the August 1, 2000 rulemaking, we implemented section 401 of Pub. L. 106–113 by specifying three categories of hospitals which would essentially be grandfathered in as RRCs: those that lost RRC status due to (a) triennial review, (b) MGCRB standardized amount reclassification, or (c) OMB redesignation of the county in which they were located from rural to urban. The first and second categories of hospitals no longer exist, as we do not conduct triennial review and there are no MGCRB reclassifications for purposes of the standardized amount. As for the third category of hospitals, we have retained the rule that hospitals redesignated as urban through no action of their own, and solely through an OMB redesignation of an area as urban would continue to be considered RRCs if they were RRCs prior to the change in

geographic areas. Our rulemaking from August 1, 2000 was intended to ensure that the hospitals for which Congress intended to preserve RRC status (that is, those that lost RRC designation through an OMB geographic area redefinition, triennial review, or MGCRB standardized amount reclassification) would continue their RRC status. However, it was not intended to allow hospitals to exploit acquired rural status in order to seek the most advantageous MGCRB reclassification. Indeed, the rule we added to § 412.230 limiting hospitals that reclassify under § 412.103 from further reclassifying (65 FR 47087 through 47089) demonstrates this policy. Therefore, we believe the policy we discussed in this year's proposed rule—that a hospital that voluntarily cancels acquired rural status can no longer be considered a ''rural'' referral center—is fully consistent with our August 1, 2000 rulemaking.

Furthermore, our amendment to the regulations eliminating the triennial review requirement was not intended to allow hospitals to retain RRC status indefinitely once obtained under § 412.96. We eliminated the triennial review requirement in the August 29, 1997 final rule (62 FR 45998 through 46000). In that rule, we addressed section 4202(b)(1) of Pub. L. 105–33, which states in part, ''Any hospital classified as a rural referral center by the Secretary * * * for FY 1991 shall be classified as such a rural referral center for fiscal year 1998 and each subsequent fiscal year.'' In the August 29, 1997 rule, we noted that section 4202(b)(1) of Pub. L. 105–33 provided reinstatement to only those hospitals that were classified as RRCs during FY 1991. As a result, those hospitals that were RRCs in FY 1991 and lost RRC status due to triennial review would be reinstated to RRC status; whereas, those hospitals that were classified as RRCs after FY 1991 and lost that status due to triennial review would not be protected. We stated that we did not believe that it was equitable or administratively practical to maintain two lists of referral centers; that is, (a) a list of those hospitals that lost RRC status due to triennial review but were then reinstated under section 4202(b)(1) of Pub. L. 105–33 because they were approved as RRCs in FY 1991; and (b) a list of those hospitals that lost RRC status due to triennial review, but were not protected by section 4202(b)(1) because they were approved as RRCs after FY 1991. Therefore, we terminated the triennial review requirement and reinstated all hospitals that lost RRC status due to triennial review. In addition, in the August 29, 1997 final rule, we stated that we could still reinstate some type of annual or periodic qualifying criteria and remove a hospital's RRC status if we discovered that some hospital or class of hospitals should not be allowed to retain referral center status because they fail to meet some basic requirement that we believe is essential to receiving this special designation. As indicated above, a hospital generally must be rural to be classified as an RRC. It follows from the requirement that an RRC must be located in a rural area that cancellation of acquired rural status negates a hospital's RRC designation.

Comment: One commenter agreed with the policy discussed in the proposed rule that a hospital that cancels its acquired rural status should no longer qualify to be an RRC.

Response: We appreciate the commenter's support.

In this FY 2008 IPPS final rule, we are again announcing our policy that a hospital that cancels its acquired rural status under § 412.103 would also lose its RRC designation under § 412.96. Under this final policy, any hospital that submits a written request on or after October 1, 2007, to cancel its acquired rural status under § 412.103(g) will lose RRC status (obtained based on rural status acquired under § 412.103) as of the same date that the cancellation of acquired rural status under § 412.103(g) takes effect. We are amending the regulations text at § 412.96 by adding a paragraph (g)(4) that states: ''A hospital that submits a written request on or after October 1, 2007, to cancel its reclassification under § 412.103(g) is deemed to have cancelled its status as a rural referral center effective on the same date the cancellation under § 412.103(g) takes effect. This provision of this paragraph (g)(4) applies to hospitals that qualify as rural referral centers under § 412.96 based on rural status acquired under § 412.103.''

We note that the policy set forth in § 412.96(g)(4) applies only to hospitals that obtain RRC status based on rural status acquired under § 412.103. For example, in the FY 2001 IPPS final rule (65 FR 47089) and the FY 2005 IPPS final rule (69 FR 49056), we permitted a hospital that previously qualified as an RRC and lost its status as an RRC due to OMB's redesignation of the county in which it is located from rural to urban to be reinstated as an RRC (even though the area in which it is geographically located is now urban). Section 412.96(g)(4) would not apply to a hospital that has RRC status based on this policy regarding OMB redesignations and that also has acquired rural status under § 412.103 for other purposes (for example, to become an SCH). In this situation, the hospital did not obtain RRC status based on acquired rural status under § 412.103, but instead based on the policies described in our FY 2001 and FY 2005 final rules regarding OMB redesignations.

In the FY 2008 IPPS proposed rule (72 FR 24812), we also proposed to revise the regulations at § 412.103(g) with respect to when cancellation of acquired rural status becomes effective. Currently, § 412.103(g)(2) states, ''The hospital's cancellation of the classification is effective beginning with the hospital's next full cost reporting period following the date of its request for cancellation.'' To address concerns that some IPPS hospitals are acquiring rural status solely to benefit from reclassification rules applying to hospitals that were once RRCs, and then canceling that rural status within a short period of time, such as a few months, we proposed to require IPPS hospitals to retain acquired rural status for at least one 12-month cost reporting period. In the FY 2008 IPPS proposed rule, we stated that if the hospital chooses to cancel its rural reclassification, the effective date of that cancellation would occur both after at least one 12-month cost reporting period and at the start of the next Federal fiscal year. Thus, for example, if a hospital with a cost reporting period from July 1, 2008 to June 30, 2009, becomes rural on May 30, 2008, its acquired rural status under § 412.103 would remain in effect from May 30, 2008, through at least September 30, 2009 (that is, the date it acquired rural status through the end of the fiscal year containing a 12-month cost reporting period). We stated that we believed this policy was reasonable, given that acquired rural status for IPPS hospitals should be a considered decision for hospitals that truly wish to be considered as rural, and not purely as a mechanism for reclassifying. We did not propose a duration requirement for hospitals paid under cost reimbursement because we are not aware of similar manipulations of rural status in these cases.

We proposed to change our current policy by revising § 412.103(g) to specify that a hospital's cancellation of its acquired rural status under § 412.103 is effective for hospitals under reasonable cost reimbursement (such as CAHs) with the hospital's next cost reporting period and for hospitals under the IPPS after at least one 12-month cost reporting period as rural, and not until the beginning of a Federal fiscal year following both the request for cancellation and the 12-month cost

reporting period. Under the proposed revised regulations, an IPPS hospital (such as an RRC or SCH) that cancels its acquired rural status would continue to be paid as rural until the beginning of the next Federal fiscal year after at least one 12-month cost reporting period as rural. In addition, for these IPPS hospitals, the deadline for seeking cancellation of the acquired rural status would be no less than 120 days before the end of the fiscal year.

Comment: One commenter raised concerns regarding the proposed requirement that a hospital maintain rural status for at least a full 12 months, stating that the rate as a rural SCH may be only slightly higher than the urban Federal rate. The commenter believes that changes that positively impact the hospital's urban payment rate or negatively impact the rural payment rate could cause a hospital the need to cancel its rural status, and that in these cases, it seems that the proposed time lag/expansion could cause a hospital to be harmed.

Response: After considering the commenter's concerns regarding hospitals that acquire rural status to become SCHs, and considering that our primary purpose in revising the policy is to address concerns regarding hospitals that acquire rural status to become RRCs and then cancel RRC status after a brief period of time, such as a few months, in order to take advantage of favorable reclassification rules under § 412.230 applicable to hospitals that were ever RRCs, we have decided to limit our final policy to IPPS hospitals that obtain RRC status based on rural status acquired under § 412.103. Therefore, in this final rule, we are requiring an IPPS hospital that is classified as an RRC based on rural status acquired under § 412.103 to maintain its acquired rural status under § 412.103 for at least one 12-month cost reporting period and until the next Federal fiscal year following both its request for cancellation of acquired rural status and at least one 12-month cost reporting period as rural.

RRCs benefit only from special provisions in the statute relating to geographic reclassification and DSH. A hospital that is in acquired rural status cannot be geographically reclassified by the MGCRB (§ 412.230). Therefore, the only benefit to an RRC in acquired rural status relates to DSH (and only if the hospital has less than 100 beds). Thus, there is limited or no benefit to a hospital acquiring rural status in order to become an RRC, except when the acquired rural status is subsequently canceled. Thus, the issue is that hospitals should not be permitted to obtain rural status solely for the purpose of canceling such status as soon as possible in order to benefit from favorable MGCRB reclassification rules, but, rather, should be required to retain rural status for a reasonable period of time. Therefore, we believe that a policy requiring an IPPS hospital that acquires rural status under § 412.103, in order to become an RRC, to maintain acquired rural status for at least one 12-month cost reporting period and until the next Federal fiscal year is reasonable.

Comment: Two commenters questioned the CMS statement that this proposed change would be consistent with IPPS policy that makes changes prospectively based on the Federal fiscal year. They stated that many rural elections under IPPS are not based on the Federal fiscal year, such as acquiring SCH or MDH status, among others. They stated they do not see how this proposed revision serves the Medicare program, and do not believe CMS has adequately explained the need for such a revision. They requested CMS not adopt this provision in the final rule.

Response: Section 1886(d)(8)(E) of the Act specifies that the effective date of acquired rural status is not later than 60 days after the receipt of the hospital's application. Therefore, under the statute, a hospital paid under the IPPS may acquire rural status in the middle of a Federal fiscal year, and then receive any payment advantages (or disadvantages) that accompany rural status. In most cases, a hospital will acquire rural status because of the long-term financial benefits it expects to reap. We recognize that for hospitals paid under the IPPS system, there may be a short-term cost if the hospital must accept a lower rural wage index from the time the hospital acquires rural status to the time the hospital is approved as an RRC, SCH or MDH. However, we note that acquiring rural status is a voluntary choice, and presumably hospitals balance the long-term financial benefits that accrue from RRC, SCH or MDH status against the costs arising from a lower rural wage index.

As we discussed above, our primary concern is with IPPS hospitals that acquire rural status to become RRCs and then cancel acquired rural status after a brief period of time in order to take advantage of special MGCRB reclassification rules. Therefore, we have decided to apply our new policy only to IPPS hospitals that obtain RRC status based on acquired rural status under § 412.103. As noted above, there is limited or no benefit to a hospital acquiring rural status in order to become an RRC, except when the acquired rural status is subsequently cancelled. Thus, the issue is that such hospitals should not be permitted to obtain rural status solely for the purpose of canceling such status as soon as possible in order to benefit from favorable MGCRB reclassification rules, but, rather, should be required to retain rural status for a reasonable period of time. We believe that a policy requiring an IPPS hospital that acquires rural status under § 412.103 in order to become an RRC, to maintain acquired rural status for at least one 12-month cost reporting period and until the next Federal fiscal year is reasonable. As noted above, acquiring rural status is a voluntary choice. A hospital should make a decision on whether to acquire rural status to become an RRC based on its own assessment of the financial impact on the hospital in the long term. There is administrative burden to both the hospital and CMS from acquiring rural status, and we do not believe that such hospitals should be able to change their status after only a short period of time, such as a few months. Furthermore, we believe that requiring such hospitals to maintain acquired rural status, and the associated wage index change, until the beginning of the next Federal fiscal year (after at least one 12-month cost reporting period as rural), rather than the beginning of the next cost reporting period, is consistent with the IPPS that generally makes changes prospectively on a Federal fiscal year basis.

Finally, we note that while section 1886(d)(8)(E) of the Act governs the start-date of acquiring rural status (that is, not later than 60 days after receipt of an application in a form and manner determined by the Secretary), it does not address the end-date of such acquired rural status. We believe we have the general rulemaking authority (including under section 1871 of the Act) to specify the required longevity of acquired rural status, especially when it has become apparent that hospitals may be acquiring rural status for a very short period of time solely in order to take advantage of special MGCRB reclassification rules that accrue to hospitals that were ever an RRC. Therefore, in light of the comments and after further consideration, we are finalizing the policy announced in the proposed rule with the revisions discussed above limiting the policy to IPPS hospitals that become RRCs based on rural status acquired under § 412.103.

We are finalizing a revision to § 412.103(g) to specify that for a hospital that obtains RRC status based on acquired rural status under § 412.103, the hospital's cancellation of its

acquired rural status under § 412.103 is effective after at least one 12 month cost reporting period as rural, and not until the beginning of a Federal fiscal year following both the request for cancellation and the 12-month cost reporting period. Under the revised regulations, if an IPPS hospital that obtained its RRC status based on rural status acquired under § 412.103 cancels its acquired rural status, it would continue to be paid as rural until the beginning of the next Federal fiscal year after at least one 12 month cost reporting period as rural. In addition, for these RRCs, the deadline for seeking cancellation of the acquired rural status would be no less than 120 days before the end of the current Federal fiscal year.

This rule applies to all such hospitals (that is, hospitals that became RRCs based on rural status acquired under § 412.103) that submit a written request on or after October 1, 2007, to cancel their acquired rural status, whether they are in acquired rural status before October 1, 2007, or acquire rural status on or after October 1, 2007. Thus, if such a hospital submits a written request on or after October 1, 2007, to cancel its acquired rural status, the effective date of cancellation would be after at least one 12 month cost reporting period as rural and at the beginning of the next Federal fiscal year. If such a hospital submits a written request before October 1, 2007, to cancel its acquired rural status, the hospital is subject to the pre-FY 2008 rule, and the effective date of cancellation would be the beginning of its next cost reporting period (given it submits the written request not less than 120 days prior to the end of its current cost reporting period).

For all other hospitals (that is, hospitals other than IPPS hospitals that became RRCs based on acquired rural status under § 412.103), the effective date of cancellation of acquired rural status under § 412.103 will continue to be the beginning of the hospital's next full cost reporting period following the date of its request for cancellation (given it submits the written request not less than 120 days prior to the end of its current cost reporting period).

D. Indirect Medical Education (IME) Adjustment (§ 412.105)

1. Background

Section 1886(d)(5)(B) of the Act provides for an additional payment amount under the IPPS for hospitals that have residents in an approved graduate medical education (GME) program in order to reflect the higher indirect patient care costs of teaching hospitals relative to nonteaching hospitals. The regulations regarding the calculation of this additional payment, known as the indirect medical education (IME) adjustment, are located at § 412.105.

The Balanced Budget Act of 1997 (Pub. L. 105–33) established a limit on the number of allopathic and osteopathic residents that a hospital may include in its full-time equivalent (FTE) resident count for direct GME and IME payment purposes. Under section 1886(h)(4)(F) of the Act, for cost reporting periods beginning on or after October 1, 1997, a hospital's unweighted FTE count of residents for purposes of direct GME may not exceed the hospital's unweighted FTE count for its most recent cost reporting period ending on or before December 31, 1996. Under section 1886(d)(5)(B)(v) of the Act, a similar limit on the FTE resident count for IME purposes is effective for discharges occurring on or after October 1, 1997.

2. IME Adjustment Factor for FY 2008

The IME adjustment to the DRG payment is based in part on the applicable IME adjustment factor. The IME adjustment factor is calculated by using a hospital's ratio of residents to beds, which is represented as r, and a formula multiplier, which is represented as c, in the following equation: $c \times [\{1 + r\}^{.405} - 1]$. The formula is traditionally described in terms of a certain percentage increase in payment for every 10 percent increase in the resident to-bed ratio.

Section 502(a) of Pub. L. 108–173 modified the formula multiplier (c) to be used in the calculation of the IME adjustment. Prior to the enactment of Pub. L. 108 173, the formula multiplier was fixed at 1.35 for discharges occurring during FY 2003 and thereafter. Section 502(a) modified the formula multiplier beginning midway through FY 2004 and provided for a new schedule of formula multipliers for FY 2005 and thereafter. In the FY 2005 IPPS final rule, we announced the schedule of formula multipliers to be used in the calculation of the IME adjustment and incorporated the schedule in our regulations at § 412.105(d)(3)(viii) through (d)(3)(xii). In the FY 2008 IPPS proposed rule, we specified that, for any discharges occurring during FY 2008, the statutorily mandated formula multiplier is 1.35. Previously, for discharges occurring during FY 2007, the mandated formula multiplier was 1.32. We estimate that application of the mandated formula multiplier for FY 2008 will result in an increase of 5.5 percent in IME payment for every approximately 10 percent increase in the resident to bed ratio.

Comment: One commenter expressed satisfaction that CMS is increasing the formula multiplier for FY 2008 and recommended that CMS maintain the formula multiplier at 1.35.

Response: The provision for the IME formula multiplier for FY 2008 specified in the proposed rule is mandated by section 1886(d)(5)(B) of the Act, which establishes that, for discharges occurring during FY 2008 and thereafter, the formula multiplier is 1.35. As noted in the proposed rule and above, we have incorporated the statutorily mandated schedule of formula multipliers in our regulations.

3. Time Spent by Residents on Vacation or Sick Leave and in Orientation

a. Background

In the FY 2007 IPPS final rule (71 FR 48080), we clarified our policy with respect to the time that residents spend in nonpatient care activities (such as conferences and seminars) as part of approved residency programs. We amended our regulations concerning the FTE resident count at 42 CFR § 412.105(f)(1)(iii)(C) to state, ''In order to be counted, a resident must be spending time in patient care activities, as defined in § 413.75(b) * * *'' The regulations at § 413.75(b) define patient care activities as ''the care and treatment of particular patients, including services for which a physician or other practitioner may bill.'' In light of this clarification, during the past year, we have received questions from the teaching hospital community as to whether the time that residents spend on vacation or sick leave, and in orientation activities that typically occur at the beginning of a residency training program, is counted for IME payment purposes.

Historically, time spent by residents on vacation or sick leave and in initial orientation activities has been included in the FTE resident count for IME and direct GME. (The sick leave we are referring to throughout this discussion is sick leave that does *not* require the resident to make up for his or her absence by adding additional training time at the end of the program.) The practice of allowing vacation and sick leave to be included in the IME count appears to be based on a provision in the Provider Reimbursement Manual, Part I, at section 2405.3.H.2. This manual provision discusses the treatment of residents who are on vacation or sick leave in the context of

our prior ''one day count'' policy for counting residents for IME payment. Generally, effective with cost reporting periods beginning on or after October 1, 1984, and before July 1, 1991, residents were counted for IME purposes on a uniform reporting date of September 1. A hospital's FTE residents were counted based on their assignment to that hospital's IPPS or outpatient areas on September 1 of an academic year. Because it was possible that a resident might not actually be present in the hospital on September 1 because he or she was on approved vacation or sick leave, to ensure that the hospital's IME FTE count would not be understated for the entire year, section 2405.3.H.2 of the PRM–I states that ''interns and residents using vacation and sick leave on the day of the count may be included in the count.'' Although the regulations were changed effective for cost reporting periods beginning on or after July 1, 1991 (55 FR 36059) to reflect the current resident-counting methodology (that is, to count the number of FTE residents based on the amount of time required to fill a residency slot as specified at § 412.105(f)(1)(iii)(A)), the fiscal intermediaries (or, if applicable, the MAC) have continued to include time spent by residents on vacation and sick leave in the FTE resident counts for purposes of both IME and direct GME payments.

Orientation time is time spent by residents in activities that typically take place at the beginning of a resident's training program, and include orientation regarding hospital employment, the hospital's policies and procedures in general, as well as policies and procedures specific to the residency training program. As is the case for vacation and sick leave, time spent by residents in orientation has continued to be included by fiscal intermediaries/MAC in the FTE resident counts for purposes of both IME and direct GME.

We understand why we have received numerous questions regarding whether FTE resident time spent on vacation or sick leave, or in orientation activities, should be counted for purposes of IME payment. The time a resident spends on vacation or sick leave is not addressed within the current definition of ''patient care activities'' at § 413.75(b). In fact, time spent on vacation or sick leave would not be spent at the hospital location at all, so no patient care activities would occur during this time. Time spent in orientation might be spent in the hospital complex (or at a nonhospital setting), but would not involve the care and treatment of particular patients. Thus, although time spent by residents on vacation or sick leave or in orientation has historically been included in the IME and direct GME FTE counts, it seems apparent that this time should be carefully considered in light of our clarified policy and current regulations. We believe these types of activities (vacation time, sick leave, and orientation) are inherently different from the types of ''patient care activities'' and ''nonpatient care activities'' we have discussed in depth in previous rules, and most recently in the FY 2007 IPPS final rule. We believe the aforementioned activities should be distinguished from other activities, patient care or otherwise, in which the resident participates as part of the approved program.

b. Vacation and Sick Leave Time

We believe that approved vacation time and sick leave are not appropriately categorized as patient care activities, or as didactic, research, or other nonpatient care activities. In addition, although the Accreditation Council for Graduate Medical Education (ACGME) has some rules regarding resident duty hours and work environment, the ACGME is not explicit regarding resident vacation and sick leave policies. Rather, vacation and sick leave policies are determined by the resident's employer and can vary by residency training program. Consequently, although vacation and sick leave are fringe benefits to which every employee, hospital or otherwise, is typically entitled, vacation and sick leave are not, in fact, part of the training time spent by residents in an approved program. Therefore, we believe vacation and sick leave are not properly considered as either patient care time or nonpatient care time, but are within a distinct third category of time. As we noted above, it has been our policy to include the time spent by residents on vacation or sick leave in the FTE resident count for IME and direct GME. However, we do not believe the continuation of this policy is appropriate in light of our current policy as clarified in the FY 2007 IPPS final rule, and expressed in revised regulations, that permit only time spent by residents in patient care activities to be counted for purposes of IME. We initially considered proposing a policy to no longer count the time spent by residents on vacation or sick leave for purposes of IME on the grounds that this time is not spent in patient care activities in accordance with our regulations. However, we do not believe such a policy would have recognized the unique character of vacation and sick time as time that is not spent in any aspect of residency training patient care or nonpatient care. Because we believe time spent by residents on vacation and sick leave is not properly considered patient care time or nonpatient care time, but fits within a distinct third category of time that is neither patient care nor nonpatient care, we believe it would be more appropriate to remove the time altogether from the FTE calculation for each resident for both IME and direct GME payment purposes. Accordingly, in the FY 2008 IPPS proposed rule (72 FR 24814), we proposed to remove vacation and sick leave from the total time considered to constitute an FTE resident for purposes of IME payments, effective for cost reporting periods beginning on or after October 1, 2007. Further, in order to have a consistent conception of an FTE resident for purposes of IME and direct GME payment, we proposed to remove vacation and sick leave from the total FTE resident time for purposes of direct GME payment as well effective for cost reporting periods beginning on or after October 1, 2007. We acknowledged that removing vacation and sick leave time from the denominator of the FTE count for both IME and direct GME could have some impact on the FTE count, but noted that the impact is fact-specific. In some cases, it would result in a lower FTE count, and in some cases, it would result in a higher FTE count. In addition, we noted that under our current policy, residents who are on maternity leave or other approved sick leave of extended duration that prolongs the total time a resident is participating in the approved program beyond the normal duration of the program are not counted while they are out on extended sick or maternity leave. This is because the FTE time spent by such residents is counted in accordance with our FTE counting policies during the training time they spend to make up for their absence. For example, a resident in an internal medicine program who takes 3 months of approved maternity leave, and therefore, must stay an additional 3 months beyond the normal 3 years to complete her training, would not be counted while she is on maternity leave for IME and direct GME payment purposes. Rather, time spent during the additional 3 months of training in which she must participate to make up for her 3 month absence will be counted in accordance with our FTE-counting policies for IME and direct GME. We did not propose to change our policy with respect to time spent by residents on maternity leave or other approved sick leave of extended duration. We proposed to amend the regulations at

§§ 412.105(f)(1)(iii)(A) and 413.78(b) to specify that ''Vacation and sick leave are not included in the determination of full-time equivalency.''

c. Orientation Activities

As discussed above, we believe that orientation activities in which residents participate, often prior to the start of their residency training program, are also distinct from the typical ''patient care'' and ''nonpatient care'' activities in which residents participate as part of their training program. For example, before residents begin training in an approved residency program, the hospital (or in many cases, the medical school as the employer of the residents) is required to provide orientation for their residents. Most of these orientation activities involve neither patient care nor the typical didactic or research activities that comprise the residency training program. Instead, such orientation activities consist of basic informational sessions in which all new employees, residents, and other staff must participate at the beginning of employment. There could also be other orientation activities designed specifically to prepare residents to furnish patient care in a particular setting, or to participate in a particular approved residency training program. We recognize that certain portions of orientation activities are specific to residents in particular approved programs and are required by the accrediting organizations. Other components of orientation activities relate to employment and are common to all employees. Still other components of orientation activities may involve training regarding particular hospital policies and procedures, some of which would relate to patient care and safety. In many ways, these orientation activities resemble ''didactic'' activities. However, we believe there are important differences between the ''didactic'' activities that are part of orientation and the other conferences and seminars in which the residents engage throughout the course of their training. That is, we do not envision orientation activities as including scholarly didactic activities such as conferences or seminars that may occur throughout a residency training program. Rather, we believe orientation activities would occur either at the beginning of a particular specialty program, or when a resident goes to another facility for training. In orientation sessions, much of the information being imparted to the residents is essential knowledge for the residents in order to furnish patient care services in a particular hospital facility or approved program. Thus, the information furnished during orientation is not information that merely enhances the resident's patient care delivery knowledge and skills during the residency program, but it is a necessary prerequisite for the residents as they commence (or continue) their training program, and is often required as a term of employment. Because we recognize the distinct character of orientation activities as essential to the provision of patient care by residents, and the fundamental differences between orientation and the typical didactic activities in which a resident may participate throughout a residency training program, in the FY 2008 IPPS proposed rule (72 FR 24814), we proposed to continue to count the time spent by residents in orientation activities, whether they occur in the hospital or nonhospital setting, and proposed to amend our regulations accordingly. (We note that orientation activities in the hospital setting have historically been counted for direct GME payment purposes in accordance with the regulations at § 413.78(a) which states ''Residents in an approved program working in all areas of the hospital complex may be counted.'') We also proposed to amend § 413.75(b) to add a definition of the term ''orientation activities,'' to mean ''activities that are principally designed to prepare an individual for employment as a resident in a particular setting, or for participation in a particular specialty program and patient care activities associated with that particular specialty program.'' We understand that orientation activities typically occur at the beginning of a resident's first program year. However, in the FY 2008 IPPS proposed rule, we noted that we were interested in hearing from commenters on whether orientation activities typically occur during other times during an approved residency training program. We proposed to amend the definition of ''patient care activities'' at § 413.75(b) as follows: ''the care and treatment of particular patients, including services for which a physician or other practitioner may bill, and orientation activities as defined at § 413.75(b).''

Comment: Many commenters expressed appreciation of CMS' efforts to clarify its policies concerning the time that residents spend in orientation activities in the determination of an FTE. Several commenters also stated their appreciation that CMS did not attempt to penalize hospitals for offering vacation and sick leave; that is, they were appreciative that CMS did not propose to remove vacation and sick leave from only the numerator of the FTE. One commenter stated ''We can agree with the proposed removal of vacation and sick time from both the numerator and denominator in the FTE calculation.'' The commenter stated that any benefit time such as holidays should also be removed. The commenter also stated that CMS should clarify its expectations in order to ''* * * eliminate an overzealous reading * * *'' of policy so that between the effective date of FY 2007 final rule and this year's final rule, days spent by residents on vacation or sick leave would not be viewed as days spent in nonpatient care and, therefore, removed from the numerator of the FTE count. The commenter further requested that the policy change be made retroactive to FY 2007 to coincide with CMS' clarification in the FY 2007 final rule concerning nonpatient care activities. The commenter also indicated that other benefit time should be removed from the numerator and denominator so as to avoid leaving a gap in policy that is open to interpretation for FY 2007 FTE resident counts.

However, numerous commenters viewed the proposed policy as ''operationally impractical'' and stated that it would impose significant documentation and administrative burdens. Many commenters requested that the regulations remain unchanged—that vacation and sick leave continue to be included in the determination of an FTE. Commenters also asserted that there are many issues and questions that CMS must consider and determine before finalizing such a policy; otherwise, the policy will be subject to interpretation and could be applied inconsistently by providers.

Several commenters stated that the proposed rule would be administratively burdensome for the following reasons: each hospital would be required to track vacation and sick time for each resident and allocate that vacation and sick leave time for every hospital in which the resident is training; it is difficult for hospitals that share residents to discern whether the residents actually take their allotted vacation time; and residents may rollover their unused vacation from one year to another. One commenter expressed concerns regarding the ''intellectual and administrative difficulty'' of trying to parse resident time and indicate whether it should be included in the FTE count with orientation or be removed from the FTE count with vacation and sick leave. Several commenters stated that hospitals do not have sick leave and vacation records for each resident for

the entire year, and hospitals would have to communicate up front and on a continual basis with all other hospitals in which an individual resident is training in order to determine the correct FTE count for that particular resident.

One commenter stated that records of sick time and vacation are kept by the sponsoring institution and actual scheduling and tracking of time off is organized at the department level. Another commenter stated that up to this point, sick leave has not been recorded, while another commented that hospitals often require residents to make up sick days due to the educational demands of the residency program, and that residents may also swap days to cover for someone who is sick. One commenter stated that hospital record keeping requirements should be established prior to the implementation of the proposed policy so that both hospitals and fiscal intermediaries have a consistent understanding of what documentation is required to comply with the policy. Another commenter stated that the purpose of the rotation schedule is to identify and document residency training and not to duplicate the detail kept by the payroll system. Several commenters also stated that the proposed policy would prove to be burdensome because vacation time is usually decided between the resident and supervising physician and, therefore, the recordkeeping requirements would need to be modified. In addition, commenters noted that vacation days are allotted based on the residency program year which may be different than the cost reporting year. Commenters also noted that residents may rotate to different hospitals which have different fiscal year ends. Therefore, the other hospitals to which the residents rotate, may not know the residents' vacation and sick leave until each hospital's cost report has been filed. One commenter stated ''[t]he Graduate Medical Education Committee's (GMEC) responsibilities as stated in the Accreditation Council for Graduate Medical Education (ACGME) 'Green' book indicate that monitoring of duty-hours and call schedules for excessive service demands and/or resident fatigue must be included. It also states that each program must ensure that adequate time for rest and personal activities must be provided.''

Several commenters expressed concerns that the proposed rule will lead to other areas of time being reviewed, to the point where residents will be spending more time tracking their time for lunches and meetings than being involved with patient care. One commenter noted that CMS' proposed policy will be a significant challenge for the teaching hospital community because of the fluid nature of residency training. One commenter stated that CMS did not provide a policy justification for why vacation and sick time should be removed from the FTE count for direct GME. The commenter mentioned that although CMS may be trying to reduce the administrative burden, a simpler way of reducing the administrative burden would be to retain the current policy. The commenter noted that, in the last few years, the administrative burdens associated with receiving Medicare payments for GME ''have grown exponentially'' and that with the proposed rule on vacation, sick leave, and orientation, the teaching hospital community has reached a ''breaking point.'' Commenters also noted that the administrative cost of instituting the proposed policy would exceed the potential savings.

One commenter requested that CMS confirm and clarify that the proposal is to remove vacation and sick time from both the numerator and denominator. Another commenter stated that CMS' proposed policy ''* * * suggests CMS is interested in supporting [the resident's] role on an hourly basis and if this is correct, hospitals should be able to count all after-hours, weekend and holiday time the residents spend with patients.'' The commenter maintained that if CMS supports GME on an hourly basis, the commenter would expect a net increase in its FTE count because of the long hours of resident-related patient care.

One commenter stated that CMS correctly noted that the outcome of the proposed rule would depend on specific facts. However, the commenter noted that CMS failed to acknowledge that the effect of the proposed rule would be to decrease FTE counts in every instance in which the FTE resident is counted at less than one FTE; that is, in every instance where there is also disallowed time, such as didactic time. The commenter also noted that ''[e]liminating time spent in didactic teaching from the denominator of the fraction prior to removing vacation time from the equation would exacerbate even further this drop in hospital FTE counts.'' Commenters also provided examples of cases where a resident rotates to more than one hospital and takes vacation while assigned to one of the hospitals. The commenters noted that each hospital to which the resident rotates, as a result of the proposed policy, would experience a change in its FTE count even though no hospital has modified its rotation arrangement.

Commenters were concerned that although the proposed policy would have minimal effects nationally, the policy has major implications at the local level. A number of commenters noted their facilities provided training for hundreds of interns and residents, and stated the cost of tracking the vacation and sick time of interns and residents at their facilities would be in the thousands of dollars, and, in some cases, would decrease a provider's reimbursement.

Many commenters stated that if the proposed policy is finalized, it cannot be done until the IRIS system is modified to change the denominator of an FTE, since the commenter believes IRIS currently is based on a denominator of 365 days. One commenter stated that in order to document that no double counting is occurring, hospitals use up to 60 lines on IRIS to document each resident's time. However, hospitals have noted that 60 lines is not enough to account for the residents' time and therefore hospitals must '' * * * consolidate training time frames which can create additional overlap potentials which must be investigated by the hospitals involved.'' The commenter stated if hospitals need to account for vacation and sick leave, IRIS will require significant modification. The commenter noted that CMS needs to further study the impact of its proposed policy on IRIS submissions and it would be unfair and wrong for CMS to ''prematurely implement'' the vacation and sick leave policy if IRIS cannot accommodate it. Another commenter stated that it had previously commented on the need to update IRIS and that teaching hospitals have needed to purchase ''workaround software,'' ''Compu-max,'' to meet the regulatory and audit requirements of Medicare. The commenter further stated that ''Compu-max'' software generates FTE counts on the basis of a 365 day year and this process is how most of the teaching hospitals generate IRIS reports for Medicare purposes. Because vacation and sick leave varies among hospitals and among residents, IRIS would now require an additional field for each resident which would include a resident-specific number of countable days. The commenter questioned where this information would be stored since IRIS currently has both a Master Record database and an Assignment Record database. The commenter believed that ''extensive updating and testing of a new version'' of IRIS will be required to make certain that providers and fiscal

intermediaries can use the program, and that provider payments will not be jeopardized. The Master Record includes demographic and other permanent information and remains unchanged during the residents' training years, while the Assignment Record database includes the residents' assignments (with beginning and end dates) at the hospital which is completing the IRIS report. The commenter stated that the denominator could not be locked in the databases because it would differ among hospitals depending on the cost reporting year and it would change when the resident changes programs. As previously noted, the commenter maintained that the administrative burden would be significant when the cost reporting year differs from the residency training year and the resident is training at more than one hospital. Another commenter stated that the commenter's facility, prior to instituting a costly resident tracking system, had to devote over 300 personnel hours to entering over 1,000 residents into IRIS. The commenter urged CMS to review the IRIS program and make recommendations for updating the software. The commenter further noted that IRIS has not changed significantly since it was updated for Y2K in 1999, and that it currently uses MS–DOS which is no longer the industry standard and needs to be updated to reflect ''current operating environments.''

Response: We believe our proposed policy on the exclusion of vacation and sick leave from both the numerator and denominator of the FTE calculation is consistent with the clarification of our policy regarding patient care activities expressed in the FY 2007 IPPS final rule, that permits only time spent by residents in patient care activities to be counted for purposes of IME for training that occurs in hospital settings and for purposes of both IME and direct GME for training that occurs in nonhospital settings (71 FR 48080). We believe that approved leave, including vacation time and sick leave, are not appropriately categorized as patient care activities, or as didactic, research, or other nonpatient care activities. Rather, these activities fall into a distinct third category that is neither patient care nor nonpatient care. Furthermore, vacation, sick leave, and other types of approved leave are discrete periods of time that are not spent as training time in the approved residency program and do not take place in either the hospital complex or a nonhospital site. Therefore, we believe vacation, sick leave, and other types of approved leave should be removed from the FTE calculation for direct GME purposes, and not just for IME purposes.

Despite our continued belief that vacation, sick leave, and other approved leave is neither a patient care nor a non-patient care activity, we acknowledge the significant concerns raised by the commenters regarding the administrative burdens associated with the implementation of the proposed policy. Therefore, we will *not* be finalizing the proposed policy to remove vacation and sick leave from the FTE calculation at this time. However, we will continue to consider ways to finalize the proposed policy, or something similar to it, but in a more administratively feasible manner. For example, since commenters pointed out that one major difficulty with the proposed policy is that it would require hospitals that cross-train residents to obtain information regarding the amounts of time off taken by each resident from the other hospital(s), such that the same denominator would be used for the resident at each hospital in which he/she trains, we are considering a policy that would require a hospital to be aware of only the vacation, sick leave, and other types of approved leave a resident takes while training at that specific hospital. That is, under the approach we are considering, hospitals would *not* be required to account for vacation, sick leave, and other types of approved leave occurring at another hospital(s). Each hospital would only be responsible for excluding time off from the numerator and denominator that occurred while the particular resident was assigned to its hospital. Hospitals that train the same resident would not need to obtain information about the time off taken by the resident at the other hospital(s), nor would the same denominator need to be used by both hospital(s) for that FTE resident. However, in no case would a resident be counted as more than 1.0 FTE in total. Another option we are considering is, given that all residents take vacation and most take some sick leave, to establish a standard amount of ''approved leave'' which must be excluded from the FTE calculation of all residents. We are interested in receiving feedback on these alternative approaches to implementing this policy.

With respect to time spent in orientation activities, the current policy on orientation activities occurring in the hospital complex will continue to be effective for IME and direct GME payment purposes, and a new policy with respect to orientation occurring in certain nonhospital settings (explained in greater detail in response to comments below) will be effective for cost reporting periods beginning on or after October 1, 2007. That is, time spent in orientation activities (as that term is defined in the revised regulation at § 413.75(b)) occurring in the hospital complex is currently counted, and will continue to be counted on or after October 1, 2007. Time spent by residents in orientation activities occurring in nonhospital settings such as physicians offices or clinics where patient care is routinely provided and a hospital is permitted to count the time spent by residents in accordance with §§ 412.105(f)(1)(ii)(C) and 413.78(f) may be counted only for cost reporting periods beginning on or after October 1, 2007.

We would also like to note that in response to the statement by a commenter that ''[e]liminating time spent in didactic teaching from the denominator of the fraction prior to removing vacation time from the equation would exacerbate even further this drop in hospital FTE counts,'' under CMS' policy as expressed in the August 18, 2006 **Federal Register**, entire workdays that are spent in didactic activities must be identified and removed only from the *numerator* of the FTE calculation, and not from the denominator.

Comment: One commenter described a methodology using an example for counting residents which the commenter believes, from a mathematical standpoint, is the correct way to implement CMS' proposed policy. The applicable portion of the example is as follows:

Dr. Z spends 334 days in total of the 365-day cost reporting period at Hospital A. This time at Hospital A includes 261 days of non-vacation/non-sick time, 28 days of vacation time, and 45 days of Medicare time nonreimbursable for IME purposes. Under current rules, Hospital A's reporting of its resident FTE count for IME purposes for Dr. Z would usually be represented as 289 days/365 days = 0.792 FTE. However, this can be thought of as comprised of the following two components as noted in the formula: $(a/b) \times (c/a)$

The first term represents the hospital's share of the resident's total time in the cost reporting period and the second term represents the resident's share of reimbursable days at that hospital. In the formula, a = # of countable days at the hospital, b = # of days in the cost reporting period, and c = number of Medicare-reimbursable days. Applying this formula in the case of Dr. Z training at Hospital A,

(334/365) × (289/334) = 0.792 FTE.

Applying this formula yields the same result as the usual formula (289 days/365 days). Now, if one were to implement the CMS proposed policy on a hospital-specific basis and remove the 28 vacation days from a, the ''# of countable days at the hospital,'' which is represented in the numerator of the first term and the denominator of the second term above, it would yield the following calculation:

(306/365) × (289/306) = 0.792 FTE.

One can see that the calculation yields exactly the same resident FTE count for Hospital A as performing the calculation while including the vacation time. So, by removing the vacation days from the numerator and denominator in this manner, which would be the correct way to do it mathematically, Hospital A's resident FTE count has been preserved from its previous level. While the financial impact of this methodology would be neutral, if CMS were to still require that vacation and sick time be tracked, we believe it should be rejected because of the significant administrative challenges that would be imposed on the teaching hospital community. Imposing such additional burdens to implement a policy that has zero effect on resident FTE counts at teaching hospitals makes no sense and should be rejected.

Response: We appreciate the commenter sharing this proposed methodology with us. However, we do not agree with the commenter that the methodology presented in the example above would be the correct way, from a mathematical standpoint, to implement CMS' proposed policy. The commenter provided the following equation: (306/365) × (289/306) = 0.792 FTE. We do not agree that 289 should be the numerator of the second part of the equation because, although it excludes the 45 days of nonreimbursable time, it still includes vacation time; the correct number to use for the numerator would be 261. Furthermore, the denominator that should be used is 337, which is calculated by subtracting the 28 days of vacation from the total of 365 days. We believe the mathematically correct interpretation of the proposed policy would be to calculate the FTE resident's time as 261/337, which results in .774 FTE.

Comment: One commenter stated that, in regard to the vacation and sick leave policy, the commenter can only see examples where providers' FTE resident counts would be reduced, not increased. Another commenter stated that the proposed rule did not include examples of calculations which illustrate CMS' thinking. The commenter also provided examples where FTE resident counts changed for both hospitals at which a resident trains despite the fact that neither party modified the rotation arrangement in any way.

Response: Since we are not finalizing the proposed policy on vacation and sick leave, we will not be providing any detailed examples to illustrate how the proposed policy would have been implemented. However, as previously mentioned, we are considering a policy alternative under which a hospital would only have to keep track of vacation, sick leave, and other types of approved leave that the residents take while training at that specific hospital (or while training at a nonhospital site for which that hospital is counting the FTE residents in accordance with § 413.78(f)). For example, assume the total number of days in a certain residency program is 320 days and the resident is assigned for 200 days at Hospital A and 120 days at Hospital B. The resident takes 10 days of vacation while assigned to Hospital B. Under the alternative policy we are considering, the resident's time could be calculated as follows: Hospital A: 200/320 = 0.625, Hospital B: (120 − 10)/(320 − 10) = 0.355. If the hospitals track time off in hourly increments, rather than days, another example of this alternative policy would be: Assume that the resident is now taking 36 *hours* of vacation while assigned to Hospital B and the specific residency program in which the resident is training considers each workday to be 12 hours. Again, as in the previous example, there are 320 days during the residency training year. The resident is assigned for 200 days at Hospital A and 120 days at Hospital B. The resident's time under the alternative policy could be calculated for each hospital as follows: Hospital A: 2400/3840 = 0.625, Hospital B: (1440 − 36)/(3840 − 36) = 0.369. We are interested in hearing feedback on this alternative policy approach.

Comment: One commenter stated that an FTE is determined by ''* * * the amount of time it takes to fill one approved slot''; thus, the FTE resident denominator may differ for different specialty training programs. The commenter also asked how one day of sick leave would be removed from the FTE count when the FTE resident may be measured in terms of days, weeks, or months. The commenter noted that the resulting ''FTE'' could be different based on how the denominator is determined.

Response: The commenter is correct that an FTE is determined based on the total time necessary to fill a residency slot (see § 412.105(f)(1)(iii)(A) and also § 413.78(b)), and therefore, an FTE resident's denominator could vary for different specialty programs. We refer the commenter to the examples in the previous response to see how time off in daily or hourly increments might be removed from the FTE count. For a program that uses 52 weeks as the program year, the time off would be identified in weekly increments and excluded from the 52 weeks in the numerator and denominator. We note that it is possible to deduct fractions of days or weeks from the FTE calculation as well (i.e., if a resident takes 10.5 days off, or 2.5 weeks off, then these amounts would be removed from the numerator and denominator of the applicable FTE calculation).

Comment: Several commenters stated that residents work more than 40 hours a week, and CMS should take residents' actual work week hours into consideration when determining whether vacation and sick leave should be removed from the determination of an FTE. One commenter specifically stated that CMS has not yet defined a ''work week,'' and because a resident usually works more than 40 hours per week, that time should be taken into consideration in the proposal to remove vacation and sick leave. The commenter further noted that hospitals continue to compensate the residents when they are on vacation and therefore they should be able to count that time. Another commenter asked whether an FTE consists of 40 hours per week or 60 hours per week and stated that it is difficult to determine an FTE because there is no consistent regulatory definition of what amount of work/training is required to count a resident as 1.0 FTE or how the appropriate amount of time can be substantiated with a Medicare auditor. Several commenters asserted that vacation and sick leave provides time away from the stress and rigors of the residency program and allows residents to focus on patient care. One commenter contended that hospitals would be incentivized to offer minimal vacation and restrict maternity and paternity leave, and that the proposed policy would burden residents who are already overworked. The commenter noted further that the proposed policy would also negatively affect female residents because they are more likely to carry over vacation time from year to year to be used as a maternity benefit. One commenter stated that hospitals cannot attract quality employees if they do not offer vacation and sick leave, and that the same goes for residents. Another commenter stated that vacation leave

and sick leave are an essential element of hospital employment and therefore ''* * * an integral part of the patient care process.'' The commenter stated that CMS has interpreted the term ''patient care activities'' without considering any complementary activities that contribute to effective ''patient care activities.'' Commenters stated that teaching hospitals accept patients for medical treatment contingent on their ability to provide medical coverage with both staff physicians and residents, and that teaching hospitals will continue to have the additional financial burden of providing coverage when residents are on vacation and sick leave. The commenters stated that by including vacation and sick leave in the determination of an FTE, CMS would be ''* * * ensuring a 'minimal' payment to help offset costs for care coverage that must be provided by another medical professional.'' Another commenter stated the context for CMS' proposal is flawed because the government should not be tampering with employee benefits, and the proposal may cause providers to consider changing their benefit rules because of potential loss of funds due to maintaining benefits.

Response: As we have stated in response to comments above, there is a consistent regulatory definition of what constitutes 1.0 FTE, and this should be used by hospitals and fiscal intermediaries/MAC alike to determine the unit of an FTE for each specialty program. In terms of calculating a resident's ''work week,'' a hospital's allowable FTE count is ''based on the total time necessary to fill a residency slot'' (§ 412.105(f)(1)(iii)(A)). The regulations at § 413.78(b) add that ''a part time resident counts as a partial FTE based on the proportion of allowable time worked compared to the total time necessary to fill a full-time internship or residency slot.'' As the regulations state, the concept of the total time necessary to fill a residency slot is used to determine the part-time or full-time status of the resident. If it is determined that, among all the hospitals and nonhospital sites in which the resident is training, the resident is not working the number of hours necessary to fill a residency slot, the resident would be considered part-time, and the proportion of total time the resident is working in all training sites would be adjusted accordingly. Therefore, we would consider a ''work week'' to be dependent on the specific residency program in which the resident is training and the resident's full- or part-time status. For example, if 60 hours per week (including vacation time) is established as the total time necessary to fill the residency slot for a particular program, and a resident in this program works 60-hour weeks (full time) consisting of 30 hours per week at each of two hospitals, in allowable/countable activities or areas, then each hospital would count ''0.5'' of an FTE for this resident. Since in this example, the time necessary to fill a residency slot is 60 hours per week (including vacation time) rather than 40 hours per week, any leave taken would be excluded from the FTE unit based on a 60-hour work week (or a program year consisting of 3,120 hours (that is, 52 weeks × 60 hours)).

In response to the commenters' concerns regarding maternity leave and the provision of leave as essential to attracting quality employees and providing quality patient care, maternity leave is typically a leave of extended duration and we did not propose any changes to policies concerning leave of extended duration in the proposed rule. Furthermore, it is important to note that the intent of the proposed rule was not to suggest that hospitals should change their benefit policies. We see no reason that hospitals would not continue to offer the same benefits they offered prior to our proposed policy. Additionally, we note that the proposed rule would not have *disallowed* vacation, sick leave, and other types of approved leave, which would have required the time to be excluded only from the numerator of the FTE calculation; it proposed to exclude the time from both the numerator and denominator of the FTE calculation. In response to the comment that hospitals accept patients for treatment contingent on their ability to provide medical coverage, other commenters have stated that residents often cover for each other when a resident is sick or on vacation; therefore, we do not agree that the exclusion of vacation, sick leave, and other types of approved leave from the numerator and denominator of the FTE calculation would limit the hospital's ability to provide medical coverage. However, as we stated in response to previous comments, we are not finalizing the proposed policy to remove vacation and sick leave from the FTE calculation at this time.

Comment: Several commenters stated that vacation and sick leave were included in the base year costs for determination of PRAs. Therefore, in order to maintain consistency between base year and current year FTE counts, the commenter suggested that vacation and sick leave should be included in the determination of an FTE.

Response: We acknowledge that the costs and FTEs associated with vacation and sick leave were included in the determination of the base year PRAs. This is because prior to the implementation of the IPPS, under the reasonable cost system of reimbursement, vacation leave and sick leave were reimbursed as a Medicare allowable cost. Since implementation of the IPPS, however, we have only permitted hospitals to count for purposes of direct GME the time spent by residents training in GME activities within the hospital complex. Since the time spent by residents on approved leave is not spent in the hospital complex, we believe that, from a policy perspective, it would be appropriate to not include vacation and sick leave in the FTE count for direct GME purposes. However, as we noted above, we have decided not to finalize our proposal to remove vacation and sick leave from the FTE calculation at this time.

Comment: Many commenters disagreed with removing vacation and sick leave from the determination of an FTE because these fringe benefits are included under other forms of hospital reimbursement. For example, several commenters stated that Medicare regulations allow fringe benefits for all employees as Medicare allowable costs and there should be no exception made for residents. Another commenter stated that when CMS requires hospitals to pay for the costs of residents in nonhospital settings, CMS requires that fringe benefits such as vacation and sick leave be included. The commenter requested ''* * * clarification on the justification for considering vacation and sick time non-patient care related given the apparent inconsistency this proposal would create with respect to both * * *'' the GME nonhospital site policy and non-GME policies. Commenters also recommended that, because vacation and sick leave are included in wage index calculations, they should be included in the determination of an FTE. One commenter specifically stated the Provider Reimbursement Manual (CMS Pub. 15–2) Section 3605.2, treats amounts paid for vacation and sick leave as included in wages and salaries. Therefore, to maintain consistency between wage index and GME, the commenter indicated that vacation and sick leave should be included. The commenter further noted that 42 CFR 412.105(f)(1)(iii)(A) states FTE status ''* * * is based on the total time necessary to fill a residency slot,'' and therefore vacation and sick leave should continue to be included in the determination of an FTE. Another

commenter provided additional reasons as to why the commenter believed the determination of an FTE should include vacation and sick leave, including: CMS recognizes vacation and sick leave when paid to an outside supplier as stated in PRM–I, section 1402.2; the American Medical Group Association's (AMGA) 2006 Compensation Survey Data Report includes fringe benefits in compensation; and there are several instances ''* * * where CMS recognizes that fringe benefits (including vacation and sick leave) are an allowable cost when services being provided are related to patient care activities''—for example: CMS Pub. 15, Part I, Section 2144.4; CMS Pub. 15, Part I, Section 2182.6; CMS Pub. 15, Part I, Section 2144.9; CMS Pub. 15, Part I, Section 1402.2; and CMS Pub. 15, Part II, Section 3605.2. The commenter also noted that in establishing reasonable compensation equivalents (RCEs), CMS recognized compensation for a full-time physician at 2,080 hours per year, ''* * * including a reasonable amount of time devoted to vacation and sick leave * * *'' as stated in PRM–I, Section 2182.6. The commenter further noted that the PRM ''* * * goes on to note that the intermediary considers the general practice of the hospitals it serves in determining the reasonableness of a hospital-compensated physician's time devoted to vacation and sick leave'' and includes CMS' response to a comment regarding the development of the RCE in the March 2, 1983 **Federal Register** (48 FR 8902). The commenter stated that, based on the comment and response, it was evident that CMS believed vacation time should be included in compensation for hospital-based physicians.

Response: We agree with the commenters that the costs of vacation and sick leave have always been considered allowable under Medicare, for both hospital employees in general, and for residents and teaching physicians. However, with respect to the treatment of vacation, sick leave, and other types of approved leave in the GME context, the issue is not the allowability of the *cost*, but rather whether this time should be included in the determination of an FTE, considering that such time is not spent in any aspect of residency training. From a policy perspective, we do not believe that vacation, sick leave, and other types of approved leave, where the residents are not engaged in activities that are part of the approved program, and are not even present in the hospital or any nonhospital site, should be included in the determination of an FTE, for both IME and direct GME purposes. However, as we stated previously, because of the concerns regarding the administrative burden surrounding implementation of this policy, we have decided not to finalize the proposed policy to remove vacation, sick leave, and other approved leave from the FTE calculation as proposed, and we are asking for feedback on a method of dealing with some of the ''burden.'' With respect to the inclusion of vacation and sick leave in the wage index calculations, we note that salaries and hours of residents and teaching physicians are carved out of the IPPS wage index. Also, as explained in the August 18, 2006 **Federal Register** (71 FR 48085), the salaries and hours of residents historically used in the wage index calculation are irrelevant for purposes of determining a GME FTE count. We also note that for purposes of counting FTE time for determining direct GME and IME payments, a resident that trains in a hospital is counted by that hospital regardless of whether that hospital makes any payments for the resident's salary and fringe benefits. Therefore, we do not find persuasive the commenter's argument that vacation and sick time should be counted by the hospital that pays for that time. Our policy is consistent in that FTE counts at each hospital are based on what the resident is doing and not on whether the hospital is paying for the resident's salary and fringe benefits.

Comment: Several commenters expressed additional concerns regarding the removal of vacation and sick leave for purposes of the FTE resident count for IME. One commenter stated that academic centers are dependent on direct and indirect GME payments to cover the costs of the residents' education, salaries, and research, and they must also face the increased burden of indigent care and ''medically complex'' patients. The commenter further noted that IME covers fixed costs such as employee benefits which are in place even when the resident is on sick leave. A couple of commenters stated that residents' participation in research and other academic activities will be adversely affected by the proposed policy and more dialogue and stakeholder input is needed on such a rule. Another commenter asked whether Medicare may potentially disallow vacation and sick leave from cost reporting in totality. The commenter suggested that if CMS' intent is to reduce payments to hospitals, CMS should use mechanisms found on the cost report to achieve its goals—such as adjustments to the PRA for GME and the formula multiplier for IME.

Response: We note, again, that we did not propose to *disallow* vacation, sick leave, and other types of approved leave from the IME count (or direct GME count) and that the intent of the proposed rule was not to reduce Medicare GME payments to teaching hospitals. A disallowance would mean excluding the vacation, sick leave, and other types of approved leave from the numerator of the FTE calculation, but not the denominator, as is done for IME for research and for time spent in distinct part units that are excluded from the IPPS. By excluding vacation, sick leave, and other types of approved leave from both the numerator and denominator of the FTE resident calculation, the effect on the FTE resident count for a hospital would be limited, if there would be any at all.

Comment: Several commenters expressed their concerns regarding the effect of the proposed policy on hospitals that rotate residents and participate in Medicare GME affiliation agreements. One commenter stated that the proposed policy does not resolve the inequalities that result when residents rotate to different hospitals. The commenter further maintained that the proposed policy may unfairly increase FTE time at another hospital to which a resident rotates because time off is allocated to the hospital in which the resident was assigned. One commenter stated ''[s]ince the receiving institution usually is accepting the residents because of a desire to provide more medical staff coverage, they will not allow residents to take vacations when scheduled at their facility. Then, if the resident's vacation is excluded from the FTE calculation (as proposed), the receiving facility will be getting more of an FTE than they are paying for.'' The commenter suggested that the proposed policy is ''inherently flawed'' because it would produce a redistribution of FTE residents that is inconsistent with multiple base year policies. Other commenters provided an example where there is an affiliation agreement between Hospital A and Hospital B, Hospital A rotates a *different* resident to Hospital B each month, and each resident does *not* take vacation while training a Hospital B. In this case, Hospital B's total resident FTE count for the entire year would be greater than one, since the vacation time would be excluded from the denominator of Hospital B and not from the numerator. The commenter stated that this is a fundamental problem of CMS' proposal because a hospital that was at its hospital-specific cap may now find

itself training over its cap while another hospital may find itself training under its cap. The commenter noted that an additional burden would be created because a hospital would probably not know its resident FTE count until the very end of the training year and would have to wait until the last minute to amend its Medicare GME affiliation agreements. Another commenter stated that the rule is not clear on which hospital should claim the sick or vacation time when a resident rotates between hospitals. The commenter recommended that if vacation or sick leave occurs during an assigned rotation at a specific hospital, that hospital should claim the vacation and sick time. However, if the vacation and sick leave occurs between rotations, the hospital claiming the time associated with the rotation immediately prior to the vacation or sick leave should account for the sick or vacation leave. If the sick leave or vacation occurs during the residents' rotation to a nonhospital site, the hospital counting the resident's time at the nonhospital site should account for the vacation and sick time. Another commenter stated that a hospital that absorbs the vacation payment will be hurt by the proposed rule, ''* * * thereby not matching third party reimbursement to the cost incurred. The policy of matching costs to reimbursement is an inherent principle of third party reimbursement and should have been considered when CMS proposed this change.''

Response: We are sympathetic to the points raised by the commenters concerning shifts in FTE counts among hospitals that cross-train resident, and we will explore options of mitigating this effect in the context of reducing the overall administrative burden of the proposed policy. In the interim, as we stated above, we are not finalizing the proposed policy.

Comment: Several commenters stated that the proposed rule is not clear as to whether a change would relate to scheduled time off or actual time off. One commenter stated that it would be inappropriate to exclude all scheduled time off since residents usually do not take all of their vacation or sick time. The commenter further noted that, if the hospital were to exclude time from the denominator of the FTE calculation because that time was scheduled time off, but include that time in the numerator of the FTE calculation because other documentation shows that the resident actually worked during that time, the resulting FTE would be greater than 1.0 and disallowed by the fiscal intermediary on that basis. However, the commenter also asserted that if CMS were to require that *actual* time off be excluded, this would be a substantial administrative burden because the hospital would have to determine: whether the resident actually used scheduled vacation leave, or whether the resident worked at the hospital, even for a brief period of patient care, during the vacation period; and whether the resident switched days off with another resident so that the time was made up at a later point. We also received comments regarding the mathematical counting of FTEs, particularly when a resident takes a half day of vacation or sick leave. Another commenter stated that vacation time of one or more weeks is likely to be documented on the rotation schedule, while one or two days of vacation may not always be included. One commenter stated that the American Board for Internal Medicine requires that residents make up sick time but CMS does not allow this make-up time to be reflected in the cost report.

Response: The commenters pointed out correctly that we did not specify in the proposed rule whether we intended that scheduled time off or actual time off should be removed from the calculations of an FTE. In considering this, we agree that had we finalized the proposed policy in this final rule, it would be more appropriate to instruct hospitals to only exclude actual vacation, sick leave, and other types of approved leave taken, since it is understandable that residents may not use all of their allotted approved leave. Accordingly, under the alternative approach on which we are considering and seeking feedback, a hospital would track *actual* time off taken by residents assigned to it (but not be responsible for deducting time off while the resident is assigned to another hospital). Concerning the comment about the requirements of the American Board of Internal Medicine, we are not sure if the commenter is referring to leave of short duration or extended leave. However, we note that the proposed rule did not include any proposals regarding extended leave.

Comment: Several commenters disapproved of CMS' recent rules on GME, including the recent proposed rule on Medicaid GME. Commenters expressed their concern regarding how these rules have disallowed pieces of residents' training time and imposed significant administrative burdens. One commenter requested that CMS limit its application of policy regarding ''patient care activities'' to that of didactic activities ''* * * to prevent going down a policy 'slippery slope' that ends up with parsing every aspect of residents' training time into a 'patient care,' or 'nonpatient care' bucket.'' The commenter noted that the proposed policy on vacation and sick leave illustrates ''* * * the downward spiral that starts to occur if CMS attempts to extend its 'patient care' analysis beyond didactic activities.'' One commenter stated that with the exception of bench research, all other resident training time should be included in the determination of an FTE for Medicare direct GME and IME payment purposes. The commenter stated that CMS should discontinue its efforts to parse out residents' time; instead the goal should be for Medicare to pay its fair share of GME costs. Another commenter stated that CMS' policy that only permits residents to be counted for IME payment purposes if they are involved in patient care has no statutory basis, and CMS ''* * * apparently excludes time spent in didactic activities based on assumption that because IME is an adjustment to the DRG system, it is inherently related to patient care.''

Response: We do not believe that the proposed rule, if finalized, would have contributed to an inappropriate ''parsing'' of a resident's training into patient care and nonpatient care time. Particularly for IME purposes, this is an important distinction to make, given that the IME adjustment is intended to account for the higher patient care costs experienced by teaching hospitals relative to nonteaching hospitals. We refer readers to the August 18, 2006 **Federal Register** (71 FR 48080) for a more detailed discussion on the distinction between patient care and nonpatient care activities. With respect to the proposed policy to exclude vacation and sick leave from the FTE resident calculation, as we stated above, we believe vacation, sick leave, and other types of approved leave are neither patient care nor nonpatient care, but fall into a third category of time that is not spent in any aspect of residency training.

Comment: One commenter stated that ''[i]n *University Medical Center* v. *Blue Cross/Blue Shield Association, 2005–D36, June 7, 2005*, the CMS Administrator concurred with the findings of the Provider Reimbursement Review Board (PRRB Decision No. 2005–D36, dated April 12, 2005) that held that the critical factor related to vacation time was 'consistency' in its treatment by the fiscal intermediary for each provider.'' The commenter stated that, currently, the provider includes vacation time when the resident's rotation is to a site owned by the provider and excludes vacation time when the resident's rotation is to a site

not related to the provider. The commenter stated that its fiscal intermediary has accepted this process and that this method is consistent with the Administrator's decision in the aforementioned case. Furthermore, the commenter asserted that treating vacation and sick leave differently from orientation, is inconsistent with the Administrator's decision in *University Medical Center* v. *Blue Cross/Blue Shield Association*.

Response: We believe the commenter has confused the Administrator's findings in the case of *University Medical Center* v. *Blue Cross/Blue Shield Association* with respect to the vacation time at issue. In that case, the Provider (plaintiff) believed that since it continued to pay the residents' salaries while the residents were assigned and took vacation time while at another hospital, the Provider should be allowed to include those FTEs in its direct GME and IME FTE count. The fiscal intermediary disagreed with the Provider, asserting that ''it is common practice to include vacation time in the resident count for the hospital where residents are assigned and working when the vacation time is taken.'' The Provider Reimbursement Review Board (the Board) concluded that the fiscal intermediary's methodology was proper, but that '' * * * the critical factor is consistency. As long as vacation time is accounted for in the same manner for each hospital, as presented by the Intermediary, each hospital will be properly reimbursed.'' We stated that we ''acknowledge and concur with the Board's conclusion that *the Intermediary properly disallowed the FTE time spent on vacation* * * *'' (emphasis added). In this case, we did not state that we agree with the Board that the most important factor is *consistency*. The fiscal intermediary was correct to disallow from the provider's FTE count the vacation time that occurred at another hospital because of the longstanding Medicare policy that ''a hospital cannot claim the time spent by residents training at another hospital'' (42 CFR 412.105(f)(1)(iii)(A) for IME and § 413.78(b) for direct GME). A method for counting FTEs is *not* correct merely because hospitals, or fiscal intermediaries, for that matter, apply it consistently. As the Administrator concluded in the case, ''the Intermediary properly disallowed the vacation time from the Provider's FTE counts, since that FTE was not spent training at the Provider, nor were those FTEs assigned to the Provider during the vacation time in question.'' Thus, under our *previous* policy (and current policy, since we are not finalizing our proposal at this time), regardless of which hospital is paying the resident's salaries and fringe benefits, the hospital to which the resident is assigned during the time the vacation was taken is the hospital that counts that FTE time for direct GME and IME. If the rotation schedule does not clearly indicate where the resident is assigned during the time the vacation is taken, the hospitals to which the resident rotates over the course of the academic year would divide and count that vacation time proportionately based on the amount of time spent in actual training at the respective hospitals. For example, if during the course of the academic year, a resident spends 25 percent of his time at Hospital A, and 75 percent of his time at Hospital B, and there are two weeks of vacation in which the resident was not assigned to either Hospital A or Hospital B, then it is appropriate for Hospital A to count 25 percent of that vacation time and Hospital B to count 75 percent of the vacation time for that FTE resident.

Comment: One commenter noted that, unlike the ACGME, the AOA has adopted a clear policy on resident vacations and other leaves of absence; osteopathic programs are required to give interns and residents a minimum of 10 business days of vacation time during each year of training. The commenter stated that the AOA's policy is in place to protect residents and ameliorate stress and fatigue and that CMS' proposal contradicts efforts aimed at establishing limits on time spent in the training environment which have been established to protect the health, safety, and well being of residents and their patients and disregards the need for residents to have personal time away from their program. Another commenter disagreed with the argument for removing vacation and sick leave because the ACGME and Residency Review Committees are not explicit regarding this time which causes the amount of vacation and sick leave to vary from program to program. The commenter stated that there are numerous cases where Residency Review committees ''* * * are open-ended or not explicit in number or content, leaving programs to interpret within a range of behavior or activities, what is acceptable for accreditation.''

Response: Regardless of whether a clear policy on vacation, sick leave, and other types of approved leave has been adopted by any of the accrediting bodies, we believe that vacation, sick leave, and other types of approved leave for purposes of counting residents for Medicare direct GME and IME fit into a third category that is neither patient care nor nonpatient care. Furthermore, under the proposed rule, we were *not* ''*disallowing*'' vacation, sick leave, and other types of approved leave, but rather excluding the time spent by residents on vacation, sick leave, and other types of approved leave from the calculation of an FTE.

Comment: One commenter requested that if CMS finalizes the proposed policy, it should be made date specific to October 1, 2007, instead of for cost reporting periods beginning on or after October 1, 2007, because hospitals with cost reporting periods beginning October 1, 2007, would be disadvantaged for a longer period of time than hospitals with different cost reporting periods.

Response: As previously stated, we are *not* finalizing our proposed policy with respect to vacation and sick leave at this time.

Comment: One commenter asked CMS to comment on the statement that ''[t]he hospital complex consists of the hospital and any hospital based providers * * * and subproviders * * * Therefore, if the orientation takes place in a related medical school, such time could not be counted for GME purposes.''

Response: The commenter is correct that the hospital complex consists of the hospital, hospital-based providers, and subproviders; that is, facilities that meet the provider-based criteria at § 413.65. The commenter is also correct that orientation activities in a related medical school cannot be counted. As we stated on page 24814 of the May 3, 2007 proposed rule, ''Because we recognize the distinct character of orientation activities as essential to the provision of patient care by residents, and the fundamental differences between orientation and the typical didactic activities in which a resident may participate throughout a residency training program, we are proposing to continue to count the time spent by residents in orientation activities, *whether they occur in the hospital or nonhospital setting*, and are proposing to amend our regulations accordingly'' (emphasis added). However, the nonhospital settings we were referring to in which orientation may be counted are those nonprovider settings such as physicians' offices or clinics, where patient care is routinely provided and a hospital is permitted to count the time spent by residents in accordance with our regulations at §§ 412.105(f)(1)(ii)(C) and 413.78(f), *not* other nonhospital settings where time spent by residents is not permitted to be counted for purposes of direct GME and IME. We

note that the policy to allow time spent by residents in orientation activities to be counted if it occurs in nonhospital sites where patient care is routinely provided is new, and will be effective for cost reporting periods beginning on or after October 1, 2007. (In order to count resident training time in orientation activities for IME and direct GME purposes at the nonhospital site, hospitals must comply with the regulations at §§ 413.78(f) and 412.105(f)(1)(ii)(C)). Prior to cost reporting periods beginning on or after October 1, 2007, the effective date of this policy, time spent by residents in orientation was permitted to be counted for direct GME and IME only if it occurred in the hospital complex.

Comment: One comment addressed Medicare's rules regarding shared programs and residency training at nonhospital sites, when the shared programs are operated by a foundation. The commenter stated that because at least two hospitals may be involved with the foundation, the interns and residents keep time studies to document time spent in patient care in each location so that each hospital is aware of its financial commitment. The foundation bills the hospital monthly for the total costs of educating the interns and residents for training in the hospital and nonhospital site. The commenter stated that its fiscal intermediary considers this a shared program (neither hospital is paying for ''all or substantially all'' of the costs) and has disallowed the time spent in nonhospital settings. Another commenter urged CMS to '' * * * continue to fund, to the best of your ability, the ongoing education of newly graduated physicians and allow the dedicated medical education professionals the opportunity to continue to make a difference in the future of health care.'' We also received comments concerning the counting of didactic time.

Response: We did not propose to make any changes to our regulations specifically regarding residency training at nonhospital sites or general GME funding mechanisms and counting of didactic time. Therefore, we believe the comments are outside the scope of this rule and we are not responding to them at this time.

d. Regulation Changes

In the FY 2008 IPPS proposed rule (72 FR 24815), we proposed, for cost reporting periods beginning on or after October, 1, 2007, for direct GME and IME payments, that time spent by residents on vacation or sick leave would not be included in the determination of what constitutes an FTE resident (or would be removed from both the numerator and denominator of the FTE count) for both IME and direct GME payment purposes. In addition, we proposed to continue to count time spent by residents in orientation activities for both IME and direct GME payment purposes. We proposed to amend the regulations at §§ 412.105(f)(1)(iii)(A) and 413.78(b). Lastly, we proposed to amend § 413.75(b) to include the definition of the term ''orientation activities'' and to amend the definition of ''patient care activities'' to add ''orientation activities.''

After consideration of the public comments received, at this time we are *not* finalizing our proposed policy to remove vacation and sick leave from the determination of the FTE calculation. However, we are adopting as final our proposed policy to continue counting time spent by residents in orientation activities for IME and direct GME in the hospital complex; and, effective for cost reporting periods beginning on or after October 1, 2007, we are finalizing the policy that orientation activities occurring in a nonhospital site where patient care is routinely provided and the hospital complies with the regulations set for at §§ 413.78(f), and 412.105(f)(1)(ii)(C)) may be counted. We are also finalizing our proposal to define ''orientation activities'' the regulations text at § 413.75(b) as ''activities that are principally designed to prepare an individual for employment as a resident in a particular setting, or for participation in a particular specialty program and patient care activities associated with that particular specialty program.'' We are also finalizing our proposal to modify the definition of ''patient care activities'' to mean ''the care and treatment of particular patients, including services for which a physician or other practitioner may bill, and orientation activities as defined in this section.''

E. Payments to Disproportionate Share Hospitals (DSHs): Technical Correction

1. Background

Section 1886(d)(5)(F) of the Act provides for additional payments to subsection (d) hospitals that serve a disproportionate share of low-income patients. The Act specifies two methods for a hospital to qualify for the Medicare disproportionate share hospital (DSH) adjustment. Under the first method, hospitals that are located in an urban area and have 100 or more beds may receive a DSH payment adjustment if the hospital can demonstrate that, during its cost reporting period, more than 30 percent of its net inpatient care revenues are derived from State and local government payments for care furnished to indigent patients. These hospitals are commonly known as ''Pickle hospitals.'' The second method, which is also the most commonly used method for a hospital to qualify, is based on a complex statutory formula under which payment adjustments are based on the level of the hospital's DSH patient percentage, which is the sum of two fractions: The ''Medicare fraction'' and the ''Medicaid fraction.'' The Medicare fraction is computed by dividing the number of patient days that are furnished to patients who were entitled to both Medicare Part A and Supplemental Security Income (SSI) benefits by the total number of patient days furnished to patients entitled to benefits under Medicare Part A. The Medicaid fraction is computed by dividing the number of patient days furnished to patients who, for those days, were eligible for Medicaid but were not entitled to benefits under Medicare Part A by the number of total hospital patient days in the same period.

$$\text{DSH Patient Percentage} = \frac{\text{Medicare, SSI Days}}{\text{Total Medicare Days}} + \frac{\text{Medicaid, Non-Medicare Days}}{\text{Total Patient Days}}$$

2. Technical Correction: Inclusion of Medicare Advantage Days in the Medicare Fraction of the Medicare DSH Calculation

In the FY 2005 IPPS final rule (69 FR 49099), we discussed in the preamble our policy change to reflect the inclusion of the days associated with Medicare + Choice (now Medicare Advantage) beneficiaries under Medicare Part C in the Medicare fraction of the DSH calculation. In that rule, we indicated that we were revising the regulation text at § 412.106(b)(2)(i) to incorporate this policy. However, we inadvertently did not make a change in the regulation text to conform to the preamble language. We also inadvertently did not propose to change § 412.106(b)(2)(iii) in the FY 2005 final rule, although we intended to do so. Section 412.106(b)(2)(i) of the regulations discusses the numerator of the Medicare fraction of the Medicare disproportionate patient percentage (DPP) calculation while § 412.106(b)(2)(iii) of the regulations discusses the denominator of the Medicare fraction of the Medicare DPP. We intended to amend the regulation text with respect to both the numerator and the denominator of the Medicare fraction of the Medicare DPP. Therefore, in this final rule with comment period, we are making this technical correction to § 412.106(b)(2)(i) and to § 412.106(b)(2)(iii) to make them consistent with the preamble language of the FY 2005 IPPS final rule and to effectuate the policy iterated in that rule.

With respect to the technical correction that we are making to § 412.106(b)(2)(iii), we note that we ordinarily publish a notice of proposed rulemaking in the **Federal Register** to provide for a period for public comment before a provision such as this would take effect. However, we can waive this procedure if an agency finds good cause that a notice and comment procedure is impracticable, unnecessary, or contrary to the public interest and incorporates a statement of the finding and its reasons in the notice issued. We find it unnecessary to undertake notice and comment rulemaking in this instance for the additional change to § 412.106(b)(2)(iii) because this notice merely provides technical corrections to the regulations and does not make any substantive changes to the regulations or our existing policy. Therefore, under 5 U.S.C. 533(b)(B), for good cause, we waive notice and comment procedures.

F. Hospital Emergency Services Under EMTALA (§ 489.24)

1. Background

Sections 1866(a)(1)(I), 1866(a)(1)(N), and 1867 of the Act impose specific obligations on certain Medicare-participating hospitals and CAHs. (Throughout this section of this final rule with comment period, when we reference the obligation of a ''hospital'' under these sections of the Act and in our regulations, we mean to include CAHs as well.) These obligations concern individuals who come to a hospital emergency department and request examination or treatment for medical conditions, and apply to all of these individuals, regardless of whether they are beneficiaries of any program under the Act.

The statutory provisions cited above are frequently referred to as the Emergency Medical Treatment and Labor Act (EMTALA), also known as the patient antidumping statute. EMTALA was passed in 1986 as part of the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), Pub. L. 99–272. Congress incorporated these antidumping provisions within the Social Security Act to ensure that individuals with emergency medical conditions are not denied essential lifesaving services because of a perceived inability to pay.

Under section 1866(a)(1)(I)(i) of the Act, a hospital that fails to fulfill its EMTALA obligations under these provisions may be liable for termination of its Medicare provider agreement, which would result in loss of all Medicare and Medicaid payments.

Section 1867 of the Act sets forth requirements for medical screening examinations for individuals who come to the hospital and request examination or treatment for a medical condition. The section further provides that if a hospital finds that such an individual has an emergency condition, it is obligated to provide that individual with either necessary stabilizing treatment or an appropriate transfer to another medical facility where stabilization can occur.

The EMTALA statute also outlines the obligation of hospitals to receive appropriate transfers from other hospitals. Section 1867(g) of the Act states that a participating hospital that has specialized capabilities or facilities (such as burn units, shock-trauma units, neonatal intensive care units or (with respect to rural areas) regional referral centers as identified by the Secretary in regulation) shall not refuse to accept an appropriate transfer of an individual who requires these specialized capabilities or facilities if the hospital has the capacity to treat the individual.

The regulations implementing section 1867 of the Act are found at 42 CFR 489.24.

2. Recent Legislation Affecting EMTALA Implementation

a. Secretary's Authority To Waive Requirements During National Emergencies

Section 1135 of the Act authorizes the Secretary to temporarily waive or modify the application of several requirements of titles XVIII, XIX, or XXI of the Act (the Medicare, Medicaid, and State Children's Health Insurance Program provisions), and their implementing regulations in an emergency area during an emergency period. Section 1135(g)(1) of the Act defines an ''emergency area'' as the geographical area in which there exists an emergency or disaster declared by the President pursuant to the National Emergencies Act or the Robert T. Stafford Disaster Relief and Emergency Assistance Act (subsection A) and a public health emergency declared by the Secretary pursuant to section 247d of Title 42 of the United States Code. Section 1135(g)(1) of the Act also defines an ''emergency period'' as the period during which such a disaster exists. Section 1135(b) of the Act lists the actions for which the otherwise applicable statutory provisions and implementing regulations may be waived. Included among these actions are, in subparagraph (b)(3)(A), a transfer of an individual who has not been stabilized in violation of the EMTALA requirements restricting transfer until an individual has been stabilized (section 1867(c) of the Act) and, in subparagraph (b)(3)(B), the direction or relocation of an individual to receive medical screening in an alternate location, in accordance with an appropriate State emergency preparedness plan.

Section 1135(b) of the Act further states that a waiver or modification provided for under section 1135(b)(3) of the Act shall be limited to a 72-hour period beginning upon implementation of a hospital disaster protocol. All other waivers arising out of section 1135(b) of the Act (except for section 1135(b)(7)) ordinarily may continue in effect for the duration of the declaration of emergency or disaster, or the declaration of a public health emergency, or for 60-day periods as described in section 1135(e)(1) of the Act.

To take into account the effect of section 1135(b)(3)(A) waivers on the EMTALA requirements, § 489.24(a)(2) of our regulations specifies that sanctions

under the EMTALA regulations for inappropriate transfer during a national emergency do not apply to a hospital with a dedicated emergency department located in an emergency area, as specified in section 1135(g)(1) of the Act. However, the current regulations do not address the Secretary's authority to waive sanctions associated with the direction or relocation of an individual to receive a medical screening examination.

For further information about section 1135 of the Act and its applicability, we refer readers to the CMS Web site: *http://www.cms.hhs.gov/Emergency/02_Hurricanes.asp*.

b. Provisions of the Pandemic and All-Hazards Preparedness Act

On December 19, 2006, Congress enacted the Pandemic and All-Hazards Preparedness Act, Pub. L. 109–417. Section 302(b) of Pub. L. 109–417 makes two specific changes that affect EMTALA implementation in emergency areas during an emergency period.

As noted above, section 1135(b)(3) of the Act authorized the Secretary to waive sanctions for either the transfer of an unstabilized individual in violation of the requirements of section 1867(c) of the Act where such transfer is necessitated by the circumstances of the declared emergency in the emergency area during the emergency period or the direction or relocation of an individual to receive medical screening in an alternate location in accordance with an appropriate State emergency preparedness plan. Section 302(b)(1)(A) of Pub. L. 109–417 amended section 1135(b)(3)(B) of the Act to state that sanctions for the direction or relocation of an individual for screening may be waived where, in the case of a public health emergency that involves a pandemic infectious disease, that direction or relocation occurs pursuant to a State pandemic preparedness plan, or to an appropriate State emergency preparedness plan. In addition, sections 302(b)(1)(B) and (b)(1)(C) of Pub. L. 109–417 amended section 1135(b) of the Act to further state that ''if a public health emergency involves a pandemic infectious disease (such as pandemic influenza), the duration of a waiver or modification for such emergency shall be determined in accordance with section 1135(e) of the Act as such subsection applies to public health emergencies.'' The amendments to section 1135(b) of the Act made by section 302(b) of Pub. L. 109–417 are effective as of the date of enactment of that legislation (December 19, 2006) and apply to public health emergencies declared pursuant to section 247d of Title 42 of the United States Code.

c. Revisions to the EMTALA Regulations

Currently, the EMTALA regulation at 42 CFR 489.24(a)(2) specifies that sanctions under this section (§ 489.24) for inappropriate transfers during a national emergency do not apply to a hospital with a dedicated emergency department located in an emergency area, as specified in section 1135(g)(1) of the Act. To implement the changes made by section 302(b) of Pub. L. 109–417 and to ensure that our regulations accurately reflect section 1135 of the Act, in the FY 2008 IPPS proposed rule (72 FR 24816), we proposed to make two changes to paragraph (a)(2) of § 489.24. First, we proposed to specify that the sanctions that do not apply are those for either the inappropriate transfer of an individual who has not been stabilized, or those for the direction or relocation of an individual to receive medical screening at an alternate location. We also proposed to revise § 489.24 by adding a second sentence to paragraph (a)(2) to state that a waiver of these sanctions for EMTALA violations is limited to a 72-hour period beginning upon the implementation of a hospital disaster protocol, except that if a public health emergency involves a pandemic infectious disease (such as pandemic influenza), the duration of the waiver will be determined in accordance with section 1135(e) of the Act as it applies to public health emergencies. This proposed change would clarify that, in the case of public health emergencies involving pandemic infectious diseases, the waiver of EMTALA sanctions is not limited to 72 hours, but will remain in effect until the termination of the applicable declaration of a public health emergency as described in section 1135(e)(1)(B) of the Act.

We received several public comments that generally supported the updating of the regulations to reflect the new legislation. These comments did not include any specific recommendations for change. Therefore, we are adopting as final, without modification, the proposed revision to § 489.24 to specify that the sanctions that do not apply are those for either the inappropriate transfer of an individual who has not been stabilized, or those for the direction or relocation of an individual to receive medical screening at an alternate location and to add a second sentence to paragraph (a)(2) to state that a waiver of these sanctions for EMTALA violations is limited to a 72-hour period beginning upon the implementation of a hospital disaster protocol, except that if a public health emergency involves a pandemic infectious disease (such as pandemic influenza), the duration of the waiver will be determined in accordance with section 1135(e) of the Act as it applies to public health emergencies.

G. Disclosure of Physician Ownership in Hospitals and Patient Safety Measures

1. Disclosure of Physician Ownership in Hospitals

Section 1866 of the Act states that any provider of services (except a fund designated for purposes of section 1814(g) and section 1835(e) of the Act) shall be qualified to participate in the Medicare program and shall be eligible for Medicare payments if it files a Medicare provider agreement and abides by the requirements applicable to Medicare provider agreements. These requirements are incorporated into our regulations in 42 CFR part 489, subparts A and B (Provider Agreements and Supplier Approval). Section 1861(e) of the Act defines the term ''hospital.'' Section 1861(e)(9) of the Act defines a hospital and authorizes the Secretary to establish requirements as he finds necessary in the interest of patient health and safety. Section 1820(e)(3) of the Act authorizes the Secretary to establish criteria necessary for an institution to be certified as a CAH.

Section 5006 of Pub. L. 109–171 (DRA) required the Secretary to develop a ''strategic and implementing plan'' to address certain issues related to physician investment in ''specialty hospitals.'' In the strategic and implementing plan included in our ''Final Report to the Congress and Strategic and Implementing Plan Required under Section 5006 of the Deficit Reduction Act of 2005'' issued on August 8, 2006 (page 69), available on our Web site at: *http://www.cms.hhs.gov/PhysicianSelfReferral/06a_DRA_Reports.asp* (hereinafter referred to as the ''DRA Report to Congress''), we stated that our plan for addressing issues related to physician investment in specialty hospitals involved promoting transparency of investment. Consistent with that approach, we stated that we would adopt a disclosure requirement that would require hospitals to disclose to patients whether they are physician-owned, and if so, disclose the names of the physician owners. Accordingly, in the FY 2008 IPPS proposed rule (72 FR 24816), we proposed changes to regulations governing Medicare provider agreements to effectuate this

change, under our authority at sections 1861(e)(9), 1820(e) and 1866 of the Act, and under our rulemaking authority at sections 1871 and 1102 of the Act. We sought comment as to whether these changes would be best effectuated through changes to the Medicare provider agreement regulations or whether it would be more appropriate to include these changes in the conditions of participation (CoPs) applicable to hospitals and CAHs.

Specifically, we proposed to amend § 489.3 to define a ''physician-owned hospital'' as any participating hospital (which, as defined in § 489.24 includes any CAH) in which a physician or physicians have an ownership or investment interest. We solicited comments on whether, for purposes of the ownership disclosure requirements only, the definition of ''physician-owned hospital'' should exclude certain physician ownership or investment interests based on the nature of the interest, or the relative size of the interest, or the entity's assets (for example, whether the interest would satisfy the exceptions at §§ 411.356(a) and (b) for physician ownership or investment interest in publicly-traded securities and mutual funds).

We proposed to add a new provision at § 489.20(u)(1) to require that patients be given written notice that a hospital is physician-owned and that the list of physician owners is available upon request. We proposed to require that the notice, in a manner reasonably designed to be understood by all patients, disclose the fact that the hospital meets the Federal definition of a ''physician-owned hospital'' and that patients will be provided the list of the hospital's physician owners upon request. In addition, we proposed to add a new provision at § 489.20(u)(2) that would require hospitals to require that all physician owners who are also members of the hospital's medical staff to disclose, in writing, their ownership interest in the hospital to all patients they refer to the hospital, as a condition of continued medical staff membership. Patient disclosure would be required at the time a physician makes a referral. We stated that we believed that these provisions are in the interest of the health and safety of individuals who are furnished services in these institutions. The proposed notice requirement would permit individuals to make more informed decisions regarding their treatment, and to evaluate whether the existence of a financial relationship, in the form of an ownership interest, suggests a conflict of interest that is not in their best interest.

In order to enforce these proposed requirements, we proposed to amend § 489.12 to permit CMS to deny a provider agreement to a hospital that does not have procedures in place to notify patients of physician ownership in the hospital. In addition, we proposed to amend § 489.53 to permit CMS to terminate a provider agreement with a physician owned hospital if the hospital fails to comply with the requirements of § 489.20(u).

We received a number of comments concerning our proposal. Most came from national and state hospital associations, and a few were received from individual hospitals, and two associations representing physician-owned hospitals.

Comment: Commenters representing hospital associations were generally supportive of the physician ownership disclosure proposal, but recommended that CMS except from the definition of a ''physician-owned hospital'' those hospitals in which the physician ownership is limited to holding publicly traded securities or mutual funds that satisfy the requirements of the exceptions under §§ 411.356(a) or (b).

Response: We agree and are revising the regulatory text at § 489.3 accordingly.

Comment: Several commenters requested that CMS revise the timing of the hospital's written notice of the disclosure of physician ownership to patients. The commenters requested that CMS clarify that the written notice be given to patients, not only with the provision of a package of information regarding preadmission testing and registration, but also at the time of scheduling.

Response: We believe that the specific revisions suggested by the commenters would not be feasible. The scheduling of most inpatient or outpatient services is performed by a staff member in the physician's office, rather than the patient. Therefore, the first contact between the hospital and the patient usually will be when the hospital sends a package of information regarding scheduled preadmission testing and registration for a planned hospital admission for inpatient care or outpatient service. We do recognize the benefit to patients of receiving this information at the earliest opportunity, and in those instances where the patient and the hospital are scheduling the inpatient admission or outpatient services, we encourage hospitals to provide the notice at that time.

Comment: Several commenters noted that the proposal requires physician-owned hospitals to provide patients with a list of the hospital's physician owners or investors upon request, but does not establish any timeframe for the hospital to furnish the list to the patient. The commenters suggested that the list be provided to the patient at the time the request is made.

Response: While we expect a hospital to make this list available to a patient upon request, and that this should be done at the earliest possible opportunity, we believe that it is important to allow the hospital some degree of flexibility regarding the manner and form by which it meets this requirement. Therefore, we are not revising the provision to include any specific timeframe for making the list available.

Comment: Many comments addressed the appropriateness of our decision to propose a physician ownership disclosure requirement for all hospitals. Although most commenters supported our proposal, two commenters recommended that the proposed ownership disclosure requirement be limited to those facilities that meet the specialty hospital definition under section 1877(h)(7) of the Act. The commenters contended that the research to date raises concerns about ownership and referrals related to specialty hospitals only, and that similar concerns have not been raised about other types of hospitals with physician ownership.

Response: We are not adopting the commenters' suggested changes. We believe that it is in the best interests of patients to have available physician ownership information concerning all hospitals.

Comment: Most commenters agreed with our proposal to effectuate a hospital physician ownership disclosure requirement through changes to the regulations governing Medicare provider agreements. However, one commenter recommended that the proposal be effectuated through changes to the CoPs applicable to hospitals and CAHs. The commenter believed that the use of the CoPs is more practical for enforcement purposes and states that the provider agreement rules are only referenced when a healthcare facility initially enrolls, with no subsequent review of compliance.

Response: We are finalizing the hospital physician ownership disclosure requirements through the regulations governing Medicare provider agreements. We believe that this approach is better than using the Medicare CoPs, which are centered on quality of care. We also disagree with the commenters' assertion that there is no subsequent review of compliance with the provider agreement rules after

initial enrollment. CMS reviews compliance with the provider agreement rules after initial enrollment, and, if a provider is out of compliance, CMS may terminate its provider agreement.

Comment: One commenter urged CMS to make the disclosure requirement applicable to all financial arrangements between physicians and all hospitals, not just ownership and investment interests by physicians in physician-owned hospitals. The commenter encouraged CMS to require disclosure of financial interests such as salaries, bonuses, medical directorships, and consulting arrangements, as well as any other arrangements conferring a material financial benefit upon a physician by a hospital.

Response: We are not adopting the commenter's suggestions. We believe the physician ownership disclosure proposal focuses on those hospitals whose ownership or investment interests might be most relevant to patients in deciding whether and where to undergo medical treatment. The voluminous amount of information suggested by the commenter would be of little additional benefit to patients in making such decisions. In addition, we believe that our proposal strikes the appropriate balance between providing useful information to the patient and not unnecessarily burdening physicians and hospitals.

Comment: One commenter strongly opposed physician ownership disclosure as a condition of continued medical staff membership and stated that hospitals have no effective means to police medical staff members in this manner. Another commenter believed that changes must be made to § 482.22(c), which lists requirements for medical staff bylaws, to provide that bylaws of physician-owned hospitals must contain a provision requiring physician ownership disclosure as condition of continued medical staff membership.

Response: We believe that the overall intent of this physician ownership disclosure requirement is to provide patients with the information that they need to decide whether the existence of a financial relationship, in the form of a physician ownership interest, is in their best interests as a potential patient of the hospital. Therefore, we are not finalizing the proposed provision at § 489.20(u)(2), which ties a physician's continued medical staff membership to this disclosure of ownership, because it would not provide any additional protections for patients that are not already contained under § 489.20(u)(1). Furthermore, the provision at § 489.20(u)(1) allows hospitals much greater flexibility in meeting this disclosure requirement than would be provided by the inclusion of § 489.20(u)(2).

For similar reasons, we disagree with the commenter who believed that changes must be made to the medical staff bylaws provision under the CoPs at § 482.22(c). As previously stated, we believe that the appropriate area for the hospital physician ownership disclosure requirement is in the regulations governing Medicare provider agreements.

Comment: One commenter asserted that the disclosure of physician ownership interests provides no useful information to the patient unless the notice is done in concert with an outreach and educational initiative for patients that provides other information about the hospital so the patient can make an informed decision.

Response: We believe the disclosure of physician ownership interests does provide useful information. However, we will carefully consider the recommendation to conduct an outreach and educational initiative for patients.

Comment: One commenter recommended that CMS establish a de minimis level of physician investment below which no notification would be necessary.

Response: We are not establishing a de minimis level of physician investment. Rather than establishing an arbitrary threshold, we believe that patients should be informed about any level of physician investment. However, as discussed above, we have excluded ownership interests that satisfy the exceptions found in §§ 411.356(a) and (b) from the definition of a physician-owned hospital found at § 498.3.

Comment: One commenter (a healthcare system) recommended that instead of revoking hospital privileges of physician investors or owners that fail to provide the required disclosure, CMS should deny payments to physicians who fail to disclose their ownership in a hospital at the time the referral is made.

Response: We are not adopting the commenter's suggestion. We do not believe that we have the statutory authority to take such action.

After consideration of the public comments we received, we are revising the proposed changes to § 489.3 by adding a provision to except from the definition of a ''physician-owned hospital'' those hospitals in which the physician ownership is limited to holding publicly traded securities or mutual funds that satisfy the requirements of the exception under§ 411.356(a) or (b). We are adopting as final, without modification, the proposed revisions to §§ 489.12 and 489.53. We are redesignating proposed paragraph (u)(1) of § 489.20 as paragraph (u) and revising it to specify that the hospital should furnish a list of physician owners to patients at the beginning of their hospital stay or outpatient visit. We are not adopting the proposed regulatory text under § 489.20(u)(2).

2. Patient Safety Measures

In the DRA Report to Congress (page 67), we stated that it was appropriate to issue further guidance on what we expect of all hospitals with respect to the appraisal, initial treatment, and referral, when appropriate, of patients with medical emergencies. The Medicare hospital CoP regulations at 42 CFR Part 482 impose requirements on hospitals that have emergency departments, as well as requirements on hospitals without emergency departments. We believe that hospitals should be required to disclose to patients at the time of inpatient admission or registration for an outpatient service information concerning whether a physician is available on the premises 24 hours per day, 7 days per week. In the FY 2008 IPPS proposed rule (72 FR 24817), under the authority at sections 1861(e)(9), 1820(e)(3), 1866, 1871, and 1102 of the Act (described previously), we proposed to add a new provision at § 489.20(v) to require that hospitals furnish all patients notice at the beginning of their hospital stay or outpatient service if a doctor of medicine or a doctor of osteopathy is not present in the hospital 24 hours per day, 7 days per week, and to describe how the hospital will meet the medical needs of any patient who develops an emergency medical condition, at a time when no physician is present in the hospital. We sought comment as to whether this change would be best effectuated through changes to the Medicare provider agreement regulations or whether it would be more appropriate to include this change in the CoP requirements applicable to acute care hospitals and CAHs.

It has also come to our attention that some hospitals have called 9–1–1 when a patient has gone into respiratory arrest, a physician has not been on the premises, and the onsite clinical personnel have lacked the requisite equipment or training to provide the required assessment, initial treatment, and referrals that are required of all hospitals. In some cases, required interventions to initiate emergency treatment may be outside the scope of

practice of the clinical personnel onsite. This has occurred even in hospitals that operate emergency departments. Therefore, in the FY 2008 IPPS proposed rule (72 FR 24817), we solicited comments on whether current requirements for emergency service capability in hospitals with or without emergency departments should be strengthened in certain areas. Specifically, we sought feedback on whether present regulatory provisions should be expanded with respect to the type of clinical personnel that must be present at all times in hospitals with and without emergency departments; the competencies that such personnel must demonstrate, such as training in Advanced Cardiac Life Support, or successful completion of specified professional training programs; the type of emergency response equipment that must be available and the manner in which it must be available, such as in each emergency department, or inpatient unit, among others; and whether emergency departments must be operated 24 hours per day, 7 days per week. We indicated that after evaluating the comments we received, we would consider whether we should amend the Medicare hospital CoPs related to the provision of emergency services in hospitals with and without emergency departments.

We received a number of public comments on our proposal. Our response follows each comment summary below.

Comment: Most of the commenters stated that only physician-owned specialty hospitals should be required to disclose to patients whether or not a physician is on site at all times and how emergencies are handled when a physician is not on-site. The commenters stated that physician-owned specialty hospitals are generally not part of a larger system of care, most often have no transfer agreements with other hospitals, and tend to specialize in one type of care delivery, and that these factors create challenges to their ability to treat the unexpected emergency. The commenters also stated that ''full-service community'' hospitals are part of a network of care in their community that involves referrals from local physician practices, reliance on local trauma support networks, participation in local emergency medical transport systems, and transfer agreements among facilities. The commenters stated that applying additional requirements to full-service community hospitals is unnecessary and costly. However, they stated that applying them to physician-owned specialty hospitals could be used to assure that such hospitals, in the absence of being part of the broader care network, meet minimum standards for patient safety.

In contrast, several other commenters stated that they supported a requirement to disclose onsite physician coverage, so long at it applies to all hospitals, regardless of whether they are physician-owned. Another commenter supported extending the physician onsite disclosure requirement to all hospitals and CAHs, stating that ideally all patients should be informed regarding the level of physician staffing present in the hospital. This commenter stated that patients should know, for example, whether a physician will remain in the hospital until all patients have recovered from anesthesia and are fully conscious. The commenter also stated that patients should be informed of the hospital's emergency response plan when a physician is not on the premises 24 hours per day, 7 days per week.

Response: Fully informed consumers of hospital and CAH services play an essential role in assuring the quality of health care services. It is important to provide patients information about whether a hospital or CAH has a physician on site at all times, and the provisions for handling emergencies when a physician is not on site. Consumers may have an expectation that a hospital or CAH, as a health care facility that operates 24 hours per day, 7 days per week, always has a physician on site. Therefore, it is important to ensure that consumers are provided accurate information on the availability of physician services at the point when they are about to become patients of a hospital or CAH. All hospitals and CAHs are required to have the basic capabilities to address medical emergencies within their facilities, regardless of whether a physician is always on-site and, in the case of hospitals, regardless of whether or not the hospital offers an emergency department or service. (All CAHs are required to offer emergency services.)

In order to be fully informed, consumers also should be made aware of the hospital's or CAH's process for addressing medical emergencies that may occur when a physician is not on-site. Therefore, we have not adopted the suggestion of those commenters who would condition consumers'' access to this information on the basis of the ownership structure of the hospital or CAH. Medicare hospital health and safety regulations are the same for all participating hospitals, regardless of their type of ownership. The same is true for the Medicare CAH health and safety regulations. For example, all hospitals are expected to have the capability to assess a medical emergency, provide initial treatment, and refer, or transfer, a patient to another hospital when appropriate. Given the uniform applicability of hospital and CAH requirements to all hospitals or CAHs, there is no basis for requiring only those hospitals or CAHs that are physician-owned to make the proposed physician availability-related disclosures. The disclosure requirement is appropriately triggered when a hospital or CAH does not have a physician on-site 24 hours per day, 7 days per week.

As discussed in the regulatory impact statement, this final rule with comment period change will not have any significant economic impact on hospitals or CAHs. Therefore, we disagree with those commenters who stated that the physician-availability disclosure requirement would be costly for hospitals and CAHs.

Comment: Several commenters addressed whether the physician-availability disclosure requirement should apply to CAHs as well as hospitals. One commenter stated that the problem of hospitals ill-prepared to handle patient emergencies seems confined to specialty hospitals. This commenter stated that the physician-availability disclosure requirement would affect numerous rural hospitals and CAHs, which often do not have physicians on site, and often utilize physician assistants or nurse practitioners, or both, with a supervising physician available by telephone. The commenter stated that, because these hospitals have established referral systems and often serve as staging areas where patients are stabilized for transport, additional requirements would be unnecessary and costly. The commenter also stated that limiting rural hospitals' and CAHs' ability to utilize physician assistants and nurse practitioners would create substantial access problems.

Similarly, another commenter stated that the proposed change would be a particular problem for CAHs. This commenter stated that the CAH CoPs have been written expressly to provide flexibility for CAHs so they can meet the needs of patients in isolated, rural communities without having a physician in the building at all times.

In contrast, another commenter stated that the physician-availability disclosure requirement should include CAHs because there is no clear distinction between the services offered by physician-owned specialty hospitals and CAHs. This commenter stated that, while most CAHs are nonprofit

hospitals that provide a range of services to small rural communities, some CAHs are for-profit hospitals and some offer specialty services. The commenter stated he was aware of one CAH with a hand surgery focus and another with a cardiac catheterization laboratory. The commenter stated that, because CAHs are not restricted in the services they offer, they should have the same physician-availability disclosure requirements as other hospitals.

Response: We agree that the physician-availability disclosure requirement should apply equally to hospitals and CAHs. Although we agree with those commenters who stated that many CAHs do not have physicians on-site at all times, and thus would be required to disclose this information to patients, we do not agree that this alone is sufficient reason to exempt CAHs from the physician-availability disclosure requirement. It would not be appropriate to condition patients' access to information on physician availability on whether or not the patients reside in a rural area. Because we do not require either hospitals or CAHs to have a physician on-site at all times, there is no basis to require only hospitals, but not CAHs, to disclose this information. As one commenter stated, the CAH CoPs provide greater flexibility in many areas when compared to the hospital CoPs. However, this is not the case in all areas. CAHs, for example, must provide emergency services to the public 24 hours per day, while hospitals have the option of operating an emergency department or not. Furthermore, as one commenter stated, there is no restriction on the types of services a CAH may offer. Thus, it may be difficult for consumers to distinguish whether a given provider is a hospital or a CAH. Consumers may not be aware that there are different requirements for CAHs than for facilities participating in Medicare as hospitals. Consumers may make assumptions about physician availability in any ''hospital,'' because the facility provides services 24 hours per day, 7 days per week, regardless of whether that facility is a CAH or hospital for Medicare purposes. Therefore, it is important for consumers to be informed whether a physician is always on site, and how emergencies will be handled when no physician is available. We do not agree that this requirement limits the ability of rural hospitals or CAHs to utilize physician assistants and nurse practitioners. There is no change to the current requirements in the CoPs for hospitals or CAHs regarding utilization of physician assistants and nurse practitioners.

Comment: One commenter stated a physician-availability disclosure requirement should apply only to facilities that provide inpatient care 24 hours per day, 7 days per week. The commenter stated that CMS should clarify in the FY 2008 IPPS final rule that the requirement does not apply to provider-based settings that are not open at all times and/or are not providing inpatient services. The commenter stated that disclosure of emergency services capabilities in the registration process will create greater confusion for patients.

Response: Because the requirement in this final rule with comment period applies to hospitals and CAHs, and because both hospitals and CAHs are required to make inpatient care available on a 24 hours per day, 7 days per week basis, we do not agree that the requirement would be narrowed to fewer facilities by applying it only to facilities providing inpatient care. We do not agree that provider-based locations are subject to a separate standard because they do not participate separately in Medicare. The health and safety standards apply to provider-based locations of hospitals or CAHs. All provider-based locations of a hospital or CAH are considered part of the hospital or CAH, and the provider-based location's clinical services, including the provision of emergency services, must be integrated into those of the hospital or CAH.

Comment: One commenter stated that the proposed requirement fails to provide timely or useful information to the patient, indicating that the physician-availability disclosure occurs post-admission. The commenter stated that CMS should undertake a comprehensive consumer education initiative prior to imposing this requirement, so that the patient could make an informed choice about any particular facility.

Response: We do not agree that the patient would, in every instance, already have been admitted before the required physician-availability disclosure would take place. We proposed that, for purposes of this disclosure requirement, the hospital stay or outpatient visit begins with the provision of a package of information regarding scheduled preadmission testing and registration for a planned hospital admission for inpatient care or the provision of a package of information regarding an outpatient service. It is our intent that this information be provided by the hospital to the consumer at the first point of contact related to a particular admission or episode of care, in order to enhance its usefulness.

CMS strives, as part of its overall commitment to increasing the transparency of the health care system to consumers, to equip consumers with information that enables them to make informed choices about their care. Education and outreach about our efforts are ongoing. We do not agree that implementation of the physician-availability disclosure requirement should be delayed until a specific educational campaign is concluded.

Comment: One commenter stated that hospitals are currently required to have a plan in place for how they will provide care, including emergency care. The commenter stated that the physician-availability disclosure requirement is therefore redundant and places an unnecessary burden on the facility.

Response: We do not agree that having a plan in place for providing emergency care is the same as informing consumers about the availability of physician services and how emergency care will be provided to them when a physician is not on the premises. The physician-availability disclosure required by this final rule with comment period is intended to assure provision of important information to consumers making healthcare decisions. This requirement is separate and distinct from any requirements contained in the hospital and CAH CoPs regarding the provision of emergency services and the care planning for each patient, among others.

Comment: One commenter stated that the required disclosure ''arguably'' should be extended to cover the presence or absence of particular equipment, or the level of expertise of the facility's staff, so the patient can understand what to expect depending on the nature of the emergency and the capabilities of the facility, and the likelihood of transfer to another hospital for any particular medical emergency.

Response: Ideally, an informed consumer would have a comprehensive understanding of the capabilities of any hospital and/or CAH, in terms of both specialized equipment and staff, that the consumer considers using. However, the commenter's suggestion would greatly expand the impact of the physician-availability disclosure requirement. Instead of affecting only those hospitals and CAHs that do not have a physician present 24 hours per day, 7 days per week, the commenter's suggested approach would affect all hospitals and CAHs. It would not only increase the number of hospitals and CAHs affected by the requirement, but would also

require them to provide a much more detailed and lengthy disclosure. Therefore, at this time, we will not be mandating an expanded disclosure requirement. Hospitals have the flexibility to provide such additional information to consumers, either as a general policy or in response to questions from consumers.

Comment: One commenter did not object to informing patients when a physician is not always in the facility. However, the commenter hoped that the required notice of how emergency services would be provided would not imply that patients are receiving less than competent care. The commenter stated that a hospital could make an affirmative statement, such as the following: ''This facility provides competent, fully trained staff who are available 24 hours per day. At times when there is no physician present, patients with health care emergencies will be assessed and treated by qualified medical personnel, with physician support available via telephone or pager, and will be transferred to another hospital, when necessary.''

Response: We are requiring hospitals and CAHs that do not have a physician on site at all times to state this in the notice, as well as how the hospital will meet the needs of any patient who develops an emergency medical condition at a time when there is no physician present. We are not prescribing specific wording for the notice, since the content must be tailored to the circumstances of the individual hospital or CAH, but we note that the commenter's suggested wording lacks explicit notice that the hospital does not provide on-site availability of a physician 24 hours per day, 7 days per week. Adoption of this disclosure requirement does not imply anything about the competency of care provided by other types of practitioners.

Comment: One commenter stated that many long term care hospitals do not provide on-site, 24-hour physician coverage and asked whether such hospitals are expected to have such on-site physician services. The commenter stated that if this is CMS's interpretation, then this interpretation should be translated into the CoPs.

Response: In this final rule with comment period, we are requiring hospitals and CAHs that do not have a physician on-site 24 hours per day, 7 days per week to disclose this information to patients, along with information about how they would handle an emergency when no physician is on-site. We are not making any changes to the hospital or CAH CoPs in this final rule with comment period. The current hospital and CAH CoPs do not include a requirement for a physician to be on site at all times.

Comment: One commenter stated that CMS should clarify whether the disclosure would be required only on those days when a physician is not on-site, or at all times if there is a possibility that a physician might not be on-site. The commenter also stated that CMS should indicate whether it expects a separate, signed notice to be provided to patients or a general notice to be included with other registration/admission documents outlining basic provisions for unexpected emergency care.

Response: This final rule with comment period requires any hospital or CAH that does not provide for a physician to be on-site 24 hours per day, 7 days per week to disclose this to patients, regardless of whether or not it happens to have 24-hour on-site coverage at the beginning of the patient's hospital or CAH inpatient stay or outpatient visit. A hospital or CAH that is required under this final rule with comment period to make a physician-availability disclosure must do so via a written notice provided to each patient. The required notice must indicate that a physician is not on-site 24 hours per day, 7 days per week, and how the hospital or CAH handles medical emergencies that arise when a physician is not on-site. This final rule with comment period does not require that the hospital have the patient sign the notice.

Comment: Most of the commenters stated that they supported strengthening requirements concerning emergency services capabilities only for physician-owned specialty hospitals. The commenters stated that applying additional requirements for ''full-service community hospitals'' is unnecessary and costly, but that applying them to physician-owned facilities could be used to assure that such hospitals, in the absence of being part of the broader care network, meet minimum standards for patient safety.

Another commenter also stated that any additional measures should be applied only to physician-owned facilities and not to ''full-service community hospitals.'' This commenter also stated that State and Federal rules for CAHs already delineate in detail the emergency equipment that must be provided on site, mechanisms to contact on-call practitioners, timeframes within which these practitioners must be available, and written agreements and protocols for transferring patients for further treatment when indicated.

In contrast, several other commenters stated that, in the interest of patient safety, they would support a requirement that standardized the type and training of clinical personnel available in any Medicare-certified hospital. These commenters also stated that they endorse setting minimum requirements for equipment.

Another commenter stated that the condition of participation for emergency services in both hospitals and CAHs should be strengthened, stating that a hospital should be capable of handling any situation that can reasonably be expected to occur. This commenter also stated that, to develop the precise regulatory provisions in the revised CoPs, CMS should convene an expert panel or, at a minimum, consult with the State agencies and recognized national accrediting bodies, as required by section 1863 of the Act.

Finally, one commenter, while stating support for CMS setting minimum emergency service standards, also stated concern that such standards might conflict with, duplicate, or exceed current State requirements. The commenter stated CMS should coordinate development of minimum emergency medical response standards with interested professional organizations as well as State authorities overseeing medical emergency response.

Response: We disagree with those commenters who supported expanded regulatory requirements for emergency services capabilities only for physician-owned facilities, because Medicare hospital health and safety standards apply to all participating hospitals, regardless of their type of ownership. The same is true for the Medicare CAH health and safety standards. We are not aware of any evidence to support the view that patient safety concerns arise only in physician-owned facilities, and that what the commenters call ''full-service community hospitals'' always assure that care is provided to patients in the right time and setting, due to these hospitals' participation in a community network of care. Our oversight experience suggests that patient safety problems can occur in hospitals with any type of ownership structure, or any type of service mix, whether general or specialized. For this reason, any changes to the hospital CoPs that we might propose would apply to all hospitals, and likewise any changes to the CAH CoPs that we might propose would apply to all CAHs.

We also note the support of several commenters for a requirement that would standardize the type and training of clinical personnel, as well as minimum requirements for equipment

that must be available in any Medicare-certified hospital. With respect to whether strengthening the minimum Medicare requirements related to emergency services would raise issues of conflict with or exceeding State requirements, this potential situation is not unique to emergency services standards. Medicare health and safety standards, unless the regulations specifically state to the contrary, preempt conflicting State requirements. We will consider the commenters' views, including the suggestions about consultation, in undertaking any future rulemaking to strengthen emergency services minimum requirements.

We agree with the commenter who pointed out that the existing emergency services requirements for CAHs are detailed. For example, our current regulations at 42 CFR 485.618(a) require CAHs to make emergency services available on a 24-hour per day basis. Section 485.618(b) establishes the standard regarding availability of equipment, supplies, and medication used in treating emergency cases. Our regulations at § 485.618(d) are specific as to the required CAH emergency services clinical personnel, including the types of personnel, as well as the mode and timeframe for their availability. These regulatory standards are more detailed than those found in the comparable hospital emergency services CoP (42 CFR 482.55), or in the applicable hospital standard at 42 CFR 482.12(f)(2) for hospitals that do not have emergency departments. Because hospitals tend to be larger health care facilities than CAHs, it might be reasonable to provide a comparable degree of specificity, appropriate to the hospital setting, in the hospital CoPs. We will consider the commenters' views in undertaking any future rulemaking on this issue.

Comment: One commenter stated that, if CMS chooses to expand the existing regulatory provisions for clinical personnel that must be present at all times, CMS should use broad terminology. The commenter provided the following examples: ''qualified medical personnel,'' or ''practitioners with appropriate privileges,'' or ''licensed practitioners,'' including the phrase ''with/and physician supervision to the extent required by state law.'' The commenter also stated CMS should drop its current usage of the term ''licensed independent practitioner'' in its regulations, stating that this causes ''endless headaches'' for hospitals that wish to utilize physician assistants.

Response: We note that the terminology suggested by the commenter is very broad and would not significantly expand upon existing requirements. We will consider these comments in undertaking any future rulemaking on this issue.

Comment: Two commenters specifically addressed our request for comments on whether we should require hospitals with emergency departments to provide these emergency services 24 hours per day, 7 days per week. They stated that such a requirement would best come from the State or EMS district in which the hospital is located, because these authorities would be in the best position to judge the need for emergency care.

Response: CAHs are currently required, under the provisions at 42 CFR 485.618(a), to make emergency services available on a 24 hours per day basis. Because hospitals with emergency departments tend to be larger health care facilities than CAHs, it might be reasonable to require hospital emergency departments to also be available to the public on a 24 hour per day basis. We will consider these comments in any future rulemaking on this issue.

Comment: Two commenters addressed the issue of locating the physician-availability disclosure requirement in the provider agreement rules rather than in the CoPs. One commenter stated it would be more appropriate to include the requirement in the provider agreement rules. The other commenter stated that it would be easier to ensure compliance if CMS implemented the physician-availability disclosure requirement through the CoPs rather than the provider agreement regulations. This commenter further stated that, unlike the CoPs referenced regularly, the provider agreement rules are only referenced when a health care facility initially enrolls [in Medicare], with no subsequent review of compliance. The commenter also stated that placement of the requirement in the CoPs would facilitate the commenter's consultation with Medicare requirements when developing its own practices and policies.

Response: We agree that the physician-availability disclosure requirement should be included in the provider agreement regulations. We do not agree that the provider agreement regulations are referenced only when a facility initially enrolls in Medicare. Each participating provider must comply with all applicable provisions of the provider agreement regulations found in 42 CFR Part 489, and CMS may terminate its provider agreement if the provider is not in substantial compliance with these requirements. A provider's compliance with applicable provider agreement regulations is reviewed through a variety of means, including on-site investigation of complaints. An example of this mode of compliance review is our enforcement of the special responsibilities of Medicare hospitals in emergency cases, commonly known as EMTALA (EMTALA requirements are addressed in § 489.24, with certain related provisions found in § 489.20). Therefore, we do not agree that the regulatory language we proposed concerning disclosure of physician on-site availability should be moved to the CoPs in order to permit compliance reviews. We do not consider the ease of referencing the regulations containing the CoPs, versus that of referencing those containing the provider agreement regulations, a compelling reason to move the regulatory language from the provider agreement regulations to the CoPs.

After consideration of the public comments we received, we are adopting as final, with one technical correction, the addition of a provision at § 489.20(v) to require that hospitals and CAHs furnish all patients written notice at the beginning of their hospital stay or outpatient service if a doctor of medicine or a doctor of osteopathy is not present in the hospital 24 hours per day, 7 days per week, and to describe how the hospital or CAH will meet the medical needs of any patient who develops an emergency medical condition at a time when no physician is present in the hospital. We are correcting a typographical error that appeared in the proposed rule. The proposed regulatory text stated that the required notice must indicate ''* * *how the hospital will meet the medical needs of any inpatient who develops an emergency medical condition* * *'' We intended to say ''patient'' instead of ''inpatient,'' as is clear from the references to outpatient visits in two other places within the regulatory text we originally proposed.

H. Rural Community Hospital Demonstration Program

In accordance with the requirements of section 410A(a) of Pub. L. 108–173, the Secretary has established a 5-year demonstration program (beginning with selected hospitals' first cost reporting period beginning on or after October 1, 2004) to test the feasibility and advisability of establishing ''rural community hospitals'' for Medicare payment purposes for covered inpatient hospital services furnished to Medicare beneficiaries. A rural community hospital, as defined in section 410A(f)(1), is a hospital that—

- Is located in a rural area (as defined in section 1886(d)(2)(D) of the Act) or is treated as being located in a rural area under section 1886(d)(8)(E) of the Act;
- Has fewer than 51 beds (excluding beds in a distinct part psychiatric or rehabilitation unit) as reported in its most recent cost report;
- Provides 24-hour emergency care services; and
- Is not designated or eligible for designation as a CAH.

As we indicated in the FY 2005 IPPS final rule (69 FR 49078), in accordance with sections 410A(a)(2) and (a)(4) of Pub. L. 108–173 and using 2002 data from the U.S. Census Bureau, we identified 10 States with the lowest population density from which to select hospitals: Alaska, Idaho, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Utah, and Wyoming (Source: *U.S. Census Bureau Statistical Abstract of the United States: 2003*). Nine rural community hospitals located within these States are currently participating in the demonstration program for FY 2008. (Of the 13 hospitals that participated in the first 2 years of the demonstration program, 4 hospitals located in Nebraska have withdrawn from the program; they have become CAHs.)

Under the demonstration program, participating hospitals are paid the reasonable costs of providing covered inpatient hospital services (other than services furnished by a psychiatric or rehabilitation unit of a hospital that is a distinct part), applicable for discharges occurring in the first cost reporting period beginning on or after the October 1, 2004 implementation date of the demonstration program. Payments to the participating hospitals will be the lesser amount of the reasonable cost or a target amount in subsequent cost reporting periods. The target amount in the second cost reporting period is defined as the reasonable costs of providing covered inpatient hospital services in the first cost reporting period, increased by the inpatient prospective payment update factor (as defined in section 1886(b)(3)(B) of the Act) for that particular cost reporting period. The target amount in subsequent cost reporting periods is defined as the preceding cost reporting period's target amount, increased by the inpatient prospective payment update factor (as defined in section 1886(b)(3)(B) of the Act) for that particular cost reporting period.

Covered inpatient hospital services are inpatient hospital services (defined in section 1861(b) of the Act), and include extended care services furnished under an agreement under section 1883 of the Act.

Section 410A of Pub. L. 108–173 requires that, ''in conducting the demonstration program under this section, the Secretary shall ensure that the aggregate payments made by the Secretary do not exceed the amount which the Secretary would have paid if the demonstration program under this section was not implemented.'' Generally, when CMS implements a demonstration program on a budget neutral basis, the demonstration program is budget neutral in its own terms; in other words, the aggregate payments to the participating providers do not exceed the amount that would be paid to those same providers in the absence of the demonstration program. This form of budget neutrality is viable when, by changing payments or aligning incentives to improve overall efficiency, or both, a demonstration program may reduce the use of some services or eliminate the need for others, resulting in reduced expenditures for the demonstration program's participants. These reduced expenditures offset increased payments elsewhere under the demonstration program, thus ensuring that the demonstration program as a whole is budget neutral or yields savings. However, the small scale of this demonstration program, in conjunction with the payment methodology, makes it extremely unlikely that this demonstration program could be viable under the usual form of budget neutrality. Specifically, cost-based payments to the nine participating small rural hospitals are likely to increase Medicare outlays without producing any offsetting reduction in Medicare expenditures elsewhere. Therefore, a rural community hospital's participation in this demonstration program is unlikely to yield benefits to the participant if budget neutrality were to be implemented by reducing other payments for these providers.

In order to achieve budget neutrality for this demonstration program for FY 2008, we are adjusting the national inpatient PPS rates by an amount sufficient to account for the added costs of this demonstration program. We are applying budget neutrality across the payment system as a whole rather than merely across the participants in this demonstration program. As we discussed in the FY 2005, FY 2006, and FY 2007 IPPS final rules (69 FR 49183; 70 FR 47462; and 71 FR 48100), we believe that the language of the statutory budget neutrality requirements permits the agency to implement the budget neutrality provision in this manner. For FY 2008, using cost report data for FY 2003, adjusted to account for the increased estimated costs for the remaining nine participating hospitals, we estimate that the adjusted amount will be $9,681,893. This estimated adjusted amount reflects the estimated difference between the participating hospitals' costs and the IPPS payment based on data from the hospitals' cost reports. We discuss the payment rate adjustment that is required to ensure the budget neutrality of the demonstration program for FY 2008 in section II.A.4. of the Addendum to this final rule with comment period.

We did not receive any public comments on the provisions of the demonstration project discussed in the proposed rule.

V. Changes to the IPPS for Capital-Related Costs

(If you choose to comment on issues in this section, please include the caption ''Capital IPPS Payment Adjustments'' at the beginning of your comment.)

A. Background

Section 1886(g) of the Act requires the Secretary to pay for the capital-related costs of inpatient acute hospital services ''in accordance with a prospective payment system established by the Secretary.'' Under the statute, the Secretary has broad authority in establishing and implementing the IPPS for acute care hospital inpatient capital-related costs. We initially implemented the IPPS for capital-related costs in the August 30, 1991 IPPS final rule (56 FR 43358), in which we established a 10-year transition period to change the payment methodology for Medicare hospital inpatient capital-related costs from a reasonable cost-based methodology to a prospective methodology (based fully on the Federal rate).

Federal fiscal year (FY) 2001 was the last year of the 10-year transition period established to phase in the IPPS for hospital inpatient capital-related costs. For cost reporting periods beginning in FY 2002, capital IPPS payments are based solely on the Federal rate for most acute care hospitals (other than certain new hospitals and hospitals receiving certain exception payments). The basic methodology for determining capital prospective payments using the Federal rate is set forth in § 412.312. For the purpose of calculating payments for each discharge, the standard Federal rate is adjusted as follows:

(Standard Federal Rate) × (DRG Weight) × (Geographic Adjustment Factor (GAF)) × (Large Urban Add-on, if

applicable) × (COLA for hospitals located in Alaska and Hawaii) × (1 + Capital DSH Adjustment Factor + Capital IME Adjustment Factor, if applicable).

Hospitals also may receive outlier payments for those cases that qualify under the threshold established for each fiscal year as specified in § 412.312(c) of the regulations.

The regulations at § 412.348(f) provide that a hospital may request an additional payment if the hospital incurs unanticipated capital expenditures in excess of $5 million due to extraordinary circumstances beyond the hospital's control. This policy was originally established for hospitals during the 10-year transition period, but as we discussed in the August 1, 2002 IPPS final rule (67 FR 50102), we revised the regulations at § 412.312 to specify that payments for extraordinary circumstances are also made for cost reporting periods after the transition period (that is, cost reporting periods beginning on or after October 1, 2001). Additional information on the exception payment for extraordinary circumstances in § 412.348(f) can be found in the FY 2005 IPPS final rule (69 FR 49185 and 49186).

During the transition period, under §§ 412.348(b) through (e), eligible hospitals could receive regular exception payments. These exception payments guaranteed a hospital a minimum payment percentage of its Medicare allowable capital related costs depending on the class of the hospital (§ 412.348(c)), but were available only during the 10-year transition period. After the end of the transition period, eligible hospitals can no longer receive this exception payment. However, even after the transition period, eligible hospitals receive additional payments under the special exceptions provisions at § 412.348(g), which guarantees all eligible hospitals a minimum payment of 70 percent of its Medicare allowable capital-related costs provided that special exceptions payments do not exceed 10 percent of total capital IPPS payments. Special exceptions payments may be made only for the 10 years from the cost reporting year in which the hospital completes its qualifying project, and the hospital must have completed the project no later than the hospital's cost reporting period beginning before October 1, 2001. Thus, an eligible hospital may receive special exceptions payments for up to 10 years beyond the end of the capital IPPS transition period. Hospitals eligible for special exceptions payments are required to submit documentation to the intermediary indicating the completion date of their project. (For more detailed information regarding the special exceptions policy under § 412.348(g), refer to the August 1, 2001 IPPS final rule (66 FR 39911 through 39914) and the August 1, 2002 IPPS final rule (67 FR 50102).)

Under the IPPS for capital-related costs, § 412.300(b) of the regulations defines a new hospital as a hospital that has operated (under current or previous ownership) for less than 2 years. (For more detailed information, we refer readers to the August 30, 1991 final rule (56 FR 43418).) During the 10-year transition period, a new hospital was exempt from the capital IPPS for its first 2 years of operation and was paid 85 percent of its reasonable costs during that period. Originally, this provision was effective only through the transition period and, therefore, ended with cost reporting periods beginning in FY 2002. Because we believe that special protection to new hospitals is also appropriate even after the transition period, as discussed in the August 1, 2002 IPPS final rule (67 FR 50101), we revised the regulations at § 412.304(c)(2) to provide that, for cost reporting periods beginning on or after October 1, 2002, a new hospital (defined under § 412.300(b)) is paid 85 percent of its Medicare allowable capital related costs through its first 2 years of operation, unless the new hospital elects to receive fully prospective payment based on 100 percent of the Federal rate. (We refer readers to the August 1, 2001 IPPS final rule (66 FR 39910) for a detailed discussion of the statutory basis for the system, the development and evolution of the system, the methodology used to determine capital related payments to hospitals both during and after the transition period, and the policy for providing exception payments.)

Section 412.374 provides for the use of a blended payment amount for prospective payments for capital-related costs to hospitals located in Puerto Rico. Accordingly, under the capital IPPS, we compute a separate payment rate specific to Puerto Rico hospitals using the same methodology used to compute the national Federal rate for capital-related costs. In general, hospitals located in Puerto Rico are paid a blend of the applicable capital IPPS Puerto Rico rate and the applicable capital IPPS Federal rate.

Prior to FY 1998, hospitals in Puerto Rico were paid a blended capital IPPS rate that consisted of 75 percent of the capital IPPS Puerto Rico specific rate and 25 percent of the capital IPPS Federal rate. However, effective October 1, 1997 (FY 1998), in conjunction with the change to the operating IPPS blend percentage for hospitals located in Puerto Rico required by section 4406 of Pub. L. 105–33, we revised the methodology for computing capital IPPS payments to hospitals in Puerto Rico to be based on a blend of 50 percent of the capital IPPS Puerto Rico rate and 50 percent of the capital IPPS Federal rate. Similarly, in conjunction with the change in operating IPPS payments to hospitals located in Puerto Rico for FY 2005 required by section 504 of Pub. L. 108–173, we again revised the methodology for computing capital IPPS payments to hospitals located in Puerto Rico to be based on a blend of 25 percent of the capital IPPS Puerto Rico rate and 75 percent of the capital IPPS Federal rate effective for discharges occurring on or after October 1, 2004.

B. Policy Change

As we have noted above, the Secretary has broad authority under the statute in establishing and implementing the IPPS for hospital inpatient capital-related costs. We initially exercised that authority in the August 30, 1991 IPPS final rule (56 FR 43358). Among other provisions of that rule, we established the 10-year transition period to change the payment methodology for Medicare hospital inpatient capital-related costs from a reasonable cost-based methodology to a prospective methodology (based fully on the Federal rate). The purpose of that lengthy transition was to allow hospitals sufficient time to adjust to payment under a fully prospective system based on a uniform national rate. In that rule, we also established the initial standard Federal payment rate for capital related costs, as well as the mechanism for updating that rate in subsequent years. For FY 1992, we computed the standard Federal payment rate for capital-related costs under the IPPS by updating the FY 1989 Medicare inpatient capital cost per case by an actuarial estimate of the increase in Medicare inpatient capital costs per case. Each year after FY 1992, we update the capital standard Federal rate, as provided at § 412.308(c)(1), to account for capital input price increases and other factors. The regulations at § 412.308(c)(2) provide that the capital Federal rate is adjusted annually by a factor equal to the estimated proportion of outlier payments under the capital Federal rate to total capital payments under the capital Federal rate. In addition, § 412.308(c)(3) requires that the capital Federal rate be reduced by an adjustment factor equal to the estimated proportion of payments for (regular and special) exceptions under § 412.348. Section 412.308(c)(4)(ii) requires that

the capital standard Federal rate be adjusted so that the effects of the annual DRG reclassification and the recalibration of DRG weights, and changes in the geographic adjustment factor are budget neutral.

In the FY 2008 IPPS proposed rule, we noted that since the implementation of the IPPS for hospital inpatient capital-related costs, we have carefully monitored the adequacy of the standard Federal payment rate for capital-related costs and the updates provided under the existing regulations. On several occasions, the standard Federal payment rate has been adjusted. Section 1886(g)(1)(A) of the Act required a 7.4 percent reduction to the capital rate for discharges occurring after September 30, 1993. (We implemented that reduction to the rate in § 412.308(b)(2) of our regulations, effective in FY 1994.) Section 412.308(b)(3) of the regulations describes the 0.28 percent reduction to the capital rate made in FY 1996 as a result of the revised policy of paying for transfers. In FY 1998, we implemented section 4402 of Pub. L. 105–33, which required that, for discharges occurring on or after October 1, 1997, and before October 1, 2002, the unadjusted capital standard Federal rate be reduced by 17.78 percent (above the previous statutory reduction of 7.4 percent). (As a result of that reduction, the FY 1998 standard Federal payment rate for capital-related costs was $371.51, compared to $438.92 in FY 1997.) As we discussed in the FY 2003 IPPS final rule (67 FR 50102) and implemented in § 412.308(b)(6), a small part of that reduction was restored effective October 1, 2002.

We also noted that, in general, under a PPS, standard payment rates should reflect the costs that an average, efficient provider would bear to provide the services required for quality patient care. Payment rate updates should also account for the changes necessary to continue providing such services. Updates should reflect, for example, the increased costs that are necessary to provide for the introduction of new technology that improves patient care. Updates should also take into account the productivity gains that, over time, allow providers to realize the same, or even improved, quality outcomes with reduced inputs and lower costs. Hospital margins, the difference between the costs of actually providing services and the payments received under a particular system, thus provide some evidence concerning whether payment rates have been established and updated at an appropriate level over time for efficient providers to provide necessary services. All other factors being equal, sustained substantial positive margins may suggest that payment rates and updates have exceeded what is required to provide those services. It is to be expected, under a PPS, that highly efficient providers might regularly realize positive margins, while less efficient providers might regularly realize negative margins. However, a PPS that is correctly calibrated should not necessarily experience sustained periods in which providers generally realize substantial positive Medicare margins.

Under the capital IPPS in particular, it seems especially appropriate that there should not be sustained significant positive margins across the system as a whole. Prior to the implementation of the capital IPPS, Congress mandated that the Medicare program pay only 85 percent of hospitals' inpatient Medicare capital costs. During the first 5 years of the capital IPPS, Congress also mandated a budget neutrality adjustment, under which the standard Federal capital rate was set each year so that payments under the system as a whole equaled 90 percent of estimated hospitals' inpatient Medicare capital costs for the year. Finally, as we discussed in the proposed rule, Congress has twice adjusted the standard Federal capital rate (a 7.4 percent reduction beginning in FY 1994, followed by a 17.78 percent reduction beginning in FY 1998). On the second occasion in particular, the specific congressional mandate was ''to apply the budget neutrality factor used to determine the Federal capital payment rate in effect on September 30, 1995* * * to the unadjusted standard Federal capital payment rate'' for FY 1998 and beyond. (The designated budget neutrality factor constituted a 17.78 percent reduction.) This statutory language indicates that Congress considered the payment levels in effect during FYs 1992 through 1995, established under the budget neutrality provision to pay 90 percent of hospitals' inpatient Medicare capital costs in the aggregate, appropriate for the capital IPPS. The statutory history of the capital IPPS thus suggests that the system in the aggregate should not provide for continuous, large positive margins.

In preparation for the proposed rule, we analyzed the adequacy of the existing capital IPPS rates by conducting a comprehensive review of hospital experience under the IPPS for hospital inpatient capital-related costs, with particular attention to the relationship between acute care hospital capital Medicare costs and payments under the capital IPPS. Specifically, we examined the relationship between the Medicare inpatient capital costs of hospitals that are paid under the IPPS for hospital inpatient capital-related costs and their payments under that system over a number of years. We derived both cost and Medicare payment data from the Medicare cost report. Specifically, cost data were derived from Worksheet D, Part I, columns 10 and 12 and Part II, columns 6 and 8, and Medicare payment data from Worksheet E, Part A, Lines 9 and 10. We began our analysis with FY 1996, the year in which the statutory budget neutrality provision expired. (As we have discussed, for FYs 1992 through 1995, section 1886(g)(1)(A) of the Act required that the capital Federal rate also be adjusted by a budget neutrality factor so that aggregate payments for inpatient hospital capital costs were projected to equal 90 percent of the payments that would have been made for capital-related costs on a reasonable cost basis during the fiscal year. As discussed in section III. of the Addendum to the proposed rule and this final rule with comment period, we employed an actuarial capital cost model (described in Appendix B of the FY 2002 IPPS final rule (66 FR 40099)) to estimate the aggregate payments that would have been made on the basis of reasonable cost in order to determine the required budget neutrality adjustment. As a result of the expiration of the budget neutrality provision, the standard Federal payment rate for capital-related costs increased to $461.96 in FY 1996 from $376.83 in FY 1995.) Our analysis in the proposed rule extended through FY 2004, the most recent year for which we had relatively complete cost report information. We examined data across all hospitals subject to the capital IPPS and across the categories of hospitals (for example, urban and rural, and teaching and nonteaching) that we normally employ in conducting impact analyses. Specifically, we looked at the difference between aggregate hospital payments from the capital IPPS and hospitals' aggregate Medicare inpatient capital costs. We determined the inpatient hospital Medicare capital margins for each year of the period from FY 1996 through FY 2004. (A margin is calculated as the difference between payments and costs, divided by payments.) We similarly calculated the aggregate margins for the period FY 1996 through FY 2004 (the aggregate difference between payments and costs over the period, divided by total payments over the period). We also calculated aggregate margins for the

period FY 1998 through FY 2004 (excluding FY 1996 and 1997). As a result of the expiration of the statutory budget neutrality provision, the capital standard Federal rate increased to $461.96 in FY 1996 from $376.83 in FY 1995. The capital standard Federal rate was $438.92 in FY 1997, before it was reduced to $371.51 in FY 1998 under section 4402 of Pub. L. 105–33, which required that the unadjusted capital standard Federal rate be reduced by 17.78 percent. The capital standard Federal rates for FYs 1996 and 1997 were thus substantially higher than the rates for the periods immediately preceding those years, and in the subsequent years (FY 1998 and beyond). The margins for those years are correspondingly higher than the margins for the other years in the period, and thus it could be argued that the margins for FYs 1996 and 1997 are unrepresentative. The table below summarizes the findings of this analysis for the proposed rule.

HOSPITAL INPATIENT MEDICARE CAPITAL MARGINS

	1996	1997	1998	1999	2000	2001	2002	2003	2004	Aggregate 1996–2004	Aggregate 1998–2004 (excluding 1996 and 1997)
U.S.	17.5	13.4	7.0	6.8	7.3	7.9	8.7	7.7	5.1	9.0	7.2
URBAN	17.6	13.8	7.8	7.4	8.3	8.9	10.3	9.1	6.3	9.9	8.3
RURAL	17.2	11.1	2.0	2.7	1.3	1.5	−1.7	−1.2	−2.9	3.4	0.3
No DSH Payments	16.2	11.8	4.4	4.4	5.6	5.6	5.0	4.8	−0.9	6.9	4.2
Has DSH Payments	18.3	14.4	8.5	8.1	8.2	8.7	9.9	8.6	6.7	9.9	8.4
$1 − $249,999	14.5	12.9	−0.4	3.1	1.6	4.2	2.5	0.6	−3.5	3.3	1.8
$250,000 − $999,999	15.5	9.3	2.2	1.5	3.0	2.5	−1.2	0.2	−3.8	2.9	0.5
$1,000,000 − $2,999,999	16.8	12.8	8.5	9.2	8.6	7.2	9.0	4.6	3.0	8.7	7.1
$3,000,000 or more	20.1	16.6	10.4	9.1	9.7	11.6	13.4	12.5	10.1	12.4	11.1
TEACHING	19.4	15.7	9.8	9.7	11.1	11.7	13.9	13.2	11.3	12.9	11.6
NON–TEACHING	15.3	10.5	3.3	2.9	2.2	2.8	1.6	0.2	−3.2	3.9	1.3
Census Division:											
New England (1)	26.9	25.8	17.0	15.1	18.2	20.5	21.3	21.2	20.5	20.9	19.3
Middle Atlantic (2)	19.1	15.5	11.0	11.5	13.8	16.3	18.4	17.9	15.0	15.5	15.0
South Atlantic (3)	17.9	13.9	5.8	3.9	5.9	5.2	6.3	7.5	4.9	7.9	5.7
East North Central (4)	18.2	12.7	6.2	7.2	8.8	8.6	6.3	8.1	7.1	9.2	7.5
East South Central (5)	14.8	11.1	3.3	4.1	3.4	2.9	3.0	−1.8	−4.2	3.9	1.4
West North Central (6)	14.2	6.9	0.0	−0.4	−1.6	1.9	2.6	3.3	1.1	3.2	1.1
West South Central (7)	13.3	8.3	3.4	3.1	0.6	0.1	1.4	−1.2	−4.2	2.5	0.3
Mountain (8)	17.3	14.8	8.4	7.6	7.4	6.4	3.2	3.1	0.7	7.2	4.9
Pacific (9)	20.5	16.1	12.4	11.3	11.5	12.8	15.5	12.8	9.2	13.5	12.2
Code 99	24.1	26.1	14.9	16.7	20.0	20.9	20.6	25.2	22.3	21.4	20.3
Bed Size:											
< 100 beds	17.7	13.0	4.7	3.5	2.8	2.5	−1.7	−1.3	−5.6	3.5	0.5
100–249 beds	15.1	10.6	3.5	4.5	4.7	6.0	6.1	4.5	1.1	6.2	4.4
250–499 beds	18.9	14.0	8.7	8.3	10.4	10.5	11.7	11.6	10.6	11.7	10.4
500–999 beds	19.7	17.5	11.1	10.3	10.7	10.4	12.5	10.3	6.8	12.0	10.2
>= 1000 beds	8.2	13.8	2.1	0.2	−6.6	−3.5	8.7	6.3	1.4	3.1	1.8

Notes:
Based on Medicare Cost Report hospital data updated as of the 4th quarter of 2006.
Medicare payment is from Worksheet E, Part A, Lines 9 and 10.
Expenses are from Worksheet D, Part I, columns 10 and 12 and Part II, columns 6 and 8.
We apply the outlier trimming methodology developed by MedPAC.
Code 99 applies when census division information was not specified in the Medicare Cost Report hospital data.

As the table showed, hospital inpatient Medicare capital margins have been very high across all hospitals during the period from FY 1996 through FY 2004. The margin for the entire period was 9.0 percent (7.2 percent, excluding FYs 1996 and 1997). For particular years, margins across all hospitals ranged from a high of 17.5 percent in FY 1996 to a low of 5.1 percent in FY 2004. While the margins fell after a high in FY 1996 of 17.5 to 6.8 percent in FY 1999, they rose again to 8.7 percent in FY 2002 before declining to 5.1 percent in FY 2004.

There were similar results among most types of hospitals and groupings of hospitals by geographic region. For example, teaching hospitals have realized margins of 12.9 percent (11.6 percent, excluding FYs 1996 and 1997) during the period from FY 1996 through FY 2004, with a high margin of 19.4 percent in FY 1996 and a low margin of 9.7 percent in FY 1999. Urban hospitals realized margins of 9.9 percent during the period from FY 1996 through FY 2004 (8.3 percent, excluding FYs 1996 and 1997). DSH hospitals realized margins of 9.9 percent over the period (8.4 percent, excluding FYs 1996 and 1997), while non-DSH had aggregate margins of 6.9 percent (4.2 percent, excluding FYs 1996 and 1997).

During the period from FY 1996 through FY 2004, every type of hospital and geographic grouping of hospitals has realized a positive aggregate margin from their capital IPPS payments. Of course, the aggregate capital margins for some types of hospitals have been lower than the margins for others. In particular, inpatient hospital Medicare capital margins for rural hospitals have lagged considerably behind the margins for urban hospitals. The aggregate margin for rural hospitals during the period from FY 1996 through FY 2004 was 3.4 percent (0.3 percent, excluding FYs 1996 and 1997), compared to 9.9 percent for urban hospitals and 9.0 percent for all hospitals. Rural hospitals have even experienced negative margins during several years of the period (−1.7 percent in FY 2002, −1.2 percent in FY 2003, and −2.9 percent in FY 2004). Similarly, nonteaching hospitals have

experienced lower margins than teaching hospitals. Teaching hospitals have experienced an aggregate margin of 12.9 percent during the period from FY 1996 through FY 2004 (11.6 percent, excluding FYs 1996 and 1997). However, nonteaching hospitals have experienced an aggregate margin of 3.9 percent during that period (1.3 percent, excluding FYs 1996 and 1997).

As we discussed in the proposed rule, there may be various factors reflected in these margins. For example, one factor in the lower margins experienced by rural hospitals may be the transition of many rural hospitals to CAHs that are paid outside the IPPS. The number of rural hospitals in our analysis fell from 2,243 in FY 1996 to 1,211 in FY 2004, as the inpatient Medicare capital margins realized by rural hospitals fell from 17.2 percent to −2.9 percent. This suggests that more rural hospitals with relatively higher inpatient Medicare capital margins have made the transition to CAH status. However, it remains to be seen whether this trend in inpatient Medicare capital margins will continue as the relative numbers of CAHs and rural hospitals subject to the IPPS stabilize. We believe that the low aggregate margin for nonteaching hospitals is largely a function of the effect of the low, and for some years even negative, margin of the rural hospitals, as discussed earlier.

As we also discussed in the proposed rule, there could be a number of reasons for the relatively high margins that most IPPS hospitals have realized under the capital IPPS. One possibility is that the updates to the capital IPPS rates have been higher than the actual increases in Medicare inpatient capital costs that hospitals have experienced in recent years. As we discuss in section III. of the Addendum to this final rule with comment period, we update the capital standard Federal rate on the basis of an analytical framework that takes into account changes in a capital input price index (CIPI) and several other policy adjustment factors. Specifically, we have adjusted the projected CIPI rate-of-increase as appropriate each year for case-mix index-related changes, for intensity, and for errors in previous CIPI forecasts. Under the framework that we have been using, we had proposed an update factor of 0.8 percent for FY 2008.

The final update factor for FY 2008 is 0.9 percent, based on the best data available at this time. That update factor is derived from a projected 1.3 percent increase in the CIPI, a 0.0 percent adjustment for intensity, a 0.0 percent adjustment for case-mix, a −0.4 percent adjustment for the FY 2005 DRG reclassification and recalibration, and a forecast error correction of 0.0 percent. We discuss this update framework, and the computation of the policy adjustment factors, in section III. of the Addendum to this final rule with comment period.

We continue to believe that the CIPI is the most appropriate input price index for capital costs to measure capital price changes in a given year. We also believe that the update framework successfully captures several factors that should be taken into account in determining appropriate updates for hospitals subject to the capital IPPS. However, there may be factors affecting the rate-of-increase in capital costs that are not yet captured in our analytical framework. For example, hospitals may be experiencing productivity gains in their use of capital equipment. As productivity increases, hospitals would be able to reduce the number of inputs required to produce a unit of service. MedPAC has taken the position that the payment ''rate for health care providers should be set so that the Federal Government benefits from providers' productivity gains, just as private purchasers of goods in competitive markets benefit from the productivity gains of their suppliers.'' MedPAC has, therefore, included a productivity improvement target in its framework for updating Medicare hospital payments on the grounds that ''as a prudent purchaser, Medicare should also require some productivity gains each year from its providers.'' (MedPAC, Report to Congress, March 2006, p. 66) While we have not as yet included a specific productivity factor, such as MedPAC's productivity improvement target, in our analytical frameworks for updating the IPPS payment rates, we will continue to study the appropriateness of adopting such a measure.

As we discussed in the proposed rule, another possible reason for the relatively high margins of most capital IPPS hospitals may be that the payment adjustments provided under the system are too high, or perhaps even unnecessary. Specifically, the adjustments for teaching hospitals, disproportionate share hospitals, and large urban hospitals appear to be contributing to excessive payment levels for these classes of hospitals. Since the inception of the capital IPPS in FY 1992, the system has provided adjustments for teaching hospitals (the IME adjustment factor, under § 412.322 of the regulations), disproportionate share hospitals (the DSH adjustment factor, under § 412.320), and large urban hospitals (the large urban location adjustment factor, under § 412.316(b)). The classes of hospitals eligible for these adjustments have been realizing much higher margins than other hospitals under the system. Specifically, teaching hospitals (11.6 percent for FYs 1998 through 2004), urban hospitals (8.3 percent), and disproportionate share hospitals (8.4 percent) have significant positive margins. Other classes of hospitals have experienced much lower margins, especially rural hospitals (0.3 percent for FYs 1998 through 2004) and nonteaching hospitals (1.3 percent). The three groups of hospitals that have been realizing especially high margins under the capital IPPS are, therefore, classes of hospitals that are eligible to receive one or more specific payment adjustments under the system. We believe that the evidence indicates that these adjustments have been contributing to the significantly large positive margins experienced by the classes of hospitals eligible for these adjustments.

In the proposed rule, we therefore determined that the data on inpatient hospital Medicare capital margins, as discussed above, provided sufficient evidence that some adjustment of the updates under the capital IPPS was warranted at that time. In light of the significant disparities in the margin performances of different classes of hospitals, we did not believe at that time that an adjustment to the updates for FYs 2008 and 2009 should apply equally to all hospitals that are paid under the capital IPPS. In particular, we believed that an adjustment to the updates should take into account the much lower margins of rural hospitals (0.3 percent for the period from FY 1998 through FY 2004) compared to urban hospitals (8.3 percent during that period). We also believed that any initial adjustment to the rate should be relatively modest. One reason was that any adjustment should avoid unwarranted disruption to hospital finances: Because of the nature of capital spending, long periods of time can be necessary for hospitals to adjust adequately to significant changes in payment. Therefore, in the FY 2008 IPPS proposed rule (72 FR 24822), for FYs 2008 and 2009 we proposed that the update to the capital standard Federal rate for urban hospitals would be 0.0 percent, in place of the 0.8 percent update that would have otherwise been provided in FY 2008 under the update framework that we have been employing. (As discussed above, the final update to the capital standard Federal rate under the capital update framework is 0.9 percent.) However, in light of the margin analysis, we also proposed to give rural hospitals the full 0.8 percent update determined

by the update framework in FY 2008. We anticipated that we would provide the full update only to rural hospitals in FY 2009 as well, once we had determined what the update would be under the update framework. We proposed to revise § 412.308(c)(1) of the regulations accordingly. For purposes of the update in FYs 2008 and 2009, we proposed that an urban hospital is any hospital located in an area that meets the definitions under § 412.64(b)(1)(ii)(A) or (b)(1)(ii)(B), or § 412.64(b)(3). A rural hospital is any hospital that does not meet those definitions, or that is reclassified as rural under § 412.103. For subsequent years, we stated that we would continue to analyze the data concerning the adequacy of payments under the capital IPPS, and that we may propose additional adjustments, positive or negative, as they were warranted. We also stated that we would continue to study our update framework and to consider whether adoption of additional or revised adjustments to account for other factors affecting capital cost changes may be warranted.

In addition, we also proposed to eliminate, for FYs 2008 and beyond, one of the payment adjustments that has been provided under the capital IPPS. Specifically, we proposed to discontinue the 3.0 percent additional payment that has been provided to hospitals located in large urban areas. In proposing to eliminate this adjustment, we cited the consistent and significant positive margin of hospitals located in urban areas as strong evidence that it was not necessary to continue this adjustment. Therefore, we proposed to amend § 412.316(b) of the regulations to provide that, effective for discharges on or after October 1, 2007, there will no longer be any additional payment for hospitals located in large urban areas, as currently provided under that section. When the payment adjustments were instituted at the inception of the program, the initial standard Federal payment rate was adjusted in a budget-neutral fashion to account for the expenditures that would be required by these adjustments. However, in light of the strong overall positive margins across the system, we proposed not to increase the standard capital rate to account for expenditures otherwise payable due to this adjustment (approximately $147 million). Rather, in light of the excessive capital IPPS payments over the period of FYs 1996 through 2004, we believed that it was appropriate for the program to realize savings from this policy decision.

While we formally proposed an update of 0.0 percent for urban hospitals, an update of 0.8 percent for rural hospitals in FY 2008, and elimination of the large urban add-on payments, we also solicited public comment on additional adjustments to the capital payment structure. As we noted in the proposed rule, the margin analysis indicated that several classes of hospitals have experienced continuous, significant positive margins. The analysis indicated that the existing payment adjustments for teaching hospitals and disproportionate share hospitals were contributing to excessive payment levels for these classes of hospitals. Therefore, we stated that it may be appropriate to reduce these adjustments significantly, or even to eliminate them altogether, within the capital IPPS. These payment adjustments, unlike the parallel adjustments under the operating IPPS, were not mandated by the Act. Rather, they were included within the original design of the capital IPPS under the Secretary's broad authority under sections 1886(g)(1)(A) and (g)(1)(B) of the Act to include appropriate adjustments and exceptions within a capital IPPS. We noted that it is difficult to justify indefinite continuation of these adjustments in the light of the continuous, substantial positive margins realized by the classes of hospitals that qualify for them. When the payment adjustments were instituted at the inception of the program, the initial standard Federal payment rate was adjusted in a budget-neutral fashion to account for the expenditures that would be required by these adjustments. Therefore, we indicated that we would also consider whether we should similarly adjust the Federal capital payment rate to account for all or a portion of these adjustments, effectively increasing the base payment rate for all hospitals (including rural, nonteaching, and non-DSH hospitals that do not benefit from these adjustments), while removing these special adjustments for the hospitals that have been eligible to receive them. We also indicated that we were considering whether, in light of the substantial positive margins experienced by these teaching and DSH hospitals, the discontinuation of these adjustments should not result in a change to the standard capital rate and should instead result in savings to the program. We invited comments on these proposals and on other means of appropriately adjusting and targeting payments under the capital IPPS, as well as on the proposals that we formally made in the FY 2008 IPPS proposed rule.

Comment: Numerous commenters addressed our proposals to eliminate the large urban add-on and to provide a differential update to urban and rural hospitals for 2 years. Many commenters also addressed our discussion about the possibility of significantly reducing or eliminating the existing payment adjustments for teaching hospitals and DSH adjustments within the capital IPPS. Commenters included numerous individual hospitals, hospital associations, and MedPAC.

Commenters from the hospital industry were strongly opposed to our proposals to eliminate the large urban add-on and to provide a differential update to urban and rural hospitals for 2 years. Many commenters contended that such reductions in capital payments should not be made without explicit authorization from Congress. Many commenters also objected that the proposals violated fundamental principles of the capital IPPS. Specifically, many commenters asserted that the positive margins reflected the operation of one such fundamental principle, that by responding to the incentives of prospective payment, providers should be able to gain from conducting their operations efficiently. Many of these commenters further contended that the proposals do not take sufficient account of the cyclical nature of capital spending. These commenters pointed out that, under the design of the capital IPPS, hospitals were expected to reserve capital funds in anticipation of future capital needs, similar to how funded depreciation reserves had been used under the prior cost reimbursement system. These funds would permit future capital investment to be funded in part with equity financing rather than borrowing. Thus, it is only to be expected that hospitals would run positive margins during one phase of the capital cycle. Some regional hospital associations provided evidence intended to demonstrate that their hospitals have been experiencing positive margins because they are in a low-spending phase of their capital cycles. For example, one association representing a major metropolitan area submitted an extensive analysis, including data on margins and changes in unit cost and price, suggesting that its member hospitals are in a lower-spending phase of their capital cycle than other hospitals may be. Other commenters contended that, in order to account adequately for the capital spending cycle, it would be necessary to conduct an analysis over a much longer period, such as 20 years.

Some commenters contended that the capital IPPS is not a separate payment

system but should be considered only part of a broader IPPS embracing both capital and operating payments. These commenters further maintained that the proposed reductions in capital IPPS payments are unwarranted in the light of the negative operating IPPS margins for hospitals in recent years. Several commenters pointed out that the combined operating and capital margin for IPPS hospitals was zero in FY 2004. Other commenters similarly noted that MedPAC estimates an overall hospital Medicare margin in 2007 of negative 5.4 percent. Other commenters pointed out that, even considering capital IPPS margins alone, the trend in recent years has been for the margins to decrease. Many commenters suggested that the proposed reductions could cause serious financial hardships for many hospitals and produce a very negative impact upon the addition and dissemination of newer technologies, health information systems, electronic health records and scanning devices that are a critical part of healthcare delivery systems and improvements to enhance patient safety and quality of care. A number of commenters objected that the cuts would make it much more difficult for hospitals to undertake the capital improvements required by various state mandates, as well as the adoption of the information technologies encouraged by various Federal initiatives.

At the same time, many commenters from the hospital industry objected to employing margin analysis at all as the basis for the proposals, or for the possible revisions that we discussed to the other capital IPPS payment adjustments. These commenters contended that revisions to the payment adjustments should not be considered without updating the regression analyses that were employed originally to establish these adjustments. Furthermore, most of these commenters maintained that it would only be appropriate to employ total costs regressions, as opposed to capital cost-only regressions, in these analyses. Commenters advocated using total cost regressions on the grounds that doing so would follow precedent (the analysis that supported the original establishment of the adjustments employed total cost regressions), and would be consistent with treating the capital IPPS as intrinsically part of a broader IPPS embracing both capital and operating payments.

Other commenters raised technical issues suggesting that the positive margins in our analysis were not representative of actual capital costs. Several commenters contended that the margins may be overstated because many cost reports, especially for the years 2003 and 2004, have not yet been audited and/or settled. One commenter suggested that the margins could be overstated because of a large backlog of appeals at the PRRB. According to the commenter, the comparison of the hospitals' capital costs from the cost report could be grossly understated, yielding an inflated margin. Another commenter contended that the elimination of the loss on recapture amount by the BBA of 1997 is skewing the calculation of the capital margins, which therefore should not be the basis for our proposals.

MedPAC supported the proposal to eliminate the large urban add-on adjustment starting in FY 2008. MedPAC noted that Congress equalized the base rates of urban and rural hospitals under the operating IPPS in the MMA, and that eliminating the 3 percent add-on for large urban hospitals under the capital IPPS will similarly contribute to equalizing the capital base rates. MedPAC cited the fact that urban and rural hospitals' overall Medicare margins, reflecting both operating and capital inpatient payments along with payments for outpatient and hospital-based post-acute services, are roughly equal. However, MedPAC opposed the proposal for different updates for urban and rural hospitals on the grounds that such a differential update is inconsistent with the direction of policy for the acute care IPPS that we proposed to follow in eliminating the large urban add-on. MedPAC noted that, while eliminating the large urban adjustment would contribute to equalizing the base rates for urban and rural hospitals, differential updates would then reintroduce separate base rates. MedPAC recommended that we should use the update framework to determine the appropriate update for capital payments and then apply that update to all capital IPPS hospitals. MedPAC also recommended that we should seriously reexamine the appropriateness of the current capital IME adjustment. In its March 2007 Report to the Congress, MedPAC recommended (based on an analysis of operating and capital costs combined) that the operating IME adjustment be reduced from 5.5 percent to 4.5 percent per 10 percent increment of teaching intensity. MedPAC therefore indicated that some reduction in the capital IME adjustment would be consistent with its finding that the IME adjustment is set too high.

Response: We do not agree with those commenters who argued that we lack the authority to adopt measures such as those we proposed without specific authorization from Congress. While the statute governs the operating IPPS in highly prescriptive detail (section 1886(d) of the Act), the statutory provision governing the capital IPPS (section 1886(g) of the Act) prescribes only several broad governing principles and otherwise provides the Secretary with broad discretion to design and modify the system within those principles. The statute does not limit the Secretary's authority to update rates and gives the Secretary broad discretion to provide for exceptions. It is true that Congress has, on two occasions, adjusted the rate as originally established and updated by the Secretary. However, we do not believe that such action precludes the Secretary from exercising the discretionary authority otherwise conferred by the statute to make similar revisions to the rates and the adjustments that have been established to account for appropriate variations in costs among classes of hospitals.

We do not agree with many of the criticisms of our analysis and the conclusions that we drew from that analysis. We agree that a basic principle of prospective payment systems is that efficient providers should be able to realize positive margins from the payment structure. However, prospective payment systems are generally designed to pay at rates reflecting the costs of hospitals at average levels of efficiency. Under such a system, hospitals of above average efficiency would be expected to realize positive margins, while hospitals of less than average efficiency would be expected to realize negative margins. Therefore, the continuation of significant positive margins across a prospective payment system as a whole (or across classes of hospitals that receive specific adjustments) is an indication that the payment rates (or the adjustments to the rates) may be set at a level higher than necessary to cover the costs of efficient operation. Under such circumstances, we believe that it is appropriate to revise basic payment rates or payment adjustments, or both, to account for such evidence.

We also do not agree that, in this context, the capital IPPS should be treated as a component of a larger payment system, embracing both the capital and operating IPPSs. As we have just discussed, the statute governs the operating IPPS in highly prescriptive detail, while the statutory provision governing the capital IPPS provides the Secretary with very broad discretion (within certain governing principles) to design and modify the system. Most especially, the statute specifically

defines both the types of adjustments and the formulas for those adjustments under the operating IPPS. However, it gives the Secretary broad authority in providing for appropriate adjustments and exceptions under the capital IPPS. Furthermore, while we adopted approaches on several issues in the development of the capital IPPS that were based on the premise that the capital and operating IPPSs might eventually be merged into one system, the two systems have now operated separately for 15 years without any apparent prospect of integration in the near future. Therefore, we believe that it is appropriate under the current design of the capital and operating IPPSs to base proposals for payment policies under the capital IPPS on analysis that is confined to the data regarding the capital IPPS alone, and that total IPPS margins should not be the controlling factor in the analysis that we are now conducting. For this same reason, we do not agree with commenters who urged us to employ updated versions of the total cost regressions that were originally used to establish the payment adjustments under the capital IPPS. In the long run, we believe that it makes sense to base capital payment adjustments on total cost variations only if similar adjustments under the operating IPPS are also based on total cost regression analysis.

We agree with commenters that the capital spending of hospitals tends to occur in cycles, with periods of higher capital investment followed by periods in which capital spending tends to be lower. As some of the commenters noted, we devoted considerable attention to the potential implications of this capital cycle in developing the original design of the capital IPPS. At that time, we decided not to build any specific feature into the system to account for capital cycles, on the grounds that hospitals ought to be able to manage their spending on the basis of the predetermined rates and adjustments under the capital IPPS, conserving funds during lower spending portions (and often high interest rate periods) of the cycle in order to prepare for necessary capital expenditures later. We do not agree with those commenters who suggested that the existence of a capital spending cycle accounts for the persistently high margins for some classes of hospitals that we have observed over the period 1996 through 2004 nationally. There is no reason to suppose that there would be uniformity or regularity among hospitals in the length of time between major capital expenditures or the overall pattern of capital spending. To the degree that a capital cycle exists, it reflects the pattern of spending in individual hospitals or, in some cases, groups of hospitals where the pattern of spending is determined by factors such as common ownership, local regulation, or other factors. There is no uniform or regular capital cycle across IPPS hospitals generally or large classes of hospitals (for example, teaching hospitals) nationally. In any given year, the margins of hospitals generally, and of large classes of hospitals defined nationally, would reflect the experience of many hospitals in the lower spending portions of their capital cycles, and many other hospitals in the higher spending portions of their capital cycles. Therefore, the existence of the persistent positive margins that we identified cannot be explained on the basis of a ''capital cycle.'' For the same reasons, we do not believe that it is necessary to conduct an analysis of a period of 20 or more years, as suggested by some commenters, in order to account fully for the existence of a capital cycle.

We are also not persuaded by the technical objections that some commenters raise to the margin analysis. We have examined the settlement and audit status of cost reports over the period of our analysis and found a normal and expected pattern. Specifically, the data from more recent years (especially 2004 and 2005) reflect more cost reports that have been submitted but not yet settled, and fewer cost reports that have been settled with audit or subjected to reopening and amendment. Conversely, many more cost reports from the earlier part of the period we examined (especially those from 2002 and earlier) have been settled, settled with audit, or reopened and amended. While this analysis suggests that, as is to be expected, the margin data for the last 2 or 3 years of our analysis may be subject to some change as more cost reports are audited and settled, we do not believe that this normal pattern of activity has any significant implications for the validity of our analysis. The general pattern is for settlement and audit activity to reduce, not to increase, the levels of capital and other costs claimed by hospitals on their cost reports. Therefore, we believe that the comparatively lower positive margins of more recent years noted by some commenters are likely, if anything, to be understated compared to the margins that the data will indicate once more of those years' cost reports are audited and settled.

We also do not agree with the commenter who suggested that the margins are skewed by the elimination of the provision to recognize losses or gains on sales. Prior to the BBA of 1997, the Medicare program recognized losses or gains on sales of capital assets in relation to the depreciation that the program for which the program paid under the cost based payment system. Depreciation payments for the years prior to a sale were accordingly adjusted in the cost report submitted for the year of the sale: an additional payment was made for Medicare's portion of the depreciation on the asset if the hospital experienced a loss on the sale (indicating that prior payments for depreciation had been too low). Conversely, a portion of Medicare's payments for the depreciation of the asset was recaptured (by means of reducing payments to the hospital) in case of a gain on the sale (indicating that prior payments for depreciation had been too high). The BBA of 1997 eliminated recognition of such gains and losses on sales under Medicare's cost accounting rules, effective December 1, 1997. In the light of the congressional elimination of this provision, we do not believe that it would be appropriate (even if it were possible) to take any account of the possible effects of this provision on the margin data that we have analyzed. It is worth noting, however, that elimination of the provision to account for gains and losses on sales does not necessarily ''skew'' the margin data in the manner suggested by the commenter. Because the provision operated both to increase to account for losses on sales, and to decrease payments to account for gains on sales, the overall effect of the provision would not necessarily be (as implied by the commenter) to reduce the positive margins that are evident in the data.

Furthermore, we do not believe that a backlog of cases at the PRRB would have a material effect on the level of the margins observed in our analysis. Cases such as those described by the commenter would be taken to the PRRB when reasonable cost determinations have an effect on actual payment amounts. Reasonable cost payments for capital have been a declining factor since the beginning of the capital IPPS transition in FY 1992. Cost payments declined steadily through the transition period, and since the end of the transition reasonable cost payments have been limited to a restricted number of exceptions (for example, new hospitals, extraordinary circumstances, and some large capital projects).

We agree with MedPAC that eliminating the large urban add-on adjustment, starting in FY 2008, is warranted. We also agree with MedPAC that following the statutory precedent toward equalizing the base rates of urban and rural hospitals under the IPPS provides sufficient rationale for eliminating this adjustment. Therefore, we are finalizing our proposal to eliminate this adjustment in this final rule with comment period. In light of the strong overall positive margins across the system, we proposed not to increase the standard capital rate to account for expenditures otherwise payable due to this adjustment (approximately $147 million). Rather, in light of the excessive capital IPPS payments over the period of FYs 1996 through 2004, we continue to believe that such an increase to the standard capital rate is not appropriate.

We also agree with MedPAC that our proposal for a differential update for urban and rural hospitals during FYs 2008 and 2009 is not entirely consistent with this direction of policy for the capital and operating IPPSs. As MedPAC noted, eliminating the large urban add-on would complete the process of equalizing the base rates of urban and rural hospitals, but our proposal for differential updates would then reintroduce separate base rates. Therefore, we have decided not to finalize that proposal in this final rule with comment period.

We also appreciate MedPAC's recommendation that we should seriously reexamine the appropriateness of the current capital IME adjustment. As we noted in the proposed rule, the margin analysis suggested that this adjustment may be too high. MedPAC's previous analysis had also suggested that the adjustment may be too high. In light of MedPAC's comment, we extended the analysis that we discussed in the proposed rule, especially to distinguish the experience of teaching hospitals from the experience of urban and rural hospitals generally. Specifically, in addition to the categories of hospitals that we examined in the proposed rule, we also examined the margins of urban, large urban, and rural teaching hospitals, as opposed to urban, large urban, and rural nonteaching hospitals. In conducting this analysis, we were able to employ updated cost report information, and this updated information allowed us to incorporate the margins for an additional year, FY 2005, into the analysis. The results, for the categories of hospitals that had already been considered in the proposed rule, were very consistent with the previous data. However, the data on the experience of urban, large urban, and rural teaching and nonteaching hospitals provided significant new information, especially in light of MedPAC's recommendation. We reproduce the table showing the new results below.

HOSPITAL INPATIENT MEDICARE CAPITAL MARGINS

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Aggregate 1996–2005	Aggregate 1998–2005 (excluding 1996 and 1997)
U.S.	17.6	13.4	7.0	6.8	7.3	8.1	8.7	7.6	5.3	3.7	8.5	6.8
URBAN	17.7	13.8	7.8	7.5	8.4	9.2	10.3	9.0	6.4	4.8	9.4	7.9
RURAL	16.8	11.0	2.1	2.4	1.0	1.5	−1.7	−1.4	−2.3	−4.2	2.6	−0.4
No DSH Payments	16.2	11.7	4.2	4.3	5.6	5.5	4.7	4.4	−1.3	−4.7	5.9	3.2
Has DSH Payments	18.5	14.4	8.6	8.1	8.2	9.0	10.0	8.5	7.0	5.9	9.5	8.1
$1–$249,999	14.5	12.9	−0.4	3.1	1.6	4.1	3.2	1.4	−1.7	−4.8	3.2	1.9
$250,000–$999,999	15.5	9.0	2.3	1.6	2.8	2.7	−2.4	−1.5	−4.3	−7.3	1.5	−0.9
$1,000,000–$2,999,999	16.8	13.0	8.7	9.0	8.7	7.0	10.1	5.2	3.2	2.0	8.2	6.6
$3,000,000 or more	20.3	16.6	10.4	9.3	9.7	12.1	13.2	12.5	10.6	9.5	12.2	11.0
TEACHING	19.5	15.7	9.8	9.7	11.2	12.1	13.8	13.2	11.7	10.6	12.7	11.6
Urban	19.7	15.9	10.2	10.0	11.4	12.5	14.0	13.6	11.9	10.9	13.0	11.9
Large Urban	20.5	16.8	11.0	10.1	12.5	13.9	15.2	14.7	12.0	11.9	13.9	12.8
Rural	13.9	8.5	1.0	2.9	5.8	3.2	8.2	4.7	5.7	4.0	5.7	4.5
NON-TEACHING	15.3	10.5	3.4	2.8	2.2	2.6	1.7	0.0	−3.2	−5.1	2.8	0.3
Urban	14.4	10.1	3.8	3.0	3.0	3.1	3.6	0.9	−2.9	−4.9	3.1	0.9
Large Urban	15.5	11.3	6.2	6.1	5.7	5.2	5.3	1.7	−0.9	−3.2	5.1	2.9
Rural	17.3	11.4	2.3	2.4	0.2	1.2	−3.7	−2.6	−3.9	−6.0	2.0	−1.3
Census Division:												
New England (1)	27.9	25.9	17.1	15.1	18.2	20.7	21.3	21.1	20.5	20.3	21.0	19.5
Middle Atlantic (2)	19.1	15.5	11.1	11.6	14.1	16.5	18.7	18.0	14.7	16.0	15.6	15.2
South Atlantic (3)	18.1	13.9	5.9	4.0	6.0	5.0	6.6	6.9	5.8	2.8	7.4	5.4
East North Central (4)	18.2	12.7	6.4	7.1	8.8	8.5	6.1	7.1	6.6	3.2	8.4	6.7
East South Central (5)	14.9	11.1	3.3	4.1	3.8	3.8	3.8	−0.9	−3.4	−5.8	3.2	0.9
West North Central (6)	14.3	7.0	0.1	−0.3	−1.5	2.0	1.9	3.4	1.6	−0.4	2.8	0.9
West South Central (7)	13.2	8.3	3.3	2.6	−0.7	0.0	1.2	−2.0	−4.0	−6.5	1.2	−1.0
Mountain (8)	17.2	14.7	8.5	7.7	7.2	6.4	2.9	3.3	0.8	−4.7	5.8	3.6
Pacific (9)	20.4	16.1	12.3	11.3	11.9	13.3	14.7	12.1	9.8	8.8	13.0	11.7
Code 99	23.7	24.1	14.5	16.8	19.8	20.7	20.5	25.1	21.6	24.8	21.4	20.8
Bed Size:												
< 100 beds	17.7	13.0	4.6	3.5	2.7	2.5	−1.8	−1.2	−6.1	−9.6	2.0	−0.9
100–249 beds	15.1	10.5	3.7	4.5	4.3	6.1	6.0	4.2	1.5	0.8	5.6	3.8
250–499 beds	18.9	14.1	8.9	8.3	10.6	10.7	12.1	11.6	10.3	7.7	11.4	10.1
500–999 beds	19.9	17.1	10.7	10.4	11.3	10.8	12.6	10.1	7.3	7.8	11.6	10.1
>= 1000 beds	8.2	14.0	2.2	−1.3	−6.6	−3.6	6.5	8.1	6.5	2.1	3.5	2.3

Notes:
Based on Medicare Cost Report hospital data updated as of the 1st quarter of 2007.
Medicare payments are from Worksheet E, Part A, Lines 9 and 10.
Expenses are from Worksheet D, Part I, columns 10 and 12 and Part II, columns 6 and 8.
We apply the outlier trimming methodology developed with MedPAC.
Code 99 applies when census division information was not specified in the Medicare Cost Report hospital data.

As the table indicates, teaching hospitals in each class have been performing significantly better than comparable nonteaching hospitals. For the period FYs 1998 through 2005, urban teaching hospitals have realized an aggregate positive margin of 11.6 percent, compared to a positive margin of 0.9 percent for urban nonteaching hospitals. Similarly, large urban teaching hospitals have realized an aggregate positive margin of 12.8 percent during that period, while large urban nonteaching hospitals have an aggregate positive margin of only 2.9 percent. There is a similar pattern among rural teaching and nonteaching hospitals, although at lower margin levels. Rural teaching hospitals have experienced an aggregate positive margin over the period FYs 1998 through 2005 of 4.5 percent, while rural nonteaching hospitals have an aggregate negative margin of −1.3 percent. Significantly, the positive margins for teaching hospitals do not exhibit decline to the same degree that many commenters observed in the margins for all hospitals, as well the classes of urban hospitals and rural hospitals, under the capital IPPS. The positive margin among all IPPS hospitals declined from 8.7 percent in FY 2002 to 5.3 percent in FY 2004 and 3.7 percent in FY 2005. Similarly, the aggregate margin for urban hospitals declined from 10.3 percent in FY 2002 to 6.4 percent in FY 2004 and 4.8 percent in FY 2005. The aggregate margin for rural hospitals declined from a positive margin of 1.5 percent in FY 2001 to a negative margin, −4.2 percent, in FY 2005. However, the aggregate margin for teaching hospitals was 12.1 percent in FY 2001 and 10.6 percent in FY 2005. Urban teaching hospitals experienced margins of 12.5 percent in FY 2001, 14.0 percent in FY 2002, 13.6 percent in FY 2003, 11.9 percent in FY 2004, and 10.9 percent in FY 2005. The margins for rural teaching hospitals have shown greater variation, but still do not exhibit a pattern of significant decline. Rural teaching hospitals had positive margins of 3.2 percent in FY 2001, 8.2 percent in FY 2002, 4.7 percent in FY 2003, 5.7 percent in FY 2004, and 4.0 percent in FY 2005.

As we stated in the proposed rule, the statutory history of the capital IPPS suggests that the system in the aggregate should not provide for continuous, large positive margins. As we also indicated, a possible reason for the relatively high margins of many capital IPPS hospitals may be that the payment adjustments provided under the system are too high, or perhaps even unnecessary. As we stated above, we agree with MedPAC's recommendation that the appropriateness of the teaching adjustment should be seriously reexamined. We believe that the record of relatively high and persistent positive margins for teaching hospitals under the capital IPPS indicates that the current teaching adjustment is unnecessary, and that it is therefore appropriate to exercise our discretion under the capital IPPS to eliminate this adjustment. At the same time, we believe we should mitigate abrupt changes in payment policy and to provide time for hospitals to adjust to changes in the payments that they can expect under the program. Therefore, we are adopting the following policy in this final rule with comment period. We will phase out the adjustment over a 3 year period beginning in FY 2008. Specifically, we will maintain the current adjustment for FY 2008, in order to give teaching hospitals an opportunity to plan and make adjustments to the change. During the second year of the transition, FY 2009, the formula for determining the amount of the teaching adjustment will be revised so that adjustment amounts will be half of the amounts provided under the current formula. For FY 2010 and after, hospitals will no longer receive an adjustment for teaching activity under the capital IPPS. As discussed previously, in implementing the capital IPPS Congress has in fact mandated that payments in the aggregate not exceed 90 percent of Medicare inpatient capital costs. For this reason, and in light of the generally positive margins experienced by virtually all categories of hospitals under the capital IPPS, we believe that it is not necessary to increase the standard Federal capital rate to account for this change in payment policy.

While we are formally adopting this final policy in this final rule with comment period, we believe that this change to the structure of payments under the capital IPPS is significant enough that it could be valuable to provide the public with an opportunity for further comment. Therefore, we will accept comments on the policy that we are adopting, to phase out the capital IPPS teaching adjustment over a 3-year period, with a 50-percent reduction beginning in FY 2009. We will accept public comments on this final policy for 90 days after the date of publication of this final rule with comment period. In addition, we will provide additional opportunity for public comment during the FY 2009 proposed rulemaking cycle for the IPPS. We intend to respond to all comments that we receive on this final policy during this period in the FY 2009 final rule for the IPPS. We believe that this will provide a more than adequate opportunity for hospitals, associations, and other interested parties to raise issues and concerns related to this final policy.

VI. Changes for Hospitals and Hospital Units Excluded From the IPPS

A. Payments to Existing and New Excluded Hospitals and Hospital Units

Historically, hospitals and hospital units excluded from the prospective payment system received payment for inpatient hospital services they furnished on the basis of reasonable costs, subject to a rate-of-increase ceiling. An annual per discharge limit (the target amount as defined in § 413.40(a)) was set for each hospital or hospital unit based on the hospital's own cost experience in its base year. The target amount was multiplied by the Medicare discharges and applied as an aggregate upper limit (the ceiling as defined in § 413.40(a)) on total inpatient operating costs for a hospital's cost reporting period. Prior to October 1, 1997, these payment provisions applied consistently to all categories of excluded providers (rehabilitation hospitals and units (now referred to as IRFs), psychiatric hospitals and units (now referred to as IPFs), LTCHs, children's hospitals, and cancer hospitals).

Payment for children's hospitals and cancer hospitals that are excluded from the IPPS continues to be subject to the rate-of-increase ceiling based on the hospital's own historical cost experience. (We note that, in accordance with § 403.752(a) of the regulations, RNHCIs are also subject to the rate-of-increase limits established under § 413.40 of the regulations.) In the FY 2008 IPPS proposed rule, we proposed that the percentage increase in the rate-of-increase limits for cancer and children's hospitals and RNHCIs would be the percentage increase in the FY 2008 IPPS operating market basket, then estimated to be 3.3 percent. Consistent with our historical approach, if more recent data are available for the final rule, we use it to calculate the IPPS operating market basket. For this final rule with comment period, we have calculated the IPPS operating market basket for FY 2008 using the most recent data available. For cancer and children's hospitals and RNHCIs, the FY 2008 rate-of-increase percentage that is applied to FY 2007 target amounts in order to calculate FY 2008 target amounts 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the IPPS operating market basket increase, in

accordance with the applicable regulations in 42 CFR 413.40.

IRFs, IPFs, and LTCHs were paid previously under the reasonable cost methodology. However, the statute was amended to provide for the implementation of prospective payment systems for IRFs, IPFs, and LTCHs. In general, the prospective payment systems for IRFs, IPFs, and LTCHs provide transition periods of varying lengths during which time a portion of the prospective payment is based on cost-based reimbursement rules under Part 413 (certain providers do not receive a transition period or may elect to bypass the transition period as applicable under 42 CFR part 412, Subparts N, O, and P). We note that the various transition periods provided for under the IRF PPS, IPF PPS, and LTCH PPS have ended or will soon end.

For cost reporting periods beginning on or after October 1, 2002, all IRFs are paid 100 percent of the adjusted Federal rate under the IRF PPS. Therefore, for cost reporting periods beginning on or after October 1, 2002, no portion of an IRF PPS payment is subject to 42 CFR part 413. Similarly, for cost reporting periods beginning on or after October 1, 2006, all LTCHs are paid 100 percent of the adjusted Federal Rate under the LTCH PPS. Therefore, for cost reporting periods beginning on or after October 1, 2006, no portion of the LTCH PPS payment is subject to 42 CFR part 413. (We note that, to the extent a portion of a LTCH's PPS payment was subject to reasonable cost principles, the Secretary utilized his broad authority under section 123 of the BBRA, as amended by section 307 of the BIPA, to make such portion subject to 42 CFR part 413 and various provisions in section 1886(b) of the Act.) However, except as provided in § 412.426(c), IPFs remain under a blended methodology for cost reporting periods beginning on or after January 1, 2005, and before January 1, 2008.

Under the broad authority conferred upon the Secretary in section 124(a)(1) of the BBRA, the Secretary provided that, for IPFs paid under the blended methodology, the portion of the IPF PPS payment that is based on reasonable cost principles is subject to the provisions of 42 CFR part 413 and various provisions in section 1886(b) of the Act. In order to calculate the portion of the PPS payment that is based on reasonable cost principles, it is necessary to determine whether the IPF would be considered ''existing'' for purposes of section 1886(b)(3)(H) of the Act or ''new'' for purposes of section 1886(b)(7) of the Act. We note that readers should not confuse an IPF that is considered ''new'' for purposes of section 1886(b)(7) of the Act and § 413.40(f)(2)(ii) of the regulations with an IPF that is considered ''new'' under § 412.426(c) of the regulations. Any IPF that, under present or previous ownership or both, has its first cost reporting period as an IPF beginning on or after January 1, 2005, is considered ''new'' for purposes of § 412.426(c). An IPF that is considered ''new'' under § 412.426(c) is paid based on 100 percent of the Federal per diem payment amount. Consequently, only those IPFs considered ''new'' under section 1886(b)(7) of the Act, but not ''new'' under § 412.426(c) of the regulations will be paid under a PPS blended payment methodology. An IPF considered ''new'' for purposes of § 413.40(f)(2)(ii) would have its ''reasonable-cost based'' portion of its prospective payment subject to the provisions of §§ 413.40(f)(2)(ii) and 413.40(c)(4)(v), as applicable. An IPF considered ''new'' for purposes of section 1886(b)(7) of the Act has the target amount for its third cost reporting period determined in accordance with sections 1886(b)(7)(A)(ii) and 1886(b)(3)(A)(ii) of the Act. For the fourth and subsequent cost reporting periods, the target amount is calculated in accordance with section 1886(b)(3)(A)(ii) of the Act. An IPF that would be considered ''existing'' for purposes of section 1886(b)(3)(H) of the Act has the target amount for the ''reasonable-cost based'' portion of its prospective payment determined in accordance with section 1886(b)(3)(A)(ii) of the Act and the regulations at § 413.40(c)(4)(ii).

In the FY 2008 IPPS proposed rule (72 FR 24823), the applicable percentage increase to update the target amount for the reasonable cost-based portion of the PPS payment of an IPF that is considered ''existing'' under section 1886(b)(3)(H) of the Act or ''new'' under section 1886(b)(7) of the Act, but not ''new'' under § 412.426(c), was 3.4 percent. However, we noted that if more current data became available prior to publication of the final rule, we would use those data for updating the market basket. Based on more current data, the applicable percentage increase to update the target amount for the reasonable cost-based portion of the PPS payment of an IPF that is considered ''existing'' under section 1886(b)(3)(H) of the Act or ''new'' under section 1886(b)(7) of the Act, but not ''new'' under § 412.426(c), is 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the excluded hospital market basket increase, in accordance with the applicable regulations at 42 CFR 413.40.

We did not receive any public comments on this section of the proposed rule.

B. Separate PPS for IRFs

Section 1886(j) of the Act, as added by section 4421(a) of Pub. L. 105–33, provided for a phase-in of a case-mix adjusted PPS for inpatient hospital services furnished by IRFs for cost reporting periods beginning on or after October 1, 2000, and before October 1, 2002, with payments based entirely on the adjusted Federal prospective payment for cost reporting periods beginning on or after October 1, 2002. Section 1886(j) of the Act was amended by section 125 of Pub. L. 106–113 to require the Secretary to use a discharge as the payment unit under the PPS for inpatient hospital services furnished by IRFs, and to establish classes of patient discharges by functional-related groups. Section 305 of Pub. L. 106–554 further amended section 1886(j) of the Act to allow IRFs, subject to the blended methodology, to elect to be paid the full Federal prospective payment rather than the transitional period payments specified in the Act.

On August 7, 2001, we issued a final rule in the **Federal Register** (66 FR 41316) establishing the PPS for IRFs, effective for cost reporting periods beginning on or after January 1, 2002. There was a transition period for cost reporting periods beginning on or after January 1, 2002, and ending before October 1, 2002. For cost reporting periods beginning on or after October 1, 2002, payments are based entirely on the adjusted Federal prospective payment rate determined under the IRF PPS.

C. Separate PPS for LTCHs

On August 30, 2002, we issued a final rule in the **Federal Register** (67 FR 55954) establishing the PPS for LTCHs, effective for cost reporting periods beginning on or after October 1, 2002. Except for a LTCH that made an election under § 412.533(c) or a LTCH that is defined as new under § 412.23(e)(4), there was a transition period for cost reporting periods beginning on or after October 1, 2002, and ending before October 1, 2007. For cost reporting periods beginning on or after October 1, 2006, total LTCH PPS payments are based on 100 percent of the Federal rate.

D. Separate PPS for IPFs

In accordance with section 124 of Pub. L. 106–113 and section 405(g)(2) of Pub. L. 108–173, we established a PPS for inpatient hospital services furnished in IPFs. On November 15, 2004, we issued in the **Federal Register** a final

rule (69 FR 66922) that established the IPF PPS, effective for IPF cost reporting periods beginning on or after January 1, 2005. Under the requirements of the final rule, we compute a Federal per diem base rate to be paid to all IPFs for inpatient psychiatric services based on the sum of the average routine operating, ancillary, and capital costs for each patient day of psychiatric care in an IPF, adjusted for budget neutrality. The Federal per diem base rate is adjusted to reflect certain patient characteristics, including age, specified DRGs, selected high-cost comorbidities, days of the stay, and certain facility characteristics, including a wage index adjustment, rural location, indirect teaching costs, the presence of a full-service emergency department, and COLAs for IPFs located in Alaska and Hawaii. We have established a 3 year transition period during which IPFs whose first cost reporting periods began before January 1, 2005, will be paid a PPS payment, a portion of which is based on reasonable cost principles and a portion of the Federal per diem payment amount. For cost reporting periods beginning on or after January 1, 2008, all IPFs will be paid 100 percent of the Federal per diem payment amount.

E. Determining LTCH Cost-to-Charge Ratios (CCRs) Under the LTCH PPS

In determining both high-cost outlier and short-stay outlier payments under the LTCH PPS (at §§ 412.525(a) and 412.529, respectively), we calculate the estimated cost of the case by multiplying the LTCH's overall CCR by the Medicare allowable charges for the case. (In general, we use the LTCH's overall CCR. In some instances we use an alternative CCR, such as the statewide average CCR in accordance with the regulations at § 412.525(a)(4)(iv)(C) and § 412.529(c)(3)(iv)(C), or a CCR that is specified by CMS or that is requested by the hospital under the provisions of the regulations at § 412.525(a)(4)(iv)(A) and § 412.529(c)(3)(iv)(A).) Under the LTCH PPS, a single prospective payment per discharge is made for both inpatient operating and capital-related costs. Therefore, we compute a single ''overall'' or ''total'' LTCH-specific CCR based on the sum of LTCH operating and capital costs (as described in Chapter 3, section 150.24, of the Medicare Claims Processing Manual (CMS Pub. 100 4)) as compared to total charges. Specifically, a LTCH's CCR is calculated by dividing a LTCH's total Medicare costs (that is, the sum of its operating and capital inpatient routine and ancillary costs) by its total Medicare charges (that is, the sum of its operating and capital inpatient routine and ancillary charges) (72 FR 48117).

In the June 9, 2003 IPPS high-cost outlier final rule (68 FR 34498), we made revisions to our policies concerning the determination of LTCHs' CCRs and the reconciliation of high-cost outlier and short-stay outlier payments under the LTCH PPS. As we stated in that final rule (68 FR 34507), because the LTCH PPS high-cost outlier and short-stay outlier policies are modeled after the IPPS outlier policy, we believe they are susceptible to the same payment vulnerabilities.

In the FY 2007 IPPS final rule (71 FR 48115 through 48122), we amended our regulations and, for discharges occurring on or after October 1, 2006, refined the methodology for determining the annual CCR ceiling and statewide average CCRs for LTCHs. We also codified, with modifications and editorial clarifications, our policy for the reconciliation of high-cost outlier and short-stay outlier payments under the LTCH PPS. We indicated that because, historically, updates to the LTCH PPS CCR ceiling and statewide average CCRs have been effective on October 1, we would make these updates (and include relevant impact data) as a part of the IPPS rulemaking cycle.

Specifically, in the FY 2007 IPPS final rule (71 FR 48117 through 48121), under the broad authority of section 123 of Pub. L. 106–113 and section 307(b)(1) of Pub. L. 106–554, we established under the LTCH PPS high-cost outlier policy at § 412.525(a)(4)(iv)(C) and the LTCH PPS short-stay outlier policy at § 412.529(c)(3)(iv)(C), for discharges occurring on or after October 1, 2006, that the fiscal intermediary (or, if applicable, the MAC) may use a statewide average CCR, which is established annually by CMS, if it is unable to determine an accurate CCR for a LTCH in one of the following three circumstances: (1) New LTCHs that have not yet submitted their first Medicare cost report (for this purpose, a new LTCH is defined as an entity that has not accepted assignment of an existing hospital's provider agreement in accordance with § 489.18); (2) LTCHs whose CCR is in excess of the LTCH CCR ceiling; and (3) other LTCHs for whom data with which to calculate a CCR are not available (for example, missing or faulty data). (Other sources of data that the fiscal intermediary (or, if applicable, the MAC) may use to determine a LTCH's CCR instead of the statewide average include data from a different cost reporting period for the LTCH, data from the cost reporting period preceding the period in which the hospital began to be paid as a LTCH (that is, the period of at least 6 months that it was paid as a short-term acute care hospital), or data from other comparable LTCHs, such as LTCHs in the same chain or in the same region.)

As noted above, generally, a LTCH is assigned the applicable statewide average CCR if, among other things, a LTCH's CCR is found to be in excess of the applicable maximum CCR threshold (that is, the LTCH CCR ceiling). As we explained in the FY 2007 IPPS final rule (71 FR 48117), CCRs above this threshold are most likely due to faulty data reporting or entry, and, therefore, these CCRs should not be used to identify and make payments for outlier cases. Such data are clearly errors and should not be relied upon. Thus, under our established policy, generally, if a LTCH's calculated CCR is above the applicable ceiling, the applicable LTCH PPS statewide average CCR is assigned to the LTCH instead of the CCR computed from its most recent (settled or tentatively settled) cost report data.

Under the broad authority of section 123 of Pub. L. 106–113 and section 307(b)(1) of Pub. L. 106–554, we revised our methodology for determining the annual CCR ceiling and statewide average CCRs under the LTCH PPS effective October 1, 2006, as we explained in the FY 2007 IPPS final rule (71 FR 48117 through 48121), because we believed that those changes were consistent with the LTCH PPS single payment rate for inpatient operating and capital costs.

For discharges occurring on or after October 1, 2006, we established that the LTCH CCR ceiling specified under § 412.525(a)(4)(iv)(C)(*2*) for high-cost outliers and under § 412.529(c)(3)(iv)(C)(*2*) for short-stay outliers is calculated as 3 standard deviations above the corresponding national geometric mean total CCR (established and published annually by CMS). (The fiscal intermediary (or, if applicable, the MAC) may use a statewide average CCR if, among other things, a LTCH's CCR is in excess of the LTCH CCR ceiling.) The LTCH total CCR ceiling is determined based on IPPS CCR data, by first calculating the ''total'' (that is, operating and capital) IPPS CCR for each hospital and then determining the average ''total'' IPPS CCR for all IPPS hospitals. (Our rationale for using IPPS hospital data is discussed in the FY 2007 IPPS final rule (71 FR 48117).) The LTCH CCR ceiling is then established at 3 standard deviations from the corresponding national geometric mean total CCR. (For further detail on our methodology for annually

determining the LTCH CCR ceiling, we refer readers to the FY 2007 IPPS final rule (71 FR 48117 through 48119).)

We also established that the LTCH ''total'' CCR ceiling used under the LTCH PPS would continue to be published annually in the IPPS proposed and final rules, and the public should continue to consult the annual IPPS proposed and final rules for changes to the LTCH total CCR ceiling that would be effective for discharges occurring on or after October 1 of each year. Accordingly, in the FY 2007 IPPS final rule (71 FR 48119), we established a FY 2007 LTCH PPS total CCR ceiling of 1.321, effective for discharges occurring on or after October 1, 2006, and before October 1, 2007.

In the FY 2008 IPPS proposed rule, in accordance with § 412.525(a)(4)(iv)(C)(*2*) for high-cost outliers and § 412.529(c)(3)(iv)(C)(*2*) for short-stay outliers, using our established methodology for determining the LTCH total CCR ceiling (described above), based on IPPS total CCR data from the December 2006 update to the Provider-Specific File, we proposed a total CCR ceiling of 1.273 under the LTCH PPS that would be effective October 1, 2007. Furthermore, in the FY 2008 IPPS proposed rule, we stated that, if more recent data became available, we would use such data to determine the final total CCR ceiling under the LTCH PPS for FY 2008 using our established methodology described above. Based on the latest available data (data from the March 2007 update to the Provider-Specific File), for this final rule with comment period the total CCR ceiling of 1.284 under the LTCH PPS will be effective for discharges occurring on or after October 1, 2007, and before October 1, 2008.

In addition, under the broad authority of section 123 of Pub. L. 106–113 and section 307(b)(1) of Pub. L. 106–554, in the FY 2007 IPPS final rule (71 FR 48120), we revised our methodology to determine the statewide average CCRs under § 412.525(a)(4)(iv)(C) for high-cost outliers and under § 412.529(c)(3)(iv)(C) for short-stay outliers for use under the LTCH PPS in a manner similar to the way we computed the ''total'' CCR ceiling using IPPS CCR data. Specifically, we first calculated the total (that is, operating and capital) CCR for each IPPS hospital. We then calculated the weighted average ''total'' CCR for all IPPS hospitals in the rural areas of the State, and the weighted average ''total'' CCR for all IPPS hospitals in the urban areas of the State. (For further detail on our methodology for annually determining the LTCH urban and rural statewide average CCRs, we refer readers to the FY 2007 IPPS final rule (71 FR 48119 through 48121).) We also established that the applicable statewide average ''total'' (operating and capital) CCRs used under the LTCH PPS would continue to be published annually in the IPPS proposed and final rules, and the public should continue to consult the annual IPPS proposed and final rules for changes to the applicable statewide average total CCRs that would be effective for discharges occurring on or after October 1 each year. Accordingly, in the FY 2007 IPPS final rule (71 FR 48122), the FY 2007 LTCH PPS statewide average total CCRs for urban and rural hospitals, effective for discharges occurring on or after October 1, 2006, and before October 1, 2007, were presented in Table 8C of the Addendum of that final rule (71 FR 48303).

In the FY 2008 IPPS proposed rule, in accordance with § 412.525(a)(4)(iv)(C) for high-cost outliers and § 412.529(c)(3)(iv)(C) for short-stay outliers, using our established methodology for determining the LTCH statewide average CCRs (described above), based on the most recent complete IPPS total CCR data from the December 2006 update of the Provider-Specific File, we proposed LTCH PPS statewide average total CCRs for urban and rural hospitals that would be effective for discharges occurring on or after October 1, 2007, and before October 1, 2008, presented in Table 8C of the Addendum to the proposed rule. Furthermore, in the FY 2008 IPPS proposed rule, we stated that, if more recent data became available, we would use such data to determine the final statewide average total CCRs for urban and rural hospitals under the LTCH PPS for FY 2008 using our established methodology described above.

We did not receive any specific public comments on our proposal.

Based on the latest available data (data from the March 2007 update to the Provider-Specific File), for this final rule with comment period, the LTCH PPS statewide average total CCRs for urban and rural hospitals that will be effective for discharges occurring on or after October 1, 2007, and before October 1, 2008, are presented in Table 8C of the Addendum to this final rule with comment period. We note that, for this final rule with comment period, consistent with the proposed rule, as we established when we revised our methodology for determining the applicable LTCH statewide average CCRs in the FY 2007 IPPS final rule (71 FR 48119 through 48121), and as is the case under the IPPS, all areas in the District of Columbia, New Jersey, Puerto Rico, and Rhode Island are classified as urban, and, therefore, there are no rural statewide average total CCRs listed for those jurisdictions in Table 8C of the Addendum to this final rule with comment period. In addition, as we established when we revised our methodology for determining the applicable LTCH statewide average CCRs in that same final rule, and as is the case under the IPPS, although Massachusetts has areas that are designated as rural, there were no short-term acute care IPPS hospitals or LTCHs located in those areas as of December 2006. Therefore, consistent with the proposed rule, for this final rule with comment period there is no rural statewide average total CCR listed for rural Massachusetts in Table 8C of the Addendum of this final rule with comment period. As we also established when we revised our methodology for determining the applicable LTCH statewide average CCRs in the FY 2007 IPPS final rule (71 FR 48120 through 48121), in determining the urban and rural statewide average total CCRs for Maryland LTCHs paid under the LTCH PPS, we use, as a proxy, the national average total CCR for urban IPPS hospitals and the national average total CCR for rural IPPS hospitals, respectively. We use this proxy because we believe that the CCR data on the Provider-Specific File for Maryland hospitals may not be accurate (as discussed in greater detail in that same final rule (71 FR 48120)).

F. Report of Adjustment (Exceptions) Payments

Section 4419(b) of Pub. L. 105–33 requires the Secretary to publish annually in the **Federal Register** a report describing the total amount of adjustment payments made to excluded hospitals and units, by reason of section 1886(b)(4) of the Act, during the previous fiscal year.

The process of requesting, adjudicating, and awarding an adjustment payment is likely to occur over a 2-year period or longer. First, generally, an excluded hospital or excluded unit of a hospital must file its cost report for a fiscal year with its fiscal intermediary within 5 months after the close of its cost reporting period, in accordance with § 413.24(f)(2). The fiscal intermediary then reviews the cost report and issues a Notice of Program Reimbursement (NPR). If the hospital's operating costs are in excess of the ceiling, the hospital may file a request for an adjustment payment. The hospital's request must be received by the hospital's fiscal intermediary no later than 180 days after the date on the

intermediary's initial NPR for the cost reporting period for which the hospital requests an adjustment. The fiscal intermediary (or, if applicable, the MAC), or CMS, depending on the type of adjustment requested, then reviews the request and determines if an adjustment payment is warranted. This determination is sometimes not made until more than 6 months after the date the request is filed because there are times when the applications are incomplete and additional information must be requested in order to have a completed application. However, in an attempt to provide interested parties with data on the most recent adjustments for which we do have data, we are publishing data on adjustment payments that were processed by the fiscal intermediary or CMS during FY 2006.

The table below includes the most recent data available from the fiscal intermediaries and CMS on adjustment payments that were adjudicated during FY 2006. As indicated above, the adjustments made during FY 2006 only pertain to cost reporting periods ending in years prior to FY 2005. Total adjustment payments given to excluded hospitals and units during FY 2006 are $19,451,125. The table depicts for each class of hospitals, in the aggregate, the number of adjustment requests adjudicated, the excess operating cost over ceiling, and the amount of the adjustment payments.

Class of hospital	Number	Excess cost over ceiling	Adjustment payments
Rehabilitation	4	$2,525,385	$1,352,437
Psychiatric	27	$22,016,987	$12,648,694
Long-Term Care	.....	.....	.....
Children's	2	$787,708	$726,217
Cancer	3	$13,813,000	$4,261,560
Religious Nonmedical Health	.....	.....	.....
Care Institution	7	$2,484,149	$462,217

VII. Services Furnished to Beneficiaries in Custody of Penal Authorities

Section 1862(a)(2) of the Act prohibits payment under Medicare Part A or Part B for any items or services for which the beneficiary has no legal obligation to pay, and which no other person or organization (such as a prepayment plan of which the beneficiary is a member) has a legal obligation to provide or pay for the service. Our current regulations at § 411.4(b) specify the special conditions when Medicare payment may be made for services furnished to individuals in custody of penal authorities. These regulatory conditions include: (1) State or local law requires those individuals or groups of individuals to repay the cost of medical services they receive while in custody; and (2) the State or local government entity enforces the requirement to pay by billing all such individuals, whether or not covered by Medicare or any other health insurance, and by pursuing collection of the amounts they owe in the same way and with the same vigor that it pursues the collection of other debts.

However, § 411.4(b) does not define ''custody'' and does not clearly state that CMS will not defer to a particular State or local government's definition (or interpretation) of what constitutes ''custody.'' In the FY 2008 IPPS proposed rule (72 FR 24825), we proposed to specify that, for purposes of Medicare payment, individuals who are in ''custody'' include, but are not limited to, individuals who are under arrest, incarcerated, imprisoned, escaped from confinement, under supervised release, required to reside in mental health facilities, required to reside in halfway houses, required to live under home detention, or confined completely or partially in any way under a penal statute or rule. We believe that this definition of ''custody'' is in accordance with how custody has been defined by Federal courts for purposes of the habeas corpus protections of the Constitution. For example, the term ''custody'' is not limited solely to physical confinement. (*Sanders* v. *Freeman, 221 F.3d 846, 850–51 (6th Cir. 2000).*) Individuals on parole, probation, bail, or supervised release may be ''in custody.''

Comment: One commenter stated that the expansion of the definition of ''custody'' to include individuals who have escaped from confinement, on parole, on probation, or released on bail places an unreasonable burden on hospitals. The commenter stated that there is no incentive for patients with any of these status designations to come forward and honestly disclose their status. Moreover, the commenter pointed out, law enforcement is not in the collection business or overly concerned with billing for medical services. As a result, the commenter believed that the burden of seeking compensation for medical care furnished to patients under penal authority ultimately falls back on the healthcare provider regardless of the Medicare provisions under sections 1862(a)(2) and (a)(3) of the Act. Therefore, the commenter recommended that CMS not expand the definition of ''custody'' unless there is a means to verify the official status of the patient under penal authority.

Response: We are not expanding the definition of ''custody.'' As we indicated in the FY 2008 IPPS proposed rule, we are specifying that, for Medicare payment purposes, ''custody'' is defined consistent with how the Federal courts have defined custody and that we will not defer to a particular State or local government's definition (or interpretation) of what constitutes ''custody.'' (We note that the commenter has not explained why it believes we are expanding the definition of ''custody.'') Therefore, if a State or local government believes that an individual is not under ''custody'' for Medicare payment purposes, the State or local government should be prepared to prove to CMS that the Federal courts have ruled (or would rule) that the class or type of individual at issue is not considered (or would not be considered) under ''custody.''

Moreover, CMS contractors typically receive information from the Social Security Administration's (SSA) Prisoner Update Processing System (PUPS) in order to stop payment for services furnished to individuals in custody of penal authorities. The SSA is required by law to suspend payment of social security benefits when an individual is incarcerated and CMS contractors use that information in order to identify when they should stop Medicare payment. If Medicare denies payment for services on the basis that the individual is in ''custody'' of penal authorities, the health care provider or supplier will be directed to seek payment from the State or local government (which is similar to other general payment exclusion situations such as when Medicare directs a

civilian provider or supplier to bill the Department of Veterans Affairs instead of Medicare for a service). Therefore, there is already a means in place to verify the status of these individuals and health care providers and suppliers will not be financially burdened by our clarification of the definition of ''custody'' because, in the event that Medicare denies payment, providers and suppliers will be directed to the State or local government for payment.

Comment: Two commenters were concerned that if the proposed definition of ''custody'' is adopted, it would present practical problems for hospitals. One of the commenters stated that ''custody'' should not include individuals who are not under physical confinement, as otherwise it would be extremely difficult to identify individuals in ''custody,'' and therefore hospitals would be required to seek criminal history information and do background checks on all patients being registered. The commenter also expects that State regulations and law enforcement agencies may have conflicts with the definition as well. The second commenter asserted that, under the proposed definition, unless an individual is brought in by governmental authorities, the treating hospital will not be able to identify many persons in custody (for example, those under supervised release, or required to live under home detention). The commenter pointed out that such individuals are unlikely to identify themselves, and many prison records are protected under Federal, State or local privacy laws. Moreover, the commenter added, even if the treating hospital can identify an individual as being in ''custody'' under CMS' new definition, it will have no way of knowing whether the authority that has placed the person in custody has a legal obligation to pay for his or her care. The commenter urged CMS to include a safeguard to protect hospitals that act in good faith but mistakenly bill Medicare for services furnished to individuals in custody for whom payment is not reimbursable.

Response: As we stated in response to the previous comment, we are not expanding the definition of ''custody.'' Nor are we requiring that hospitals seek criminal histories and do background checks on all patients being registered. If Medicare denies payment for services on the basis that the individual is in ''custody'' of penal authorities, the provider or supplier will be directed to seek payment from the State or local government (which is similar to other general payment exclusion situations such as when Medicare directs a civilian provider or supplier to bill the Department of Veterans Affairs instead of Medicare for a service). If a State or local government believes that an individual is not under ''custody'' for Medicare payment purposes, it should be prepared to prove to Medicare that the Federal courts have ruled (or would rule) that the class or type of individual at issue is not considered (or would not be considered) under ''custody.'' Likewise, if a State or local government believes that it has no legal obligation to pay for the care provided to the individual (see 42 CFR 411.4(b)(1) and (b)(2)), it should be prepared to prove that to Medicare.

We are finalizing our proposed changes to § 411.4(b), with one modification. In the FY 2008 IPPS proposed rule, we specified that individuals who are ''under supervised release'' are in ''custody''; however, we did not specify that individuals who are on ''medical furlough'' are also in ''custody'' for Medicare payment purposes. Some State or local governments use the term ''medical furlough'' in order to describe individuals who are ''under supervised release.'' Therefore, we are adding ''medical furlough'' to the examples of types of ''custody'' in order to further clarify that an individual is in custody, for Medicare payment purposes, if he or she is released by the State or local government for the purpose of receiving medical services (or accompanied by a police officer, other penal authority, or other government representative to the location where the medical services are furnished) and required to return to the State or local government facility after the medical services are furnished.

VIII. MedPAC Recommendations

We are required by section 1886(e)(4)(B) of the Act to respond to MedPAC's recommendations regarding hospital inpatient payments in our annual proposed and final IPPS rules. We have reviewed MedPAC's March 2007 ''Report to the Congress: Medicare Payment Policy'' and have given it careful consideration in conjunction with the policies set forth in this document. MedPAC's Recommendation 2A–1 states that, ''The Congress should increase payment rates for the acute inpatient and outpatient prospective payment systems in 2008 by the projected rate of increase in the hospital market basket index, concurrent with implementation of a quality incentive payment program.'' This recommendation is discussed in Appendix B to this final rule with comment period.

Recommendation 2A–2: MedPAC recommended that, ''Concurrent with implementation of severity adjustment to Medicare's diagnosis related group payments, the Congress should reduce the indirect medical education adjustment in fiscal year 2008 by 1 percentage point to 4.5 percent per 10 percent increment in the resident-to-bed ratio. The funds obtained from reducing the indirect medical education adjustment should be used to fund a quality incentive payment system.'' MedPAC further states that the IME adjustment is ''set above the empirical level which contributes to the large differences between teaching and nonteaching hospitals in financial performance under Medicare.'' MedPAC asserts that since there is no accountability for how IME funds are used, and teaching hospitals will benefit from implementation of the severity adjusted DRGs, the IME adjustment should be reduced in FY 2008.

Response: We note that MedPAC stated in its March 2007 Report that Congress made a conscious decision to fund the IME adjustment above the empirical level due to the concern for how teaching hospitals would fare under the PPS. Because the IME adjustment is set by Congress, as cited in section 1886(d)(5)(B) of the Act, any change to the IME adjustment, whether it is a 1 percentage point reduction or reduction of the IME adjustment to its empirical level, would require a statutory change. Therefore, absent a change to the IME provision in the Medicare statute for FY 2008, the IME adjustment will remain at the current level required by the statute, as specified in section IV.D. of this preamble.

We did not receive any public comments regarding Recommendation 2A–2.

Recommendation 2A–3: MedPAC recommended that, ''The Secretary should improve the form and accompanying instructions for collecting data on uncompensated care in the Medicare cost report and require hospitals to report using the revised form as soon as possible.'' MedPAC indicated that ''accurate data on hospitals' charity care and bad debts are crucial to any effort to help develop a federal payment mechanism to help hospitals with their uncompensated care.''

Response: MedPAC convened an ''Expert Panel on Measuring Uncompensated Care'' on May 5, 2005, to address concerns raised by stakeholders on the usefulness of the S–10 Worksheet data. CMS' representatives participated in the

discussions on this expert panel, and listened carefully to the concerns of MedPAC and the stakeholders about the S–10 Worksheet. MedPAC is recommending that we adopt the list of recommended changes to the S–10 Worksheet that resulted from the panel's discussion. CMS is currently undertaking a major update of the hospital cost report and will be making changes to the S–10 Worksheet form and accompanying instructions based on the panel's discussions with MedPAC.

Comment: One commenter supported CMS' proposal to revise the S–10 Worksheet in response to MedPAC's expert panel recommendations. The commenter stated that its members provide 25 percent of the uncompensated care provided in hospitals nationwide and that it supported CMS' efforts to expand its collection of uncompensated care data.

Response: We appreciate the commenter's support of our efforts to improve the S–10 Worksheet and accompanying instructions for collecting data on uncompensated care in the Medicare cost report.

In sections II.C. through E. of the preamble of this final rule with comment period, we further address the recommendations included in Recommendation 1 and Recommendation 3 in the March 2005 Report to Congress on Physician-Owned Specialty Hospitals. Recommendation 1 relates to refining the DRGs used under the IPPS to more fully capture differences in severity of illness among patients; basing the DRG relative weights on the estimated cost of providing care rather than on charges; and basing the weights on the national average of hospitals' relative values in each DRG. Recommendation 3 recommended that the Secretary implement MedPAC's recommended policies over a transition period.

For further information relating specifically to the MedPAC reports or to obtain a copy of the reports, contact MedPAC at (202) 653–7220, or visit MedPAC's Web site at: *http://www.medpac.gov.*

IX. Other Required Information

A. Requests for Data From the Public

In order to respond promptly to public requests for data related to the prospective payment system, in the proposed rule, we presented our established process under which commenters could gain access to raw data on an expedited basis. Generally, the data were made available in computer tape or cartridge format or on diskette through the Internet at: *http://www.cms.hhs.gov/providers/hipps.* We listed the data files and the cost for each file, if applicable, in the proposed rule.

Commenters interested in discussing any data used in constructing the proposed rule or this final rule should contact Nisha Bhat at (410) 786 5320.

B. Collection of Information Requirements

Under the Paperwork Reduction Act of 1995 (PRA), we are required to provide 60-day notice in the **Federal Register** and solicit public comment before a collection of information requirement is submitted to the Office of Management and Budget (OMB) for review and approval. In order to fairly evaluate whether an information collection should be approved by OMB, section 3506(c)(2)(A) of the PRA requires that we solicit comment on the following issues:

- The need for the information collection and its usefulness in carrying out the proper functions of our agency.
- The accuracy of our estimate of the information collection burden.
- The quality, utility, and clarity of the information to be collected.
- Recommendations to minimize the information collection burden on the affected public, including automated collection techniques.

In the FY 2008 IPPS proposed rule, we solicited public comment on each of these issues for the following sections of this document that contain information collection requirements. These provisions are discussed in various sections of this final rule with comment period.

Special Treatment: Hospitals Located in Urban Areas and That Apply for Reclassifications as Rural. (§ 412.103)

Section 412.103(g) states that (1) for hospitals other than rural referral centers (RRCs) described in paragraph (g)(2) of this section, the hospital may cancel its rural reclassification by submitting a written request to the CMS Regional Office not less than 120 days prior to the end of its current cost reporting period, and (2) for hospitals classified as RRCs under § 412.96 based on rural reclassification under this section, the hospital may cancel its rural reclassification by submitting a written request to the CMS Regional Office not less than 120 days prior to the end of a Federal fiscal year and after being paid as rural for at least one 12-month cost reporting period.

The burden associated with these requirements is the time and effort required for a hospital to develop, draft, and submit its written request for the cancellation of its rural reclassification. While these requirements are subject to the PRA, we believe the burden is exempt under 5 CFR 1320.3(c)(4). We believe that the information collection requirements in § 412.103(g)(1) and § 412.103(g)(2), respectively, will impact less than 10 entities. The notices will be submitted by individual hospitals and will be reviewed on a case-by-case basis.

Basic Commitments. (§ 489.20)

Section 489.20(u)(1) requires physician-owned hospitals, as defined in § 489.3, to furnish notice to all patients that the hospital is a physician-owned hospital. The notice must be furnished at the beginning of their hospital stay or outpatient visit. The burden associated with the aforementioned requirements is the time and effort associated with a physician-owned hospital developing a generic notice and providing notice to the patients. Approximately 175 physician-owned hospitals must comply with this requirement. We estimate that it will require a hospital's general counsel 4 hours to develop a standard notice to be furnished to all patients upon admission as an inpatient or an outpatient. The total annual burden for this requirement is 700 hours.

In addition, we estimate that it will take 30 seconds to provide the notice to a patient and it will take another 30 seconds to maintain a copy of the disclosure in the patient's medical record. On average, each hospital will be required to make 1,092 disclosures per year. The total burden associated with the inpatient reporting and recordkeeping requirements in § 489.20(u)(1) is 3,185 annual burden hours.

Based on public comments received during the 60-day comment period for the **Federal Register** notice (72 FR 21024) for this information collection request, we revised our burden estimates to include the burden associated with the physician-ownership disclosure and recordkeeping requirement for outpatient visits. We estimate that each hospital will conduct 17,472 disclosures per year. As with the inpatient disclosure requirement, we estimate that the burden associated with complying with the outpatient disclosure requirement to be 30 seconds to disclose the information and 30 seconds to maintain a copy of the disclosure in the patient's medical record. We estimate the annual burden for the reporting and recordkeeping requirements for outpatient visits to be 25,480 hours, respectively, for a total of 50,960 hours.

Section 489.20(v) requires all hospitals, as defined in § 489.24(b), to furnish all patients notice, in accordance with § 482.13(b)(2), at the beginning of their hospital stay or outpatient visit if a doctor of medicine or a doctor of osteopathy is not present in the hospital 24 hours per day, 7 days per week. The notice must indicate how the hospital will meet the medical needs of any inpatient who develops an emergency medical condition, as defined in § 489.24(b), at a time when there is no physician present in the hospital. The burden associated with this requirement is the time and effort necessary for each hospital to develop a standard notice to furnish to its patients. We believe 2,504 hospitals will be required to comply with this requirement. Complying with the requirement will require a hospital's general counsel 4 hours to develop a standard notice. The total annual burden associated with the legal review and development of the standard notice is 10,016 hours.

We estimate that it will take 30 seconds to provide the notice to a patient, and it will take another 30 seconds to maintain a copy of the disclosure in the patient's medical record. On average, each hospital will be required to make 1,092 disclosures per year. The burden associated with the recordkeeping and reporting requirements for inpatient admissions as stated in § 489.20(v) is 45,573 annual burden hours.

Based on public comments received during the 60-day comment period for the **Federal Register** notice (72 FR 21024) for this information collection request, we revised our burden estimates for § 489.20(v) to include the burden associated with outpatient visits as well. We estimate that each hospital will conduct 17,472 disclosures per year. As with the inpatient disclosure requirement, we estimate that the burden associated with complying with the outpatient disclosure requirement to be 30 seconds to disclose the information and 30 seconds to maintain a copy of the disclosure in the patient's medical record. We estimate the annual burden for the reporting and recordkeeping requirements for outpatient visits to be 364,583 hours, respectively, for a total of 729,165 hours.

ESTIMATED ANNUAL REPORTING AND RECORDKEEPING BURDEN

Regulation section	OMB control No.	Respondents	Responses	Burden per response (hours)	Inpatient admission burden (hours)	Outpatient visit burden (hours)	Total annual burden (hours)
§ 489.20(u)	0938–New	175	175	4			700
			3,248,875	.016667	3,185	50,960	54,145
§ 489.20(v)	0938–New	2,504	2,504	4			10,016
			49,735,635	.016667	45,573	729,165	774,738
Total Annual Burden (Inpatient+Outpatient)							839,599

This final rule imposes collection of information requirements as outlined in the regulation text and specified above. However, this final rule also makes reference to several associated information collections that are not discussed in the regulation text. The following is a discussion of these collections, which have already received the Office of Management and Budget's (OMB) approval.

Add-on Payments for New Services and Technologies

Section II.J.1. of the preamble of this final rule with comment period discusses add-on payments for new services and technologies. Specifically, this section states that applicants for add-on payments for new medical services or technologies for FY 2009 must submit a formal request. A formal request includes a full description of the clinical applications of the medical service or technology and the results of any clinical evaluations demonstrating that the new medical service or technology represents a substantial clinical improvement. In addition, the request must contain a significant sample of the data to demonstrate that the medical service or technology meets the high cost threshold.

We also detailed the burden associated with this requirement in a final rule published in the **Federal Register** on September 7, 2001 (66 FR 46902). As stated in that final rule, we believe the associated burden is exempt from the PRA as stipulated under 5 CFR 1320.3(h)(6). Collection of the information for this requirement will be conducted on an individual case-by-case basis.

Occupational Mix Adjustment to the FY 2008 Index (Hospital Wage Index Occupational Mix Survey)

Section III. of the preamble of this final rule with comment period details the changes to the hospital wage index for FY 2008. Specifically, section III.C. addresses the occupational mix adjustment to the FY 2008 index. While the preamble does not contain any new information collection requirements, it is important to note that there is an OMB approved collection associated with the hospital wage index.

As stated in section III.C. of the preamble of this final rule with comment period, section 304(c) of Pub. L. 106–554 amended section 1886(d) (3)(E) of the Act to require CMS to collect data at least once every 3 years on the occupational mix of employees for each short term, acute care hospital participating in the Medicare program, in order to construct an occupational mix adjustment to the wage index. We collect the data via the occupational mix survey.

The burden associated with this information collection request is the time and effort required to collect and submit the data in the Hospital Wage Index Occupational Mix Survey to CMS. While this burden is subject to the PRA, it is already approved under OMB control number 0938–0907, with an expiration date of May 31, 2009.

Revisions to the Wage Index Based on Hospital Redesignations (Medicare Geographic Classification Review Board)

As noted in section III.I of the preamble of this final rule with comment period, section 1886(d)(10) of the Act established the MGCRB, an entity that has the authority to accept IPPS hospital applications requesting geographic reclassification for wage index or standardized payment amounts and to issue decisions on these requests. It is important for CMS to ensure the accuracy of the MGCRB decisions and remain apprised of potential payment impacts. Our regulations at § 412.256 require a hospital to submit a copy of its MGCRB application to CMS.

The burden associated with this requirement is the time and effort associated with a hospital compiling and submitting a copy of its MGCRB application to CMS. While this requirement is subject to the PRA, the burden is approved under OMB control number 0938–0573, with an expiration date of November 30, 2008.

Reporting of Hospital Quality Data for Annual Hospital Payment Update

As noted in section IV.A.1 of the preamble of this final rule with comment period, section 5001(a) of the DRA sets out new requirements for the RHQDAPU program. The RHQDAPU program was established to implement section 501(b) of Pub. L. 108–173, thereby expanding our Hospital Quality Initiative. The RHQDAPU program originally consisted of a ''starter set'' of 10 quality measures. Hospitals participating in the hospital quality initiative submit their quality data on the 10 measures to receive an increase in their Medicare Annual Payment Update. The Office of Management and Budget approved the collection of data associated with the original starter set of quality measures under OMB control number 0938–0918, with an expiration date of January 31, 2010.

However, we recently submitted a new information collection request containing additional quality measures to OMB for approval. The new measures collect data for the Surgical Care Improvement Project (SCIP) and mortality measures. We announced and sought public comment on the information collection request in both 60-day and 30-day **Federal Register** notices published on October 13, 2006 (71 FR 60532), and December 22, 2006 (71 FR 77026), respectively. The revised information collection request is currently under review at OMB.

Section IV.A.1 of the preamble of this final rule with comment period also discusses the use of the HCAHPS survey to capture quality data. The survey is designed to produce comparable data on the patient's perspective on care that allows objective and meaningful comparisons between hospitals on domains that are important to consumers. The HCAHPS survey is currently approved under OMB control number 0938–0981, with an expiration date of December 31, 2007.

Section IV.A.2.h of the preamble of this final rule with comment period addresses the reconsideration and appeal procedures for a hospital that we believe did not meet the RHQDAPU program requirements. If a hospital disagrees with our determination, it may submit a written request to us requesting that we reconsider our decision. The hospital's letter must explain the reasons it believes it did meet the RHQDAPU program requirements. While this is a reporting requirement, the burden associated with it is not subject to the PRA under 5 CFR 1320.4(a)(2). The burden associated with information collection requirements imposed subsequent to an administrative action is not subject to the PRA.

If you comment on these information collection and recordkeeping requirements, please mail copies directly to the following:

Centers for Medicare & Medicaid Services, Office of Strategic Operations and Regulatory Affairs, Regulations Development Group, Attn: William N. Parham, III, CMS–1533–F Room C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850; and

Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10235, New Executive Office Building, Washington, DC 20503, Attn: Carolyn Lovett, CMS Desk Officer, CMS–1533–F, *carolyn_lovett@omb.eop.gov.* Fax (202) 395 6974.

C. Waiver of Notice of Proposed Rulemaking

We ordinarily publish a notice of proposed rulemaking in the **Federal Register** to provide a period for public comment before the provisions of a notice such as this take effect. However, we can waive this procedure if an agency finds good cause that a notice and comment procedure is impracticable, unnecessary, or contrary to the public interest and incorporates a statement of the finding and its reasons in the notice issued.

We find it unnecessary to undertake notice and comment rulemaking for the additional change to 42 CFR 412.106(b)(2)(iii) discussed in section IV.E. of the preamble of this final rule with comment period, because this notice merely provides technical corrections to the regulations and does not make any substantive changes to the regulations or our existing policy. Therefore, under 5 U.S.C. 553(b)(B), for good cause, we are waiving notice and comment procedures.

In addition, as we discussed in section II.I. of the preamble of this final rule with comment period, we proposed in the FY 2008 IPPS proposed rule ((72 FR 24755 through 24771) to adopt the MS–LTC–DRGs as the patient classification system for the LTCH PPS beginning with discharges on or after October 1, 2007. However, in the proposed rule, we omitted proposed changes to the regulation text reflecting the proposed change from LTC–DRGs to MS–LTC–DRGs. Although we did not propose regulation text, as referenced above, our comprehensive descriptions of our proposed adoption of the MS–LTC–DRGs in the preamble of the proposed rule provided the public with detailed specifics of our proposed policy which was subject to notice and comment procedures. We are finalizing the proposed adoption of the MS–LTC–DRGs for use in the LTCH PPS beginning with discharges on or after October 1, 2007, and we are amending the definitions in the regulations at § 412.503. By adding this omitted regulation text, we are ensuring that the CFR accurately reflects the policies adopted in the FY 2008 IPPS final rule. We find that undertaking further notice and comment procedures for the purposes of adding conforming definitions in the LTCH PPS regulations on this policy is unnecessary as the regulation text merely implements and reflects our proposed policy and final policy which was subject previously to notice and comment procedures. Therefore, under 5 U.S.C. 553(b)(B), for good cause, we are waiving notice and comment procedures.

List of Subjects

42 CFR Part 411

Kidney diseases, Medicare, Physician referral, Reporting and recordkeeping requirements.

42 CFR Part 412

Administrative practice and procedure, Health facilities, Medicare, Puerto Rico, Reporting and recordkeeping requirements.

42 CFR Part 413

Health facilities, Kidney diseases, Medicare, Puerto Rico, Reporting and recordkeeping requirements.

42 CFR Part 489

Health facilities, Medicare, Reporting and recordkeeping requirements.

■ For the reasons stated in the preamble of this final rule, the Centers for Medicare & Medicaid Services is amending 42 CFR Chapter IV as follows:

PART 411—EXCLUSIONS FROM MEDICARE AND LIMITATIONS ON MEDICARE PAYMENT

■ 1. The authority citation for Part 411 continues to read as follows:

Authority: Secs. 1102, 1860D–4(e)(6), 1871, and 1877(b)(4) and (5) of the Social Security Act (42 U.S.C. 1302, 1395w–10(e)(6), 1395hh, and 1395nn(b)(4) and (5)).

■ 2. Section 411.4 is amended by revising the introductory text of paragraph (b) to read as follows:

§ 411.4 Services for which neither the beneficiary nor any other person is legally obligated to pay.

* * * * *

(b) *Special conditions for services furnished to individuals in custody of penal authorities.* Individuals who are in custody include, but are not limited to, individuals who are under arrest, incarcerated, imprisoned, escaped from confinement, under supervised release, on medical furlough, required to reside in mental health facilities, required to reside in halfway houses, required to live under home detention, or confined completely or partially in any way under a penal statute or rule. Payment may be made for services furnished to individuals or groups of individuals who are in the custody of police or other penal authorities or in the custody of a government agency under a penal statute only if the following conditions are met:

* * * * *

PART 412—PROSPECTIVE PAYMENT SYSTEMS FOR INPATIENT HOSPITAL SERVICES

■ 3. The authority citation for Part 412 is revised to read as follows:

Authority: Secs. 1102 and 1871 of the Social Security Act (42 U.S.C. 1302 and 1395hh), and sec. 124 of Pub. L. 106–113 (113 Stat. 1501A–332).

■ 4. Section 412.2 is amended by adding a new paragraph (g) to read as follows:

§ 412.2 Basis for payment.

* * * * *

(g) *Payment adjustment for certain replaced devices.* CMS makes a payment adjustment for certain replaced devices, as provided under § 412.89.

■ 5. Section 412.4 is amended by—
■ a. Revising paragraphs (d)(3)(ii)(B) and (d)(3)(ii)(C).
■ b. Adding a new paragraph (d)(3)(ii)(D).
■ c. Revising paragraph (f)(3).
■ d. Revising the introductory text of paragraph (f)(5).
■ e. Revising paragraph (f)(5)(i).
■ f. Revising paragraph (f)(5)(iv).
■ g. Adding a new paragraph (f)(6).

The revisions and additions read as follows:

§ 412.4 Discharges and transfers.

* * * * *

(d) * * *

(3) * * *

* * * * *

(ii) * * *

(B) The proportion of short-stay discharges to postacute care to total discharges in the DRG exceeds the 55th percentile for all DRGs;

(C) The DRG is paired with a DRG based on the presence or absence of a comorbidity or a complication or major cardiovascular condition that meets the criteria specified under paragraphs (d)(3)(ii)(A) and (d)(3)(ii)(B) of this section; and

(D) In the case of MS-DRGs that share the same base MS-DRG, if one MS-DRG meets the criteria specified under paragraph (d)(3)(ii)(B) of this section, every MS-DRG that shares the same base MS-DRG is a qualifying DRG.

* * * * *

(f) * * *

(3) *Transfer assigned to DRG for newborns that die or are transferred to another hospital.* If a transfer is classified into CMS DRG 385 (Neonates, Died or Transferred) prior to October 1, 2007, or into MS-DRG 789 (Neonates, Died or Transferred to Another Acute Care Facility) on or after October 1, 2007, the transferring hospital is paid in accordance with § 412.2(b).

* * * * *

(5) *Special rule for DRGs meeting specific criteria.* For discharges occurring on or after October 1, 2005, and prior to October 1, 2007, a hospital that transfers an inpatient under the circumstances described in paragraph (c) of this section is paid using the provisions of paragraphs (f)(2)(i) and (f)(2)(ii) of this section if the transfer case is assigned to one of the DRGs meeting the following criteria:

(i) The DRG meets the criteria specified in paragraph (d)(3)(i) or (d)(3)(ii) of this section.

* * * * *

(iv) If a DRG is paired with a DRG based on the presence or absence of a comorbidity or complication or a major cardiovascular complication that meets the criteria specified in paragraphs (f)(5)(i) through (f)(5)(iii) of this section, that DRG will also be paid under the provisions of paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

(6) *Special rule for DRGs meeting specific criteria.* For discharges occurring on or after October 1, 2007, a hospital that transfers an inpatient under the circumstances described in paragraph (c) of this section is paid using the provisions of paragraphs (f)(2)(i) and (f)(2)(ii) of this section if the transfer case is assigned to one of the DRGs meeting the following criteria:

(i) The DRG meets the criteria specified in paragraph (d)(3)(i) or (d)(3)(ii) of this section;

(ii) The average charges of the 1-day discharge cases in the DRG must be at least 50 percent of the average charges for all cases in the DRG; and

(iii) The geometric mean length of stay for the DRG is greater than 4 days.

(iv) If a DRG is part of an MS-DRG group that meets the criteria specified in paragraphs (f)(6)(i) through (f)(6)(iii) of this section, that DRG will also be paid under the provisions of paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

■ 6. Section 412.64 is amended by—
■ a. Revising paragraph (b)(1)(ii)(B).
■ b. In paragraph (b)(3), designating the existing text as (b)(3)(i) and adding a new paragraph (b)(3)(ii).
■ c. Adding a new paragraph (e)(3).
■ d. Revising paragraph (i)(2).
■ e. In the introductory text of paragraph (h)(4), removing the date ''September 30, 2007'' and adding in its place ''September 30, 2008''.

The revisions read as follows:

§ 412.64 Federal rates for inpatient operating costs for Federal fiscal year 2005 and subsequent fiscal years.

* * * * *

(b) * * *

(1) * * *

(ii) * * *

(B) For discharges occurring on or after October 1, 1983, and before October 1, 2007, the following New England counties are deemed to be parts of urban areas under section 601(g) of the Social Security Amendments of 1983 (Pub. L. 98–21, 42 U.S.C. 1395ww (note); Litchfield County, Connecticut; York County, Maine; Sagadahoc County, Maine; Merrimack County, New Hampshire; and Newport County, Rhode Island.

* * * * *

(3) (i) * * *

(ii) For discharges occurring on or after October 1, 2007, hospitals in the following New England counties, if not already located in an urban area, are deemed to be located in urban areas under section 601(g) of the Social Security Amendments of 1983 (Pub. L. 98–21, 42 U.S.C. 1395ww (note): Litchfield County, Connecticut; York County, Maine; Sagadahoc County, Maine; Merrimack County, New Hampshire; and Newport County, Rhode Island.

* * * * *

(e) * * *

(3) To the extent CMS determines that changes to the DRG classification and recalibrations of the DRG relative weights for a previous year (or estimates that such adjustments for a future fiscal year) did (or are likely to) result in a change in aggregate payments under this subsection during the fiscal year that are a result of changes in coding or

classification of discharges that do not reflect real changes in case mix, CMS may adjust the standardized amount for subsequent fiscal years so as to eliminate the effect of such coding and classification changes.

* * * * *

(i) * * *

(2) *Amount of adjustment.* A hospital located in a county that meets the criteria under paragraphs (i)(1)(i) through (i)(1)(iii) of this section will receive an increase in its wage index that is equal to a weighted average of the difference between the postreclassified wage index of the MSA (or MSAs) with the higher wage index (or wage indices) and the postreclassified wage index of the MSA or rural statewide area in which the qualifying county is located, weighted by the overall percentage of the hospital employees residing in the qualifying county who are employed in any MSA with a higher wage index.

* * * * *

■ 7. The heading of Subpart F is revised to read as follows:

Subpart F—Payments for Outlier Cases, Special Treatment Payment for New Technology, and Payment Adjustment for Certain Replaced Devices

■ 8. Section 412.88 is amended by revising the introductory text of paragraph (a)(2) to read as follows:

§ 412.88 Additional payment for new medical service or technology.

(a) * * *

(2) If the costs of the discharge (determined by applying the operating cost to charge ratios as described in § 412.84(h)) exceed the full DRG payment, an additional amount equal to the lesser of—

* * * * *

■ 9. A new undesignated center heading and a new § 412.89 are added under Subpart F following § 412.88 to read as follows:

Payment Adjustment for Certain Replaced Devices

§ 412.89 Payment adjustment for certain replaced devices.

(a) *General rule.* For discharges occurring on or after October 1, 2007, the amount of payment for a discharge described in paragraph (b) of this section is reduced when—

(1) A device is replaced without cost to the hospital;

(2) The provider received full credit for the cost of a device; or

(3) The provider receives a credit equal to 50 percent or more of the cost of the device.

(b) *Discharges subject to payment adjustment.* (1) Payment is reduced in accordance with paragraph (a) of this section only if the implantation of the device determines the DRG assignment.

(2) CMS lists the DRGs that qualify under paragraph (b)(1) of this section in the annual final rule for the hospital inpatient prospective payment system.

(c) *Amount of reduction.* (1) For a device provided to the hospital without cost, the cost of the device is subtracted from the DRG payment.

(2) For a device for which the hospital received a full or partial credit, the amount credited is subtracted from the DRG payment.

■ 10. Section 412.96 is amended by adding a new paragraph (g)(4), to read as follows:

§ 412.96 Special treatment: Referral centers.

* * * * *

(g) * * *

(4) A hospital that submits a written request on or after October 1, 2007, to cancel its reclassification under § 412.103(g) is deemed to have cancelled its status as a rural referral center effective on the same date the cancellation under § 412.103(g) takes effect. The provision of this paragraph (g)(4) applies to hospitals that qualify as rural referral centers under § 412.96 based on rural status acquired under § 412.103.

* * * * *

■ 11. Section 412.103 is amended by revising paragraph (g) to read as follows:

§ 412.103 Special treatment: Hospitals located in urban areas and that apply for reclassifications as rural.

* * * * *

(g) *Cancellation of classification*—(1) *Hospitals other than rural referral centers.* Except as provided in paragraph (g)(2) of this section—

(i) A hospital may cancel its rural reclassification by submitting a written request to the CMS Regional Office not less than 120 days prior to the end of its current cost reporting period.

(ii) The hospital's cancellation of the classification is effective beginning with the next full cost reporting period.

(2) *Hospitals classified as rural referral centers.* For a hospital that was classified as a rural referral center under § 412.96 based on rural reclassification under this section—

(i) A hospital may cancel its rural reclassification by submitting a written request to the CMS Regional Office not less than 120 days prior to the end of a Federal fiscal year and after being paid as rural for at least one 12-month cost reporting period.

(ii) The hospital's cancellation of the classification is not effective until it has been paid as rural for at least one 12-month cost reporting period, and not until the beginning of the Federal fiscal year following such 12-month cost reporting period.

(iii) The provisions of paragraphs (g)(2)(i) and (g)(2)(ii) of this section are effective for all written requests submitted by hospitals on or after October 1, 2007, to cancel rural reclassifications.

■ 12. Section 412.106 is amended by—

■ a. Revising paragraph (b)(2)(i).

■ b. Revising paragraph (b)(2)(iii).

The revisions read as follows:

§ 412.106 Special treatment: Hospitals that serve a disproportionate share of low-income patients.

* * * * *

(b) * * *

(2) * * *

(i) Determines the number of patient days that—

(A) Are associated with discharges occurring during each month; and

(B) Are furnished to patients who during that month were entitled to both Medicare Part A (or Medicare Advantage (Part C)) and SSI, excluding those patients who received only State supplementation;

* * * * *

(iii) Divides the number determined under paragraph (b)(2)(ii) of this section by the total number of days that—

(A) Are associated with discharges that occur during that period; and

(B) Are furnished to patients entitled to Medicare Part A (or Medicare Advantage (Part C)).

* * * * *

■ 13. Section 412.230 is amended by adding a new paragraph (d)(2)(v) to read as follows:

§ 412.230 Criteria for an individual hospital seeking redesignation to another rural area or an urban area.

* * * * *

(d) * * *

(1) * * *

(2) * * *

(v) For applications submitted for reclassification effective in FY 2009 and thereafter, a campus of a multicampus hospital that is located in a geographic area different from the area associated with the provider number of the entire multicampus hospital may seek reclassification to another CBSA using the composite wage data of the entire multicampus hospital as its hospital-specific data.

* * * * *

■ 14. Section 412.232 is amended by adding a new paragraph (d)(2)(iii), to read as follows:

§ 412.232 Criteria for all hospitals in a rural county seeking urban redesignation.

* * * * *

(d) * * *

(1) * * *

(2) * * *

(iii) For redesignations effective beginning FY 2009, the wage data of an individual campus of a multicampus hospital will be determined by allocating, on the basis of full-time equivalent staff or discharges, the wage data of the entire multicampus hospital between or among the individual campuses of the multicampus hospital. The provision of this paragraph (d)(2)(iii) applies only in the case where an individual campus is located in a geographic area different from the area associated with the provider number of the entire multicampus hospital.

■ 15. Section 412.234 is amended by revising paragraph (c) to read as follows:

§ 412.234 Criteria for all hospitals in an urban county seeking redesignation to another urban area.

* * * * *

(c) *Appropriate wage data.* (1) The hospitals must submit appropriate wage data as provided for in § 412.230(d)(2).

(2) For redesignations effective beginning FY 2009, the appropriate wage data of an individual campus located in a geographic area different from the area associated with the provider number of the entire multicampus hospital are the wage data described in § 412.232(d)(2)(iii).

■ 16. Section 412.316 is amended by—

■ a. Revising the introductory text of paragraph (b).

■ b. Revising paragraph (b)(2).

■ c. Revising paragraph (b)(3).

The revisions read as follows:

§ 412.316 Geographic adjustment factor.

* * * * *

(b) *Large urban location.* For discharges occurring on or before September 30, 2007, CMS provides an additional payment to a hospital located in a large urban area equal to 3.0 percent of what would otherwise be payable to the hospital based on the Federal rate.

* * * * *

(2) For discharges occurring on or after October 1, 2004, and before October 1, 2007, the definition of large urban areas under § 412.63(c)(6) continues be in effect for purposes of the payment adjustment under this section, based on the geographic classification under § 412.64, except as provided for in paragraph (b)(3) of this section.

(3) For purposes of this section, the geographic classifications specified under § 412.64 apply, except that, effective for discharges occurring on or after October 1, 2006, and before October 1, 2007, for an urban hospital that is reclassified as rural as set forth in § 412.103, the geographic classification is rural.

* * * * *

■ 17. Section 412.322 is amended by adding new paragraphs (c) and (d) to read as follows:

§ 412.322 Indirect medical education adjustment factor.

* * * * *

(c) *Payment adjustment factor for FY 2009.* For discharges occurring on or after October 1, 2008, and before October 1, 2009, the indirect teaching adjustment factor equals one-half the amount computed under paragraph (b) of this section.

(d) *Payment adjustment factor for FY 2010 and subsequent fiscal years.* For discharges occurring on or after October 1, 2009, CMS makes no separate payment for indirect teaching medical education under the prospective payment system for inpatient capital costs.

■ 18. Section 412.503 is amended by revising the definition of ''LTC–DRG'' and adding a definition of ''MS–LTC–DRG'' in alphabetical order, to read as follows:

§ 412.503 Definitions.

* * * * *

LTC–DRG stands for the diagnosis-related group used to classify patient discharges from a long-term care hospital based on clinical characteristics and average resource use, for prospective payment purposes. Effective October 1, 2007, long-term care hospital patient discharges occurring on or after October 1, 2007, are classified by a severity-adjusted patient classification system, the MS–LTC–DRGs. Any reference to the term ''LTC–DRG'' shall be considered a reference to the term ''MS–LTC–DRG'' when applying the provisions of this subpart for policy descriptions and payment calculations for discharges from a long-term care hospital occurring on or after October 1, 2007.

MS–LTC–DRG stands for the severity-adjusted diagnosis-related group used to classify patient discharges from a long-term care hospital based on clinical characteristics and average resource use, for prospective payment purposes for discharges from a long-term care hospital occurring on or after October 1, 2007.

* * * * *

PART 413—PRINCIPLES OF REASONABLE COST REIMBURSEMENT; PAYMENT FOR END-STAGE RENAL DISEASE SERVICES; PROSPECTIVELY DETERMINED PAYMENT RATES FOR SKILLED NURSING FACILITIES

■ 19. The authority citation for Part 413 is revised to read as follows:

Authority: Secs. 1102, 1812(d), 1814(b), 1815, 1833(a), (i), and (n), 1861(v), 1871, 1881, 1883, and 1886 of the Social Security Act (42 U.S.C. 1302, 1395d(d), 1395f(b), 1395g, 1395l(a), (i), and (n), 1395x(v), 1395hh, 1395rr, 1395tt, and 1395ww); and sec. 124 of Pub. L. 106–133 (113 Stat. 1501A–332).

■ 20. Section 413.75(b) is amended by—

■ a. Adding in alphabetical order a definition of ''orientation activities''.

■ b. Revising the definition of ''patient care activities''.

The addition and revision read as follows:

§ 413.75 Direct GME payments: General requirements.

* * * * *

(b) * * *

Orientation activities means activities that are principally designed to prepare an individual for employment as a resident in a particular setting, or for participation in a particular specialty program and patient care activities associated with that particular specialty program.

Patient care activities means the care and treatment of particular patients, including services for which a physician or other practitioner may bill, and orientation activities as defined in this section.

* * * * *

PART 489—PROVIDER AGREEMENTS AND SUPPLIER APPROVAL

■ 21. The authority citation for Part 489 is amended to read as follows:

Authority: Secs. 1102, 1819, 1820(e), 1861, 1864(m), 1866, 1869, and 1871 of the Social Security Act (42 U.S.C. 1302, 1395i–3, 1395x, 1395aa(m), 1395cc, 1395ff, and 1395hh).

■ 22. Section 489.3 is amended by adding a definition of ''physician-owned hospital'' in alphabetical order to read as follows:

§ 489.3 Definitions.

* * * * *

Physician-owned hospital means any participating hospital (as defined in § 489.24) in which a physician or physicians have an ownership or investment interest. The ownership or investment interest may be through equity, debt, or other means, and

includes an interest in an entity that holds an ownership or investment interest in the hospital. This definition does not include a hospital with physician ownership or investment interests that satisfies the requirements at § 411.356(a) or (b) of this chapter.

■ 23. Section 489.12 is amended by—

■ a. Revising paragraph (a)(2).

■ b. Redesignating paragraph (a)(3) as paragraph (a)(4).

■ c. Adding a new paragraph (a)(3).

The revision and addition read as follows:

§ 489.12 Decision to deny an agreement.

(a) * * *

(2) The prospective provider has failed to disclose ownership and control interests in accordance with § 420.206 of this chapter;

(3) The prospective provider is a physician-owned hospital as defined in § 489.3 and does not have procedures in place for making physician ownership disclosures to patients in accordance with § 489.20(u); or

* * * * *

■ 24. Section 489.20 is amended by adding new paragraphs (u) and (v) to read as follows:

§ 489.20 Basic commitments.

* * * * *

(u) In the case of a physician-owned hospital as defined in § 489.3 to furnish written notice to all patients at the beginning of their hospital stay or outpatient visit that the hospital is a physician-owned hospital in order to assist the patients in making informed decisions regarding their care, in accordance with § 482.13(b)(2) of this subchapter. The notice should disclose, in a manner reasonably designed to be understood by all patients, the fact that the hospital meets the Federal definition of a physician-owned hospital specified in § 489.3 and that the list of the hospital's physician owners or investors is available upon request. For the purposes of this paragraph, the hospital stay or outpatient visit begins with the provision of a package of information regarding scheduled preadmission testing and registration for a planned hospital admission for inpatient care or outpatient service.

(v) In the case of a hospital as defined in § 489.24(b), to furnish written notice to all patients at the beginning of their hospital stay or outpatient visit if a doctor of medicine or a doctor of osteopathy is not present in the hospital 24 hours per day, 7 days per week, in order to assist the patients in making informed decisions regarding their care, in accordance with § 482.13(b)(2) of this subchapter. The notice must indicate how the hospital will meet the medical needs of any patient who develops an emergency medical condition, as defined in § 489.24(b), at a time when there is no physician present in the hospital. For purposes of this paragraph, the hospital stay or outpatient visit begins with the provision of a package of information regarding scheduled preadmission testing and registration for a planned hospital admission for inpatient care or outpatient service.

■ 25. Section 489.24 is amended by revising paragraph (a)(2) to read as follows:

§ 489.24 Special responsibilities of Medicare hospitals in emergency cases.

(a) * * *

(2) *Nonapplicability of provisions of this section.* Sanctions under this section for an inappropriate transfer during a national emergency or for the direction or relocation of an individual to receive medical screening at an alternate location do not apply to a hospital with a dedicated emergency department located in an emergency area, as specified in section 1135(g)(1) of the Act. A waiver of these sanctions is limited to a 72 hour period beginning upon the implementation of a hospital disaster protocol, except that, if a public health emergency involves a pandemic infectious disease (such as pandemic influenza), the waiver will continue in effect until the termination of the applicable declaration of a public health emergency, as provided for by section 1135(e)(1)(B) of the Act.

* * * * *

■ 26. Section 489.53 is amended by—

■ a. Redesignating paragraph (c) and (d) as paragraphs (d) and (e), respectively.

■ b. Adding a new paragraph (c).

■ c. In newly redesignated paragraph (d)(1), removing the cross reference ''paragraph (c)(2) of this section'' and adding the reference ''paragraph (d)(2) of this section'' in its place.

The revisions and additions read as follows:

§ 489.53 Termination by CMS.

* * * * *

(c) *Termination of agreements with physician-owned hospitals.* In the case of a physician-owned hospital, as defined at § 489.3, CMS may terminate the provider agreement if the hospital failed to comply with the requirements of § 489.20(u).

* * * * *

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare Supplementary Medical Insurance Program)

Dated: July 26, 2007.

Herb B. Kuhn,

Acting Deputy Administrator, Centers for Medicare & Medicaid Services.

Dated: July 27, 2007.

Michael O. Leavitt,

Secretary.

[Editorial Note: The following Addendum and appendixes will not appear in the Code of Federal Regulations.]

Addendum—Schedule of Standardized Amounts, Update Factors, and Rate of Increase Percentages Effective With Cost Reporting Periods Beginning on or After October 1, 2007

I. Summary and Background

In this Addendum, we are setting forth the methods and data we used to determine the prospective payment rates for Medicare hospital inpatient operating costs and Medicare hospital inpatient capital-related costs. We are also setting forth the rate-of-increase percentages for updating the target amounts for certain hospitals and hospital units excluded from the IPPS. In general, except for SCHs, MDHs, and hospitals located in Puerto Rico, each hospital's payment per discharge under the IPPS is based on 100 percent of the Federal national rate, also known as the national adjusted standardized amount. This amount reflects the national average hospital cost per case from a base year, updated for inflation.

SCHs are paid based on whichever of the following rates yields the greatest aggregate payment: the Federal national rate; the updated hospital-specific rate based on FY 1982 costs per discharge; the updated hospital-specific rate based on FY 1987 costs per discharge; or the updated hospital-specific rate based on FY 1996 costs per discharge.

Under section 1886(d)(5)(G) of the Act, MDHs historically have been paid based on the Federal national rate or, if higher, the Federal national rate plus 50 percent of the difference between the Federal national rate and the updated hospital-specific rate based on FY 1982 or FY 1987 costs per discharge, whichever was higher. (MDHs did not have the option to use their FY 1996 hospital-specific rate.) However, section 5003(a)(1) of Pub. L. 109–171 extended and modified the MDH special payment provision which was previously set to expire on October 1, 2006, to include discharges occurring on or after October 1, 2006, but before October 1, 2011. Under section 5003(b) of Pub. L. 109–171, if the change results in an increase to an MDH's target amount, an MDH must rebase its hospital-specific rates to its FY 2002 cost report. Section 5003(c) of Pub. L. 109–171 further required that

MDHs would now be paid based on the Federal national rate or, if higher, the Federal national rate plus 75 percent of the difference between the Federal national rate and the updated hospital-specific rate. Further, based on the provisions of section 5003(d) of Pub. L. 109–171, MDHs are no longer subject to the 12-percent cap on their DSH payment adjustment factor.

For hospitals located in Puerto Rico, the payment per discharge is based on the sum of 25 percent of a Puerto Rico rate that reflects the base year average costs per case of Puerto Rico hospitals and 75 percent of the Federal national rate. (See section II.D.3. of this Addendum of this final rule with comment period for a complete description.)

As discussed below in section II. of the Addendum to this final rule with comment period, we are finalizing our decision to make changes in the determination of the prospective payment rates for Medicare inpatient operating costs for FY 2008. In section III. of the Addendum to this final rule with comment period, we discuss our policy changes for determining the prospective payment rates for Medicare inpatient capital-related costs for FY 2008. Section IV. of the Addendum to this final rule with comment period sets forth our changes for determining the rate-of-increase limits for certain hospitals excluded from the IPPS for FY 2008. The tables to which we refer in the preamble of this final rule with comment period are presented in section V. of the Addendum of this final rule with comment period.

II. Changes to Prospective Payment Rates for Hospital Inpatient Operating Costs for FY 2008

The basic methodology for determining prospective payment rates for hospital inpatient operating costs for FY 2005 and subsequent fiscal years is set forth at § 412.64. The basic methodology for determining the prospective payment rates for hospital inpatient operating costs for hospitals located in Puerto Rico for FY 2005 and subsequent fiscal years is set forth at §§ 412.211 and 412.212. Below we discuss the factors used for determining the prospective payment rates.

In summary, the standardized amounts set forth in Tables 1A, 1B, and 1C, of section VI. of the Addendum to this final rule with comment period reflect—

- Equalization of the standardized amounts for urban and other areas at the level computed for large urban hospitals during FY 2004 and onward, as provided for under section 1886(d)(3)(A)(iv) of the Act, updated by the applicable percentage increase required under sections 1886(b)(3)(B)(i)(XX) and 1886(b)(3)(B)(viii) of the Act.
- The labor- related share that is applied to the standardized amounts and Puerto Rico-specific standardized amounts to give the hospital the highest payment, as provided for under sections 1886(d)(3)(E), and 1886(d)(9)(C)(iv) of the Act.
- Updates of 3.3 percent for all areas (that is, the estimated full market basket percentage increase of 3.3 percent), as required by section 1886(b)(3)(B)(i)(XX) of the Act, as amended by section 5001(a)(1) of Pub. L. 109–171, and reflecting the requirements of section 1886(b)(3)(B)(viii) of the Act, as added by section 5001(a)(3) of Pub. L. 109–171, to reduce the applicable percentage increase by 2.0 percentage points for a hospital that fails to submit data, in a form and manner specified by the Secretary, relating to the quality of inpatient care furnished by the hospital.
- An adjustment to the standardized amount to ensure budget neutrality for DRG recalibration and reclassification, as provided for under section 1886(d)(4)(C)(iii) of the Act.
- An adjustment to ensure the wage index update and changes are budget neutral, as provided for under section 1886(d)(3)(E) of the Act.
- An adjustment to ensure the effects of geographic reclassification are budget neutral, as provided for in section 1886(d)(8)(D) of the Act, by removing the FY 2007 budget neutrality factor and applying a revised factor.
- An adjustment to ensure that the imputed rural floor adopted under section 1886(d)(3)(E) of the Act is budget neutral.
- An adjustment to remove the FY 2007 outlier offset and apply an offset for FY 2008.
- An adjustment to ensure the effects of the rural community hospital demonstration required under section 410A of Pub. L. 108–173 are budget neutral, as required under section 410A(c)(2) of Pub. L. 108–173.
- An adjustment to eliminate the effect of coding or classification changes that do not reflect real changes in case-mix using the Secretary's authority under section 1886(d)(3)(A)(vi) of the Act (as discussed in section II.D.6. of the preamble to this final rule with comment period).

We note that two budget neutrality provisions will no longer be applied to the standardized amounts beginning with FY 2008. First, in the FY 2005 IPPS final rule (69 FR 49032 through 49034), we allowed urban hospitals that became rural under the new labor market area definitions to maintain their assignment to the MSA where they were previously located for a 3 year period extending from FY 2005 through FY 2007. In these years, we provided for a budget neutrality adjustment to the standardized amount to ensure that this policy did not increase Medicare expenditures for hospital inpatient services. For FY 2008, this budget neutrality adjustment to the IPPS standardized amounts will no longer be necessary because the provision has expired. Second, in this final rule with comment period, we are making a prospective change to how budget neutrality is applied to implement the rural floor for FY 2008 and subsequent years. As discussed in section III.G.4. of the preamble of this final rule with comment period, we are applying the budget neutrality adjustment to hospital wage indices rather than the standardized amount. However, we are continuing to apply budget neutrality for the imputed rural floor adopted under section 1886(d)(3)(E) of the Act to the standardized amounts.

A. Calculation of the Adjusted Standardized Amount

1. Standardization of Base Year Costs or Target Amounts

In general, the national standardized amount is based on per discharge averages of adjusted hospital costs from a base period (section 1886(d)(2)(A) of the Act) or, for Puerto Rico, adjusted target amounts from a base period (section 1886(d)(9)(B)(i) of the Act), updated and otherwise adjusted in accordance with the provisions of section 1886(d) of the Act. The September 1, 1983 interim final rule (48 FR 39763) contained a detailed explanation of how base-year cost data (from cost reporting periods ending during FY 1981) were established in the initial development of standardized amounts for the IPPS. The September 1, 1987 final rule (52 FR 33043 and 33066) contains a detailed explanation of how the target amounts were determined, and how they are used in computing the Puerto Rico rates.

Sections 1886(d)(2)(B) and (d)(2)(C) of the Act require us to update base year per discharge costs for FY 1984 and then standardize the cost data in order to remove the effects of certain sources of cost variations among hospitals. These effects include case mix, differences in area wage levels, cost-of-living adjustments for Alaska and Hawaii, indirect medical education costs, and costs to hospitals serving a

disproportionate share of low-income patients.

In accordance with section 1886(d)(3)(E) of the Act, the Secretary estimates, from time to time, the proportion of hospitals' costs that are attributable to wages and wage-related costs. In general, the standardized amount is divided into labor-related and nonlabor-related amounts; only the proportion considered to be the labor-related amount is adjusted by the wage index. Section 1886(d)(3)(E) of the Act requires that 62 percent of the standardized amount be adjusted by the wage index, unless doing so would result in lower payments to a hospital than would otherwise be made. (Section 1886(d)(9)(C)(iv)(II) of the Act extends this provision to the labor-related share for hospitals located in Puerto Rico.)

For FY 2008, we are not changing the national and Puerto Rico-specific labor-related and nonlabor-related shares from the percentages established for FY 2007. Therefore, the labor-related share continues to be 69.7 percent for the national standardized amounts and 58.7 percent for the Puerto Rico specific standardized amount. Consistent with section 1886(d)(3)(E) of the Act, we are applying the wage index to a labor-related share of 62 percent for all non-Puerto Rico hospitals whose wage indexes are less than or equal to 1.0000. For all non-Puerto Rico hospitals whose wage indices are greater than 1.0000, we are applying the wage index to a labor-related share of 69.7 percent of the national standardized amount. For hospitals located in Puerto Rico, we are applying a labor-related share of 58.7 percent if its Puerto Rico-specific wage index is less than or equal to 1.0000. For hospitals located in Puerto Rico whose Puerto Rico-specific wage index values are greater than 1.0000, we are applying a labor share of 62 percent.

The standardized amounts for operating costs appear in Table 1A, 1B, and 1C of the Addendum to this final rule with comment period.

2. Computing the Average Standardized Amount

Section 1886(d)(3)(A)(iv) of the Act requires that, beginning with FY 2004 and thereafter, an equal standardized amount be computed for all hospitals at the level computed for large urban hospitals during FY 2003, updated by the applicable percentage update. Section 1886(d)(9)(A) of the Act equalizes the Puerto Rico-specific urban and rural area rates. Accordingly, we calculated FY 2008 national and Puerto Rico standardized amounts irrespective of whether a hospital is located in an urban or rural location.

3. Updating the Average Standardized Amount

In accordance with section 1886(d)(3)(A)(iv)(II) of the Act, we are updating the equalized standardized amount for FY 2008 by the full estimated market basket percentage increase for hospitals in all areas, as specified in section 1886(b)(3)(B)(i)(XX) of the Act, as amended by section 5001(a)(1) of Pub. L. 109–171. The percentage change in the market basket reflects the average change in the price of goods and services purchased by hospitals to furnish inpatient care. The most recent forecast of the hospital market basket increase for FY 2008 is 3.3 percent. Thus, for FY 2008, the update to the average standardized amount is 3.3 percent for hospitals in all areas. The estimated market basket increase of 3.3 percent is based on the 2007 second quarter forecast of the hospital market basket increase (as discussed in Appendix B of this final rule with comment period).

Section 1886(b)(3)(B) of the Act specifies the mechanism to be used to update the standardized amount for payment for inpatient hospital operating costs. Section 1886(b)(3)(B)(viii) of the Act, as added by section 5001(a)(3) of Pub. L. 109–171, provides for a reduction of 2.0 percentage points from the update percentage increase (also known as the market basket update) for FY 2007 and each subsequent fiscal year for any ''subsection (d) hospital'' that does not submit quality data as discussed in section IV.A. of the preamble of this final rule with comment period. The standardized amounts in Tables 1A through 1C of section V. of the Addendum to this final rule with comment period reflect these differential amounts.

Although the update factors for FY 2008 are set by law, we are required by section 1886(e)(4) of the Act to recommend, taking into account MedPAC's recommendations, appropriate update factors for FY 2008 for both IPPS hospitals and hospitals and hospital units excluded from the IPPS. Our recommendation on the update factors (which is required by sections 1886(e)(4)(A) and (e)(5)(A) of the Act) is set forth in Appendix B of this final rule with comment period.

4. Other Adjustments to the Average Standardized Amount

As in the past, we adjusted the FY 2008 standardized amount to remove the effects of the FY 2007 geographic reclassifications and outlier payments before applying the FY 2008 updates. We then applied budget neutrality offsets for outliers and geographic reclassifications to the standardized amount based on FY 2008 payment policies.

We did not remove the prior year's budget neutrality adjustments for reclassification and recalibration of the DRG weights and for updated wage data because, in accordance with sections 1886(d)(4)(C)(iii) and 1886(d)(3)(E) of the Act, estimated aggregate payments after updates in the DRG relative weights and wage index should equal estimated aggregate payments prior to the changes. If we removed the prior year's adjustment, we would not have satisfied these conditions.

Budget neutrality is determined by comparing aggregate IPPS payments before and after making changes that are required to be budget neutral (for example, changes to DRG classifications, recalibration of the DRG relative weights, updates to the wage index, and different geographic reclassifications). We included outlier payments in the simulations because they may be affected by changes in these parameters.

We also adjusted the standardized amount this year by an estimated amount to ensure that aggregate IPPS payments did not exceed the amount of payments that would have been made in the absence of the rural community hospital demonstration program, as required under section 410A of Pub. L. 108–173. This demonstration is required to be budget neutral under section 410A(c)(2) of Pub. L. 108–173. For FY 2008, we are also applying budget neutrality to the standardized amount for the imputed rural floor adopted under section 1886(d)(3)(E) of the Act. For FY 2008 and FY 2009, we also made an adjustment to eliminate the effect of coding or classification changes that did not reflect real changes in case-mix using the Secretary's authority under section 1886(d)(3)(A)(vi) of the Act.

a. Recalibration of DRG Weights and Updated Wage Index—Budget Neutrality Adjustment

Section 1886(d)(4)(C)(iii) of the Act specifies that, beginning in FY 1991, the annual DRG reclassification and recalibration of the relative weights must be made in a manner that ensures that aggregate payments to hospitals are not affected. As discussed in section II. of the preamble of this final rule with comment period, we normalized the recalibrated DRG weights by an adjustment factor so that the average case weight after recalibration is equal to the average case weight prior to recalibration. However, equating the average case weight after recalibration to

the average case weight before recalibration does not necessarily achieve budget neutrality with respect to aggregate payments to hospitals because payments to hospitals are affected by factors other than average case weight. Therefore, as we have done in past years, we made a budget neutrality adjustment to ensure that the requirement of section 1886(d)(4)(C)(iii) of the Act is met.

Section 1886(d)(3)(E) of the Act requires us to update the hospital wage index on an annual basis beginning October 1, 1993. This provision also requires us to make any updates or adjustments to the wage index in a manner that ensures that aggregate payments to hospitals are not affected by the change in the wage index. Consistent with current policy, for FY 2008, we adjusted 100 percent of the wage index factor for occupational mix. We describe the occupational mix adjustment in section III.C. of the preamble to this final rule with comment period.

To comply with the requirement that DRG reclassification and recalibration of the relative weights and the updated wage index be budget neutral, we used FY 2006 discharge data to simulate payments and compared aggregate payments using the FY 2007 relative weights and wage indexes to aggregate payments using the proposed FY 2008 relative weights and wage indexes. The same methodology was used for the FY 2007 budget neutrality adjustment. Based on this comparison, we computed a budget neutrality adjustment factor equal to 0.996563 to be applied to the national standardized amount. We also adjusted the Puerto Rico-specific standardized amount for the effect of DRG reclassification and recalibration. We computed a budget neutrality adjustment factor of 0.995913 to be applied to the Puerto Rico-specific standardized amount. These budget neutrality adjustment factors are applied to the standardized amounts for FY 2007 without removing the prior year's budget neutrality adjustments. In addition, as discussed in section IV. of the Addendum to this final rule with comment period, we applied the same DRG reclassification and recalibration budget neutrality factor of 0.995913 to the hospital-specific rates that is effective for cost reporting periods beginning on or after October 1, 2007.

b. Reclassified Hospitals—Budget Neutrality Adjustment

Section 1886(d)(8)(B) of the Act provides that, effective with discharges occurring on or after October 1, 1988, certain rural hospitals are deemed urban. In addition, section 1886(d)(10) of the Act provides for the reclassification of hospitals based on determinations by the MGCRB. Under section 1886(d)(10) of the Act, a hospital may be reclassified for purposes of the wage index.

Under section 1886(d)(8)(D) of the Act, the Secretary is required to adjust the standardized amount to ensure that aggregate payments under the IPPS after implementation of the provisions of sections 1886(d)(8)(B) and (C) and 1886(d)(10) of the Act are equal to the aggregate prospective payments that would have been made absent these provisions. We note that the wage index adjustments provided under section 1886(d)(13) of the Act are not budget neutral. Section 1886(d)(13)(H) of the Act provides that any increase in a wage index under section 1886(d)(13) shall not be taken into account ''in applying any budget neutrality adjustment with respect to such index'' under section 1886(d)(8)(D) of the Act. To calculate the budget neutrality factor, we used FY 2006 discharge data to simulate payments, and compared total IPPS payments prior to any reclassifications under sections 1886(d)(8)(B) and (C) and 1886(d)(10) of the Act to total IPPS payments after such reclassifications. Based on these simulations, we calculated an adjustment factor of 0.991695 to ensure that the effects of these provisions are budget neutral, consistent with the statute.

The adjustment factor was applied to the standardized amount after removing the effects of the FY 2007 budget neutrality adjustment factor. We note that the FY 2008 adjustment reflects FY 2008 wage index reclassifications approved by the MGCRB or the Administrator. (Section 1886(d)(10)(D)(v) of the Act makes wage index reclassifications effective for 3 years. Therefore, the FY 2008 geographic reclassification could either be the continuation of a 3-year reclassification that began in FY 2006 or FY 2007, or a new one beginning in FY 2008.)

c. Imputed Rural Floor—Budget Neutrality Adjustment

For FY 2005 through FY 2008, we have adopted an imputed rural floor under the authority of section 1886(d)(3)(E) of the Act. This provision also requires us to make any updates or adjustments to the wage index in a manner that ensures that aggregate payments to hospitals are not affected by the change in the wage index. To calculate the budget neutrality factor, we used FY 2006 discharge data to simulate payments. We compared total IPPS payments before and after the application of the imputed rural floor. Based on these simulations, we calculated an adjustment factor of 0.999318 to ensure that the effect of the imputed rural floor is budget neutral.

d. Case-Mix Budget Neutrality Adjustment

The MS–DRGs will increase the total number of DRGs from 538 to 745. We believe that such a significant expansion in the number of DRGs will lead hospitals to improve coding and documentation in order to have a case assigned to a DRG with a higher payment. As explained above, we made an adjustment to ensure that the DRG relative weights remain budget neutral assuming constant utilization. However, without an adjustment to the IPPS rates to account for expected case-mix growth due to improved coding rather than to underlying changes in patient severity, the change to MS–DRGs would not be budget neutral. Section 1886(d)(3)(A)(vi) of the Act provides the Secretary with explicit authority to adjust the standardized amounts to account for case-mix growth due to improved documentation and coding. Further, the Secretary may subsequently revisit this adjustment if actual data is different than the projection.

Based on the Office of Actuary's analysis (as discussed in more detail in section II.D.6. of the preamble of this final rule with comment period), using the Secretary's authority under section 1886(d)(3)(A)(vi) of the Act to adjust the standardized amount to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix, we reduced the IPPS standardized amounts by −1.2 percent for FY 2008. Section 1886(d)(3)(A)(vi) further gives the Secretary authority to revisit adjustments to the standardized amounts for changes in coding or classification of discharges that were based on estimates in a future year. Consistent with the statute, we will compare the actual increase in case-mix due to documentation and coding to our projection once we have actual data for FY 2008. At that time, if necessary, we may make a further adjustment to the standardized amounts to account for the difference between our projection and actual data.

e. Outliers

Section 1886(d)(5)(A) of the Act provides for payments in addition to the basic prospective payments for ''outlier'' cases involving extraordinarily high costs. To qualify for outlier payments, a case must have costs greater than the

sum of the prospective payment rate for the DRG, any IME and DSH payments, any new technology add-on payments, and the ''outlier threshold'' or ''fixed-loss'' amount (a dollar amount by which the costs of a case must exceed payments in order to qualify for an outlier payment). We refer to the sum of the prospective payment rate for the DRG, any IME and DSH payments, any new technology add-on payments, and the outlier threshold as the outlier ''fixed-loss cost threshold.'' To determine whether the costs of a case exceed the fixed-loss cost threshold, a hospital's CCR is applied to the total covered charges for the case to convert the charges to estimated costs. Payments for eligible cases are then made based on a marginal cost factor, which is a percentage of the estimated costs above the fixed-loss cost threshold. The marginal cost factor for FY 2008 is 80 percent, the same marginal cost factor we have used since FY 1995 (59 FR 45367).

In accordance with section 1886(d)(5)(A)(iv) of the Act, outlier payments for any year are projected to be not less than 5 percent nor more than 6 percent of total operating DRG payments plus outlier payments. Section 1886(d)(3)(B) of the Act requires the Secretary to reduce the average standardized amount by a factor to account for the estimated proportion of total DRG payments made to outlier cases. Similarly, section 1886(d)(9)(B)(iv) of the Act requires the Secretary to reduce the average standardized amount applicable to hospitals located in Puerto Rico to account for the estimated proportion of total DRG payments made to outlier cases. More information on outlier payments may be found on the CMS Web site at *http://www.cms.hhs.gov/AcuteInpatientPPS/04_outlier.asp#TopOfPage.*

(1) FY 2008 Outlier Fixed-Loss Cost Threshold

For FY 2008, we proposed to use the same methodology used for FY 2007 (71 FR 48148 through 484151) to calculate the outlier threshold. Similar to the methodology used in the FY 2007 final rule, for FY 2008, we applied an adjustment factor to the CCRs to account for cost and charge inflation (as explained below). As we have done in the past, to calculate the proposed FY 2008 outlier threshold, we simulated payments by applying FY 2008 rates and policies using cases from the FY 2006 MedPAR files. Therefore, in order to determine the FY 2008 outlier threshold, we inflated the charges on the MedPAR claims by 2 years, from FY 2006 to FY 2008.

We proposed to continue to use the refined methodology that takes into account the lower inflation in hospital charges that are occurring as a result of the outlier final rule (68 FR 34494), which changed our methodology for determining outlier payments by implementing the use of more current CCRs. Our refined methodology uses more recent data that reflect the rate-of-change in hospital charges under the new outlier policy.

Using the most recent data available, we calculated the 1 year average annualized rate-of-change in charges-per-case from the last quarter of FY 2005 in combination with the first quarter of FY 2006 (July 1, 2005 through December 31, 2005) to the last quarter of FY 2006 in combination with the first quarter of FY 2007 (July 1, 2006 through December 31, 2006). This rate of change was 7.26 percent (1.0726) or 15.04 percent (1.1504) over 2 years.

As we have done in the past, we established the proposed FY 2008 outlier threshold using hospital CCRs from the December 2006 update to the Provider Specific File (PSF)—the most recent available data at the time of the proposed rule. This file includes CCRs that reflected implementation of the changes to the policy for determining the applicable CCRs that became effective August 8, 2003 (68 FR 34494).

As discussed in the FY 2007 final rule (71 FR 48150), we worked with the Office of Actuary to derive the methodology described below to develop the CCR adjustment factor. For FY 2008, we proposed to use the same methodology to calculate the CCR adjustment by using the FY 2006 operating cost per discharge increase in combination with the actual FY 2006 market basket increase determined by Global Insight, Inc. (we note that the FY 2006 actual (otherwise referred to as ''final'') market basket increase reflects historical data whereas the published FY 2006 market basket update factor was based on Global Insight, Inc.'s 2005 second quarter forecast with historical data through the first quarter of 2005), as well as the charge inflation factor described above to estimate the adjustment to the CCRs. By using the market basket rate-of-increase and the increase in the average cost per discharge from hospital cost reports, we are using two different measures of cost inflation. For FY 2008, we determined the adjustment by taking the percentage increase in the operating costs per discharge from FY 2004 to FY 2005 (1.0529) from the cost report and dividing it by the final market basket increase from FY 2005 (1.043) We repeated this calculation for 2 prior years to determine the 3 year average of the rate of adjusted change in costs between the market basket rate of increase and the increase in cost per case from the cost report (FY 2002 to FY 2003 percentage increase of operating costs per discharge of 1.0721 divided by FY 2003 final market basket increase of 1.041, FY 2003 to FY 2004 percentage increase of operating costs per discharge of 1.0624 divided by FY 2004 final market basket increase of 1.04). For FY 2008, we averaged the differentials calculated for FY 2003, FY 2004, and FY 2005 which resulted in a mean ratio of 1.0203. We multiplied the 3 year average of 1.0203 by the 2006 market basket percentage increase of 1.0420, which resulted in an operating cost inflation factor of 6.32 percent or 1.0632. We then divided the operating cost inflation factor by the 1 year average change in charges (1.0726) and applied an adjustment factor of 0.9912 to the operating CCRs from the PSF.

As stated in the FY 2007 final rule, we continue to believe it is appropriate to apply only a 1-year adjustment factor to the CCRs. On average, it takes approximately 9 months for fiscal intermediaries (or, if applicable, the MAC) to tentatively settle a cost report from the fiscal year end of a hospital's cost reporting period. The average ''age'' of hospitals' CCRs from the time the fiscal intermediary or the MAC inserts the CCR in the PSF until the beginning of FY 2007 is approximately 1 year. Therefore, as stated above, we believe a 1-year adjustment factor to the CCRs is appropriate.

We used the same methodology for the capital CCRs and applied an adjustment factor of 0.964 (cost inflation factor of 1.0340 divided by a charge inflation factor of 1.0726) to the capital CCRs. We are using the same charge inflation factor for the capital CCRs that was used for the operating CCRs. The charge inflation factor is based on the overall billed charges. Therefore, we believe it is appropriate to apply the charge factor to both the operating and capital CCRs.

Using this methodology, we calculated a proposed outlier fixed-loss cost threshold for FY 2008 equal to the prospective payment rate for the DRG, plus any IME and DSH payments, and any add-on payments for new technology, plus $23,015.

Comment: One commenter believed that the estimate of FY 2007 outlier payments was overstated. The commenter performed its own analysis and determined that outlier payments were 4.63 percent of overall payments

for FY 2007. The commenter noted that CMS did not use the most recent CCR data to determine the FY 2007 outlier payment estimate. Specifically, the commenter stated, CMS used CCR data from October 1, 2006, while the commenter used CCRs from January 1, 2007. Based on its analysis, the commenter noted that the outlier projection methodology can be improved because a 0.5 percent shortfall in outlier payments for FY 2007 represents $420 million lost by hospitals.

As a result, the commenter suggested the following improvements to the outlier projection methodology. First, the commenter suggested that the methodology to develop the adjustment factor to the CCRs is unnecessarily complicated and does not lead to a more accurate result. The commenter urged CMS to adopt a methodology that uses recent historical industry wide average rate of change, similar to the methodology used to develop the charge inflation factor. Another commenter stated that it is not clear if the historical record supports the assumption that costs and the market basket maintain a relatively constant relationship over time. Second, the commenter suggested that the CCRs should be projected over different periods of time, some less or more than one year, based on variations in hospital fiscal year ends. The commenter believed this methodology would more accurately project the decline in CCRs. The commenter also noted that, if CMS does not adopt the MS–DRGs for FY 2008, the threshold will need to be recalculated using the CMS–DRGs. Third, the commenter noted that CMS used the December 2006 CCR update for the proposed rule and has historically used the March update for the final rule. The commenter urged CMS to use the June 2007 update instead of the March 2007 update for the final rule. Other commenters recommended that CMS lower the outlier threshold in addition to what CMS proposed because cases that were outliers under the CMS DRGs will now end up as cases without outlier payments under the MS–DRGs.

Response: We used the October 2006 PSF to compute the FY 2007 outlier estimate, as these are the CCRs on file at the beginning of the fiscal year. As we have stated in the past, CCRs in the PSF are updated throughout the year and once a CCR is inputed into the PSF, the CCR may be used for payment for a year or more until the next tentative or final cost report is settled (whichever is from the most recent period). Therefore, we do not agree that the January 2007 PSF will necessarily provide more accurate CCRs to compute FY 2007 outlier payments than the October 2006 PSF update.

In response to the comment that CCRs should be projected over different periods of time, as we have mentioned in the past, it is possible that some of the CCRs in the March PSF will be used in FY 2008 for actual outlier payments, while other CCRs may be 1 year old. Therefore, we apply a 1-year adjustment to the CCRs. However, we will study and consider this proposal for the future.

With respect to the comment on our methodology used to adjust the CCRs, as we stated in the FY 2007 IPPS final rule (71 FR 48151), we believe this calculation of an adjustment to the CCRs is more accurate and stable than the commenter's methodology because it takes into account the costs per discharge and the market basket percentage increase when determining a cost adjustment factor. There are times where the market basket and the cost per discharge will be constant, while other times these values will differ from each other, depending on the fiscal year. Therefore as mentioned above, using the market basket in conjunction with the cost per discharge uses two sources that measure potential cost inflation and ensures a more accurate and stable cost adjustment factor. Additionally, we are continuing to use the March update of the PSF for the final rule as the June PSF update will not be ready for use until the end of July, which is beyond the timetable necessary for us to compute the outlier threshold and publish this final rule with comment period by August 1st. Finally, as noted in sections II.E. and H. in the preamble of this final rule with comment period, we adopted and implemented a blend of CMS and MS–DRG weights for FY 2008. Therefore, the current threshold is based on cases that are grouped and paid using blended MS–DRG weights. Additionally, we address the impact of the MS–DRGs on the outlier threshold below.

Because we are not making any changes to our methodology for this final rule with comment period, for FY 2008, we are using the same methodology we proposed to calculate the outlier threshold. Using the most recent data available, we calculated the 1 year average annualized rate of change in charges per case from the first quarter of FY 2006 in combination with the second quarter of FY 2006 (October 1, 2005 through March 31, 2006) to the first quarter of FY 2007 in combination with the second quarter of FY 2007 (October 1, 2006 through March 31, 2007). This rate of change was 6.2 percent (1.062) or 12.78 percent (1.1278) over 2 years.

As we have done in the past, we established the FY 2008 outlier threshold using hospital CCRs from the March 2007 update to the PSF—the most recent available data at the time of this final rule with comment period. This file includes CCRs that reflected implementation of the changes to the policy for determining the applicable CCRs that became effective August 8, 2003 (68 FR 34494).

For FY 2008, we calculated the CCR adjustment by using the operating cost per discharge increase in combination with the final market basket increase determined by Global Insight, Inc., as well as the charge inflation factor described above to estimate the adjustment to the CCRs. We determined the operating CCR adjustment by taking the percentage increase in the operating costs per discharge from FY 2004 to FY 2005 (1.0564) from the cost report and dividing it by the final market basket increase from FY 2005 (1.043) We repeated this calculation for 2 prior years to determine the 3 year average of the rate of adjusted change in costs between the market basket rate of increase and the increase in cost per case from the cost report (FY 2002 to FY 2003 percentage increase of operating costs per discharge of 1.0715 divided by FY 2003 final market basket increase of 1.041, FY 2003 to FY 2004 percentage increase of operating costs per discharge of 1.0617 divided by FY 2004 final market basket increase of 1.04). For FY 2008, we averaged the differentials calculated for FY 2003, FY 2004, and FY 2005 which resulted in a mean ratio of 1.0210. We multiplied the 3 year average of 1.0210 by the 2006 market basket percentage increase of 1.0430, which resulted in an operating cost inflation factor of 6.49 percent or 1.0649. We then divided the operating cost inflation factor by the 1 year average change in charges (1.062) and applied an adjustment factor of 1.0027 to the operating CCRs from the PSF.

We used the same methodology for the capital CCRs and applied an adjustment factor of 0.9744 (cost inflation factor of 1.0348 divided by a charge inflation factor of 1.062) to the capital CCRs. We are using the same charge inflation factor for the capital CCRs that was used for the operating CCRs. The charge inflation factor is based on the overall billed charges. Therefore, we believe it is appropriate to apply the charge factor to both the operating and capital CCRs.

Using this methodology, we calculated an outlier fixed-loss cost threshold for FY 2008 equal to the

prospective payment rate for the DRG, plus any IME and DSH payments, and any add-on payments for new technology, plus $22,635. With this threshold, we project that outlier payments will equal 5.1 percent of total IPPS payments.

As we did in establishing the FY 2007 outlier threshold (71 FR 48149), in our projection of FY 2008 outlier payments, we are not making any adjustments for the possibility that hospitals' CCRs and outlier payments may be reconciled upon cost report settlement. We continue to believe that, due to the policy implemented in the outlier final rule (68 FR 34494, June 9, 2003), CCRs will no longer fluctuate significantly and, therefore, few hospitals will actually have these ratios reconciled upon cost report settlement. In addition, it is difficult to predict the specific hospitals that will have CCRs and outlier payments reconciled in any given year. We also noted that reconciliation occurs because hospitals' actual CCRs for the cost reporting period are different than the interim CCRs used to calculate outlier payments when a bill is processed. Our simulations assume that CCRs accurately measure hospital costs based on information available to us at the time we set the outlier threshold. For these reasons, we are not making any assumptions about the effects of reconciliation on the outlier threshold calculation.

We note that there are some factors that contributed to a lower fixed loss outlier threshold for FY 2008 compared to FY 2007. First, the case weighted national average operating CCR declined by approximately an additional 1.5 percentage points from the March 2006 update (used to calculate the FY 2007 outlier threshold) to the March 2007 update of the PSF. Additionally, as discussed in section II.D. of the preamble of this final rule with comment period, we are adopting the use of MS–DRGs under the IPPS for FY 2008. The MS–DRG system will increase the number of DRGs from 538 to 745, and better recognize severity of illness than the CMS–DRGs. Better recognition of severity of illness with the MS–DRGs means that nonoutlier payments will compensate hospitals for the higher costs of some cases that previously received outlier payments. As cases are paid more accurately, in order to meet the 5.1 percent target, we need to decrease the fixed-loss outlier threshold so that more cases qualify for outlier payments. Therefore, we believe that the above factors cumulatively contributed to a lower fixed-loss outlier threshold in FY 2008 compared to FY 2007.

Comment: Similar to its statement in the March 2005 Report to Congress, MedPAC commented there is a need to reform the financing of outlier payments. MedPAC explained that variation in the prevalence of outlier cases contributes to disparities in relative probability across and within DRGs. MedPAC explained that these disparities can penalize hospitals that treat patients in DRGs with a low prevalence of outliers. Therefore, MedPAC recommended that Congress give the Secretary authority to adjust the DRG relative weights to account for differences by DRG in the prevalence of outlier cases.

Response: As noted in the FY 2007 final rule (71 FR 47921), we do not have the statutory authority to implement MedPAC's recommendation. Therefore, we placed most of our attention and resources on the recommendations related to refinement of the current DRGs. However, we intend to examine MedPAC's recommendation regarding outliers in more detail in the future.

Comment: One commenter recommended that CMS make a midyear change to the outlier threshold if it appears that the 5.1 percent target will not be met. The commenter suggested that CMS use more recent CCR data for a midyear correction to the outlier threshold and use thresholds such as if outlier payments less than 95 percent or greater than 105 percent of the 5.1 percent target to trigger a midyear adjustment. Other commenters recommended that CMS further lower the threshold because CMS did not spend the total allocated pool of cost outlier funds allocated for outlier payments in FYs 2005, 2006, and 2007.

Response: With respect to the comments above, we have responded to similar comments in the FY 2006 IPPS final rule (70 FR 47495). We refer readers to that final rule.

Comment: One commenter recommended that CMS keep the proposed threshold for FY 2008 or use the FY 2007 outlier threshold for FY 2008 because CMS has underpaid the outlier pool for a number of years and has underestimated the outlier threshold as well.

Response: With respect to the comment above, we have responded to a similar comment in the FY 2007 IPPS final rule (71 FR 48151). We refer readers to that final rule. We further note that the threshold we are finalizing for FY 2008 is lower than the FY 2007 outlier threshold and the FY 2008 proposed outlier threshold. If outlier payments are lower than the 5.1 percent removed from IPPS rates, one would expect that the commenter would be suggesting reducing the outlier threshold so a higher percentage of total payments are made as outliers.

(2) Other Changes Concerning Outliers

As stated in the FY 1994 IPPS final rule (58 FR 46348), we establish outlier thresholds that are applicable to both hospital inpatient operating costs and hospital inpatient capital-related costs. When we modeled the combined operating and capital outlier payments, we found that using a common set of thresholds resulted in a lower percentage of outlier payments for capital-related costs than for operating costs. We project that the thresholds for FY 2008 will result in outlier payments that will equal 5.1 percent of operating DRG payments and 4.83 percent of capital payments based on the Federal rate.

In accordance with section 1886(d)(3)(B) of the Act, we are reducing the FY 2008 standardized amount by the same percentage to account for the projected proportion of payments paid as outliers.

The outlier adjustment factors that are applied to the standardized amount for the FY 2008 outlier threshold are as follows:

	Operating standardized amounts	Capital federal rate
National	0.948980	0.951665
Puerto Rico	0.964470	0.956231

Consistent with current policy, we applied the outlier adjustment factors to FY 2008 rates after removing the effects of the FY 2007 outlier adjustment factors on the standardized amount.

To determine whether a case qualifies for outlier payments, we apply hospital-specific CCRs to the total covered charges for the case. Estimated operating and capital costs for the case are calculated separately by applying separate operating and capital CCRs. These costs are then combined and compared with the outlier fixed-loss cost threshold.

The outlier final rule (68 FR 34494) eliminated the application of the statewide average CCRs for hospitals with CCRs that fell below 3 standard deviations from the national mean CCR. However, for those hospitals for which the fiscal intermediary or MAC computes operating CCRs greater than 1.238 or capital CCRs greater than 0.152, or hospitals for whom the fiscal intermediary or MAC is unable to calculate a CCR (as described at § 412.84(i)(3) of our regulations), we still use statewide average CCRs to

determine whether a hospital qualifies for outlier payments.[29] Table 8A in section V. of the Addendum of this final rule with comment period contains the statewide average operating CCRs for urban hospitals and for rural hospitals for which the fiscal intermediary or MAC is unable to compute a hospital-specific CCR within the above range. Effective for discharges occurring on or after October 1, 2007, these statewide average ratios replace the ratios published in the IPPS final rule for FY 2007 (71 FR 48303). Table 8B in section V. of the Addendum to this final rule with comment period contains the comparable statewide average capital CCRs. Again, the CCRs in Tables 8A and 8B will be used during FY 2008 when hospital-specific CCRs based on the latest settled cost report are either not available or are outside the range noted above. For an explanation of Table 8C, please see section V. of the Addendum to this final rule with comment period.

We finally note that we published a manual update (Change Request 3966) to our outlier policy on October 12, 2005, which updated Chapter 3, Section 20.1.2 of the Medicare Claims Processing Manual. The manual update covered an array of topics, including CCRs, reconciliation, and the time value of money. We encourage hospitals that are assigned the statewide average operating and/or capital CCRs to work with their fiscal intermediaries (or MAC if applicable) on a possible alternative operating and/or capital CCR as explained in Change Request 3966. Use of an alternative CCR developed by the hospital in conjunction with the fiscal intermediary or MAC can avoid possible overpayments or underpayments at cost report settlement, thus ensuring better accuracy when making outlier payments and negating the need for outlier reconciliation. We also note that a hospital may request an alternative operating or capital CCR ratio at any time as long as the guidelines of Change Request 3966 are followed. To download and view the manual instructions on outlier and cost-to-charge ratios, please visit the Web site: *http://www.cms.hhs.gov/manuals/downloads/clm104c03.pdf.*

(3) FY 2006 and FY 2007 Outlier Payments

In the FY 2007 IPPS final rule (70 FR 47496), we stated that, based on available data, we estimated that actual FY 2006 outlier payments would be approximately 4.62 percent of actual total DRG payments. This estimate was computed based on simulations using the FY 2005 MedPAR file (discharge data for FY 2005 bills). That is, the estimate of actual outlier payments did not reflect actual FY 2006 bills, but instead reflected the application of FY 2006 rates and policies to available FY 2005 bills.

Our current estimate, using available FY 2006 bills, is that actual outlier payments for FY 2006 were approximately 4.65 percent of actual total DRG payments. Thus, the data indicate that, for FY 2006, the percentage of actual outlier payments relative to actual total payments is lower than we projected before FY 2006. Consistent with the policy and statutory interpretation we have maintained since the inception of the IPPS, we do not plan to make retroactive adjustments to outlier payments to ensure that total outlier payments for FY 2006 are equal to 5.1 percent of total DRG payments.

We currently estimate that actual outlier payments for FY 2007 will be approximately 4.6 percent of actual total DRG payments, 0.5 percentage points lower than the 5.1 percent we projected in setting the outlier policies for FY 2007. This estimate is based on simulations using the FY 2006 MedPAR file (discharge data for FY 2006 bills). We used these data to calculate an estimate of the actual outlier percentage for FY 2007 by applying FY 2007 rates and policies, including an outlier threshold of $24,485 to available FY 2006 bills. We note that our estimate of FY 2007 outlier payments is 0.3 percentage points less than our estimate from the proposed rule. We believe the 1.06 percentage point change in the charge inflation factor from the proposed rule to this final rule with comment period contributed to a lower FY 2007 outlier payment estimate in this final rule with comment period. Additionally, we used a more recent update of the FY 2006 MedPAR claims database and the PSF for this final rule with comment period, which also affects the FY 2007 outlier payment estimate, and could contribute to a lower FY 2007 outlier payment estimate for this final rule with comment period.

f. Rural Community Hospital Demonstration Program Adjustment (Section 410A of Pub. L. 108–173)

Section 410A of Pub. L. 108–173 requires the Secretary to establish a demonstration that will modify reimbursement for inpatient services for up to 15 small rural hospitals. Section 410A(c)(2) of Pub. L. 108–173 requires that ''in conducting the demonstration program under this section, the Secretary shall ensure that the aggregate payments made by the Secretary do not exceed the amount which the Secretary would have paid if the demonstration program under this section was not implemented.'' As discussed in section IV.H. of the preamble to this final rule with comment period, we have satisfied this requirement by adjusting national IPPS rates by a factor that is sufficient to account for the added costs of this demonstration. We estimate that the average additional annual payment that will be made to each participating hospital under the demonstration will be approximately $1,075,765. We based this estimate on the recent historical experience of the difference between inpatient cost and payment for hospitals that are participating in the demonstration program. For 9 participating hospitals, the total annual impact of the demonstration program for FY 2008 is $9,681,893. The required adjustment to the Federal rate used in calculating Medicare inpatient prospective payments as a result of the demonstration is 0.999903.

In order to achieve budget neutrality, we adjust the national IPPS rates by an amount sufficient to account for the added costs of this demonstration. In other words, we apply budget neutrality across the payment system as a whole rather than merely across the participants of this demonstration, consistent with past practice. We believe that the language of the statutory budget neutrality requirement permits the agency to implement the budget neutrality provision in this manner. The statutory language requires that ''aggregate payments made by the Secretary do not exceed the amount which the Secretary would have paid if the demonstration * * * was not implemented,'' but does not identify the range across which aggregate payments must be held equal.

5. FY 2008 Standardized Amount

The adjusted standardized amount is divided into labor-related and nonlabor-related portions. Tables 1A and 1B in section V. of the Addendum to this final rule with comment period contain the national standardized amounts that we apply to all hospitals, except hospitals located in Puerto Rico, for FY 2008. The Puerto Rico-specific amounts are shown in Table 1C. The amounts shown in Tables 1A and 1B differ only in that the labor-related share applied to the standardized amounts in Table 1A is 69.7 percent, and Table 1B is 62 percent. In accordance with sections 1886(d)(3)(E) and 1886(d)(9)(C)(iv) of the Act, we apply a labor-related share of 62 percent, unless application of that

[29] These figures represent 3.0 standard deviations from the mean of the log distribution of CCRs for all hospitals.

percentage would result in lower payments to a hospital than would otherwise be made. In effect, the statutory provision means that we apply a labor-related share of 62 percent for all hospitals (other than those in Puerto Rico) whose wage indexes are less than or equal to 1.0000.

In addition, Tables 1A and 1B include standardized amounts reflecting the full 3.3 percent update for FY 2008, and standardized amounts reflecting the 2.0 percentage point reduction to the update (a 1.3 percent update) applicable for hospitals that fail to submit quality data consistent with section 1886(b)(3)(B)(viii) of the Act.

Under section 1886(d)(9)(A)(ii) of the Act, the Federal portion of the Puerto Rico payment rate is based on the discharge-weighted average of the national large urban standardized amount (this amount is set forth in Table 1A). The labor-related and nonlabor-related portions of the national average standardized amounts for Puerto Rico hospitals for FY 2008 are set forth in Table 1C of section V. of the Addendum to this final rule with comment period. This table also includes the Puerto Rico standardized amounts. The labor-related share applied to the Puerto Rico specific standardized amount is 58.7 percent, or 62 percent, depending on which provides higher payments to the hospital. (Section 1886(d)(9)(C)(iv) of the Act, as amended by section 403(b) of Pub. L. 108–173, provides that the labor-related share for hospitals located in Puerto Rico be 62 percent, unless the application of that percentage would result in lower payments to the hospital.) The following table illustrates the changes from the FY 2007 national average standardized amount. The second and third columns show the changes from the FY 2007 standardized amounts for hospitals that satisfy the quality data submission requirement for receiving the full update (3.3 percent) with the different labor-related shares that apply to hospitals. The fourth and fifth columns show the changes for hospitals receiving the reduced update (1.3 percent) with the different labor-related shares that apply to hospitals. The first row of the table shows the updated (through FY 2007) average standardized amount after restoring the FY 2007 offsets for outlier payments, demonstration budget neutrality, the wage index transition budget neutrality, and the geographic reclassification budget neutrality. The DRG reclassification and recalibration and wage index budget neutrality factor is cumulative. Therefore, the FY 2007 factor is not removed from this table. We have added two additional rows: one for the documentation and coding adjustment and the other for the rural floor adjustment. The rural floor adjustment removes the effect of the budget neutrality adjustment applied in FY 2007 to the standardized amount for application of the rural floor. It is meant to address a single year transition from a cumulative budget neutrality adjustment applied to the standardized amount to a noncumulative adjustment applied to the wage index. (For a complete discussion on the documentation and coding adjustment and the rural floor adjustment, we refer readers to section III.G.4. of the preamble to this final rule with comment period and section II.D. of the Addendum to this final rule with comment period.)

COMPARISON OF FY 2007 STANDARDIZED AMOUNTS TO THE FY 2008 SINGLE STANDARDIZED AMOUNT WITH FULL UPDATE AND REDUCED UPDATE

	Full update (3.3 percent); Wage index is greater than 1.0000	Full update (3.3 percent); Wage index is less than 1.0000	Reduced update (1.3 percent); Wage index is greater than 1.0000	Reduced update (1.3 percent); Wage index is less than 1.0000
FY 2007 Base Rate, after removing reclassification budget neutrality, demonstration budget neutrality, wage index transition budget neutrality factors and outlier offset (based on the labor and market share percentage for FY 2008):				
Labor	$3,609.23	$3,609.23	$3,609.23	$3,609.23
Nonlabor	$1,569.01	$1,569.01	$1,569.01	$1,569.01
FY 2008 Update Factor	1.033	1.033	1.013	1.013
FY 2008 DRG Recalibrations and Wage Index Budget Neutrality Factor	0.996563	0.996563	0.996563	0.996563
FY 2008 Reclassification Budget Neutrality Factor	0.991695	0.991695	0.991695	0.991695
Adjusted for Blend of FY 2007 DRG Recalibration and Wage Index Budget Neutrality Factors:				
Labor	$3,684.66	$3,277.61	$3,613.33	$3,214.15
Nonlabor	$1,601.80	$1,570.99	$1,570.79	$1,969.96
Imputed Rural Floor Budget Neutrality Factor	0.999318	0.999318	0.999318	0.999318
FY 2008 Outlier Factor	0.948980	0.948980	0.948980	0.948980
Rural Demonstration Budget Neutrality Factor	0.999903	0.999903	0.999903	0.999903
FY 2008 Documentation and Coding Adjustment	0.988	0.988	0.988	0.988
Rural Floor Adjustment	1.002214	1.002214	1.002214	1.002214
Rate for FY 2008:				
Labor	$3,459.66	$3,077.46	$3,392.68	$3,017.87
Nonlabor	$1,503.98	$1,886.18	$1,474.86	$1,849.67

Under section 1886(d)(9)(A)(ii) of the Act, the Federal portion of the Puerto Rico payment rate is based on the discharge-weighted average of the national large urban standardized amount (as set forth in Table 1A). The labor-related and nonlabor-related portions of the national average standardized amounts for hospitals located in Puerto Rico are set forth in Table 1C of section V. of the Addendum of this final rule with comment period. This table also includes the Puerto Rico standardized amounts. The labor-related share applied to the Puerto Rico standardized amount is 58.7 percent, or 62 percent, depending on which results in higher payments to the hospital. (Section 1886(d)(9)(C)(iv) of the Act, as amended by section 403(b) of Pub. L. 108–173, provides that the labor-related

share for hospitals located in Puerto Rico be 62 percent, unless the application of that percentage would result in lower payments to the hospital.)

B. Adjustments for Area Wage Levels and Cost-of-Living

Tables 1A through 1C, as set forth in section V. of the Addendum to this final rule with comment period, contain the labor-related and nonlabor-related shares that we used to calculate the prospective payment rates for hospitals located in the 50 States, the District of Columbia, and Puerto Rico for FY 2008. This section addresses two types of adjustments to the standardized amounts that were made in determining the prospective payment rates as described in this Addendum.

1. Adjustment for Area Wage Levels

Sections 1886(d)(3)(E) and 1886(d)(9)(C)(iv) of the Act require that we make an adjustment to the labor-related portion of the national and Puerto Rico prospective payment rates, respectively, to account for area differences in hospital wage levels. This adjustment is made by multiplying the labor-related portion of the adjusted standardized amounts by the appropriate wage index for the area in which the hospital is located. In section III. of the preamble to this final rule with comment period, we discuss the data and methodology for the FY 2008 wage index.

2. Adjustment for Cost-of-Living in Alaska and Hawaii

Section 1886(d)(5)(H) of the Act authorizes the Secretary to make an adjustment to take into account the unique circumstances of hospitals in Alaska and Hawaii. Higher labor-related costs for these two States are taken into account in the adjustment for area wages described above. For FY 2008, we adjusted the payments for hospitals in Alaska and Hawaii by multiplying the nonlabor-related portion of the standardized amount by the applicable adjustment factor contained in the table below.

TABLE OF COST OF LIVING ADJUSTMENT FACTORS: ALASKA AND HAWAII HOSPITALS

Area	Cost of living adjustment factor
Alaska:	
City of Anchorage and 80-kilometer (50-mile) radius by road	1.24
City of Fairbanks and 80-kilometer (50-mile) radius by road	1.24
City of Juneau and 80-kilometer (50-mile) radius by road	1.24
Rest of Alaska	1.25
Hawaii:	
City and County of Honolulu	1.25
County of Hawaii	1.17
County of Kauai	1.25
County of Maui and County of Kalawao	1.25

(The above factors are based on data obtained from the U.S. Office of Personnel Management.)

C. DRG Relative Weights

As discussed in section II. of the preamble of this final rule with comment period, we are adopting a revised classification system for all hospital discharges, assigning them into MS–DRGs, and have developed relative weights for each MS–DRG that reflect the resource utilization of cases in each MS–DRG relative to Medicare cases in other MS–DRGs. Table 5 of section V. of the Addendum to this final rule with comment period contains the relative weights that we will apply to discharges occurring in FY 2008. These factors have been recalibrated as explained in section II. of the preamble of this final rule with comment period.

D. Calculation of the Prospective Payment Rates

General Formula for Calculation of the Prospective Payment Rates for FY 2008. In general, the operating prospective payment rate for all hospitals paid under the IPPS located outside of Puerto Rico, except SCHs and MDHs, for FY 2008 equals the Federal rate.

The prospective payment rate for SCHs for FY 2008 equals the higher of the applicable Federal rate, or the hospital-specific rate as described below. The prospective payment rate for MDHs for FY 2008 equals the higher of the Federal rate, or the Federal rate plus 75 percent of the difference between the Federal rate and the hospital-specific rate as described below. The prospective payment rate for hospitals located in Puerto Rico for FY 2008 equals 25 percent of the Puerto Rico rate plus 75 percent of the applicable national rate.

1. Federal Rate

The Federal rate is determined as follows:

Step 1—Select the applicable average standardized amount depending on whether the hospital submitted qualifying quality data (full update for qualifying hospitals, update minus 2.0 percentage points for nonqualifying hospitals).

Step 2—Multiply the labor-related portion of the standardized amount by the applicable wage index for the geographic area in which the hospital is located or the area to which the hospital is reclassified.

Step 3—For hospitals in Alaska and Hawaii, multiply the non-labor-related portion of the standardized amount by the applicable cost-of-living adjustment factor.

Step 4—Add the amount from Step 2 and the non-labor-related portion of the standardized amount (adjusted, if applicable, under Step 3).

Step 5—Multiply the final amount from Step 4 by the relative weight corresponding to the applicable MS-DRG (see Table 5 of section V. of the Addendum to this final rule with comment period).

The Federal rate as determined in Step 5 is then further adjusted if the hospital qualifies for either the IME or DSH adjustment. In addition, for hospitals that qualify for a low-volume payment adjustment under section 1886(d)(12) of the Act, the payment in Step 5 is increased by 25 percent.

2. Hospital-Specific Rate (Applicable Only to SCHs and MDHs)

a. Calculation of Hospital-Specific Rate

Section 1886(b)(3)(C) of the Act provides that SCHs are paid based on whichever of the following rates yields the greatest aggregate payment: the Federal rate; the updated hospital-specific rate based on FY 1982 costs per discharge; the updated hospital-specific rate based on FY 1987 costs per discharge; or the updated hospital-specific rate based on FY 1996 costs per discharge.

As discussed previously, MDHs are required to rebase their hospital-specific rates to their FY 2002 cost reports if doing so results in higher payments. In addition, effective for discharges occurring on or after October 1, 2006, MDHs are to be paid based on the Federal national rate or, if higher, the Federal national rate plus 75 percent (changed from 50 percent) of the difference between the Federal national rate and the greater of the updated hospital-specific rates based on either FY 1982, FY 1987 or FY 2002 costs per

discharge. Further, MDHs are no longer subject to the 12-percent cap on their DSH payment adjustment factor.

Hospital-specific rates have been determined for each of these hospitals based on the FY 1982 costs per discharge, the FY 1987 costs per discharge, or, for SCHs, the FY 1996 costs per discharge and for MDHs, the FY 2002 cost per discharge. For a more detailed discussion of the calculation of the hospital-specific rates, we refer the reader to the FY 1984 IPPS interim final rule (48 FR 39772); the April 20, 1990 final rule with comment (55 FR 15150); the FY 1991 IPPS final rule (55 FR 35994); and the FY 2001 IPPS final rule (65 FR 47082). In addition, for both SCHs and MDHs, the hospital-specific rate is adjusted by the budget neutrality adjustment factor as discussed in section IV.C. of the preamble to this final rule with comment period. The resulting rate is used in determining the payment rate an SCH or MDH will receive for its discharges beginning on or after October 1, 2007.

Comment: One commenter stated that CMS did not formally state a budget neutrality factor for the hospital-specific rate in the proposed rule and omitted it from the final notice of IPPS rates for FY 2007 published in **Federal Register** on October 11, 2006. The commenter asked that the CMS formally state the budget neutrality factor that will apply to the hospital-specific rates for SCHs and MDHs. Further, the commenter requested that the documentation and coding adjustment not apply to the hospital-specific rate for MDHs and SCHs.

Response: We regret not publishing the DRG recalibration budget neutrality factor that is applicable to the hospital-specific rate for MDHs and SCHs in the final notice of IPPS rates for FY 2007 published in the **Federal Register** on October 11, 2007. We will make the annual DRG recalibration budget neutrality factor available in this section of each year's IPPS proposed and final rules. The FY 2008 DRG recalibration factor that will apply to the hospital-specific rate of MDHs and SCHs is 0.983962. This factor includes the −1.2 percent documentation and coding adjustment.

Hospitals that are paid under section 1886(d) of the Act based on a hospital-specific rate are subject to the DRG reclassification and recalibration factor component of the budget neutrality adjustment because, as IPPS, hospitals, they are paid based on DRGs. Changes in DRG relative weights from one year to the next affect aggregate SCH and MDH payments, which, in turn, affect total payments to hospitals under section 1886(d) of the Act. Because SCHs and MDHs are paid under section 1886(d) of the Act, we believe their DRG payments should be factored into the DRG reclassification and recalibration factor component of the budget neutrality adjustment to ensure that recalibration does not affect total payments to hospitals under section 1886(d) of the Act. Similarly, we believe the hospital-specific rates for MDHs and SCHs should be subject to the documentation and coding adjustment we are applying under section 1886(d)(3)(A)(vi) of the Act to maintain budget neutrality for the adoption of the MS DRGs. That is, as these hospitals use the same DRG system as all other hospitals, we believe they should be equally subject to the budget neutrality adjustment that we are applying for adoption of the MS–DRGs to all other hospitals.

b. Updating the FY 1982, FY 1987, FY 1996, and FY 2002 Hospital Specific Rates for FY 2008

We are increasing the hospital-specific rates by 3.3 percent (the estimated hospital market basket percentage increase) for SCHs and MDHs for FY 2008. Section 1886(b)(3)(C)(iv) of the Act provides that the update factor applicable to the hospital-specific rates for SCHs is equal to the update factor provided under section 1886(b)(3)(B)(iv) of the Act, which, for SCHs in FY 2008, is the market basket rate-of-increase. Section 1886(b)(3)(D) of the Act provides that the update factor applicable to the hospital-specific rates for MDHs also equals the update factor provided under section 1886(b)(3)(B)(iv) of the Act, which, for FY 2008, is the market basket rate-of-increase. For those SCHs and MDHs that fail to submit quality data, the update to the hospital-specific rates is 1.3 percent.

3. General Formula for Calculation of Prospective Payment Rates for Hospitals Located in Puerto Rico Beginning On or After October 1, 2007, and Before October 1, 2008

Section 1886(d)(9)(E)(iv) of the Act provides that, effective for discharges occurring on or after October 1, 2004, hospitals located in Puerto Rico are paid based on a blend of 75 percent of the national prospective payment rate and 25 percent of the Puerto Rico-specific rate.

a. Puerto Rico Rate

The Puerto Rico prospective payment rate is determined as follows:

Step 1—Select the applicable average standardized amount considering the applicable wage index (see Table 1C).

Step 2—Multiply the labor-related portion of the standardized amount by the applicable Puerto Rico-specific wage index.

Step 3—Add the amount from Step 2 and the nonlabor-related portion of the standardized amount.

Step 4—Multiply the amount from Step 3 by the applicable MS–DRG relative weight (see Table 5 of section V. of the Addendum to this final rule with comment period).

Step 5—Multiply the result in Step 4 by 25 percent.

b. National Rate

The national prospective payment rate is determined as follows:

Step 1—Select the applicable average standardized amount.

Step 2—Multiply the labor-related portion of the standardized amount by the applicable wage index for the geographic area in which the hospital is located or the area to which the hospital is reclassified.

Step 3—Add the amount from Step 2 and the nonlabor-related portion of the national average standardized amount.

Step 4—Multiply the amount from Step 3 by the applicable MS–DRG relative weight (see Table 5 of section V. of the Addendum to this final rule with comment period).

Step 5—Multiply the result in Step 4 by 75 percent.

The sum of the Puerto Rico rate and the national rate computed above equals the prospective payment for a given discharge for a hospital located in Puerto Rico. This rate is then further adjusted if the hospital qualifies for either the IME or DSH adjustment.

III. Changes to Payment Rates for Acute Care Hospital Inpatient Capital-Related Costs for FY 2008

The PPS for acute care hospital inpatient capital-related costs was implemented for cost reporting periods beginning on or after October 1, 1991. Effective with that cost reporting period, hospitals were paid during a 10-year transition period (which extended through FY 2001) to change the payment methodology for Medicare acute care hospital inpatient capital-related costs from a reasonable cost-based methodology to a prospective methodology based fully on the Federal rate.

The basic methodology for determining Federal capital prospective rates is set forth in the regulations at 42 CFR 412.308 through 412.352. Below we discuss the factors that we used to

determine the capital Federal rate for FY 2008, which is effective for discharges occurring on or after October 1, 2007.

The 10-year transition period ended with hospital cost reporting periods beginning on or after October 1, 2001 (FY 2002). Therefore, for cost reporting periods beginning in FY 2002, all hospitals (except ''new'' hospitals under § 412.304(c)(2)) are paid based on 100 percent of the capital Federal rate. For FY 1992, we computed the standard Federal payment rate for capital-related costs under the IPPS by updating the FY 1989 Medicare inpatient capital cost per case by an actuarial estimate of the increase in Medicare inpatient capital costs per case. Each year after FY 1992, we update the capital standard Federal rate, as provided at § 412.308(c)(1), to account for capital input price increases and other factors. The regulations at § 412.308(c)(2) provide that the capital Federal rate be adjusted annually by a factor equal to the estimated proportion of outlier payments under the capital Federal rate to total capital payments under the capital Federal rate. In addition, § 412.308(c)(3) requires that the capital Federal rate be reduced by an adjustment factor equal to the estimated proportion of payments for (regular and special) exceptions under § 412.348. Section 412.308(c)(4)(ii) requires that the capital standard Federal rate be adjusted so that the effects of the annual DRG reclassification and the recalibration of DRG weights and changes in the geographic adjustment factor are budget neutral.

For FYs 1992 through 1995, § 412.352 required that the capital Federal rate also be adjusted by a budget neutrality factor so that aggregate payments for inpatient hospital capital costs were projected to equal 90 percent of the payments that would have been made for capital-related costs on a reasonable cost basis during the fiscal year. That provision expired in FY 1996. Section 412.308(b)(2) describes the 7.4 percent reduction to the capital rate that was made in FY 1994, and § 412.308(b)(3) describes the 0.28 percent reduction to the capital rate made in FY 1996 as a result of the revised policy for paying for transfers. In FY 1998, we implemented section 4402 of Pub. L. 105–33, which required that, for discharges occurring on or after October 1, 1997, the budget neutrality adjustment factor in effect as of September 30, 1995, be applied to the unadjusted capital standard Federal rate and the unadjusted hospital-specific rate. That factor was 0.8432, which was equivalent to a 15.68 percent reduction to the unadjusted capital payment rates. An additional 2.1 percent reduction to the rates was effective from October 1, 1997 through September 30, 2002, making the total reduction 17.78 percent. As we discussed in the FY 2003 IPPS final rule (67 FR 50102) and implemented in § 412.308(b)(6) of the regulations, the 2.1 percent reduction was restored effective October 1, 2002.

To determine the appropriate budget neutrality adjustment factor and the regular exceptions payment adjustment during the 10-year transition period, we developed a dynamic model of Medicare inpatient capital-related costs; that is, a model that projected changes in Medicare inpatient capital-related costs over time. With the expiration of the budget neutrality provision, the capital cost model was only used to estimate the regular exceptions payment adjustment and other factors during the transition period. As we explained in the FY 2002 IPPS final rule (66 FR 39911), beginning in FY 2002, an adjustment for regular exception payments is no longer necessary because regular exception payments were only made for cost reporting periods beginning on or after October 1, 1991, and before October 1, 2001 (see § 412.348(b)). Because payments are no longer made under the regular exception policy effective with cost reporting periods beginning in FY 2002, we discontinued use of the capital cost model. The capital cost model and its application during the transition period are described in Appendix B of the FY 2002 IPPS final rule (66 FR 40099).

Section 412.374 provides for the use of a blended payment system for payments to hospitals located in Puerto Rico under the IPPS for acute care hospital inpatient capital-related costs. Accordingly, under the capital PPS, we compute a separate payment rate specific to hospitals located in Puerto Rico using the same methodology used to compute the national Federal rate for capital-related costs. In accordance with section 1886(d)(9)(A) of the Act, under the IPPS for acute care hospital operating costs, hospitals located in Puerto Rico are paid for operating costs under a special payment formula. Prior to FY 1998, hospitals located in Puerto Rico were paid a blended operating rate that consisted of 75 percent of the applicable standardized amount specific to Puerto Rico hospitals and 25 percent of the applicable national average standardized amount. Similarly, prior to FY 1998, hospitals located in Puerto Rico were paid a blended capital rate that consisted of 75 percent of the applicable capital Puerto Rico-specific rate and 25 percent of the applicable capital Federal rate. However, effective October 1, 1997, in accordance with section 4406 of Pub. L. 105–33, the methodology for operating payments made to hospitals located in Puerto Rico under the IPPS was revised to make payments based on a blend of 50 percent of the applicable standardized amount specific to Puerto Rico hospitals and 50 percent of the applicable national average standardized amount. In conjunction with this change to the operating blend percentage, effective with discharges occurring on or after October 1, 1997, we also revised the methodology for computing capital payments to hospitals located in Puerto Rico to be based on a blend of 50 percent of the Puerto Rico capital rate and 50 percent of the capital Federal rate.

As we discussed in the FY 2005 IPPS final rule (69 FR 49185), section 504 of Pub. L. 108–173 increased the national portion of the operating IPPS payments for hospitals located in Puerto Rico from 50 percent to 62.5 percent and decreased the Puerto Rico portion of the operating IPPS payments from 50 percent to 37.5 percent for discharges occurring on or after April 1, 2004 through September 30, 2004 (see the March 26, 2004 One-Time Notification (Change Request 3158)). In addition, section 504 of Pub. L. 108–173 provided that the national portion of operating IPPS payments for hospitals located in Puerto Rico be equal to 75 percent and the Puerto Rico portion of operating IPPS payments be equal to 25 percent for discharges occurring on or after October 1, 2004. Consistent with that change in operating IPPS payments to hospitals located in Puerto Rico, for FY 2005 (as we discussed in the FY 2005 IPPS final rule), we revised the methodology for computing capital payments to hospitals located in Puerto Rico to be based on a blend of 25 percent of the Puerto Rico capital rate and 75 percent of the capital Federal rate for discharges occurring on or after October 1, 2004.

A. Determination of Federal Hospital Inpatient Capital Related Prospective Payment Rate Update

In the FY 2007 IPPS final rule (71 FR 48161), we established a tentative capital Federal rate of $427.38 for FY 2007. In the **Federal Register** notice establishing the occupational mix adjusted payment rates for FY 2007 (71 FR 59891), we established the final FY 2007 Federal rate of $427.03 for FY 2007. In the discussion that follows, we explain the factors that we used to determine the FY 2008 capital Federal rate. In particular, we explain why the FY 2008 capital Federal rate will decrease approximately 0.86 percent,

compared to the FY 2007 capital Federal rate. (As discussed in section V. of the preamble of this final rule with comment period, we did not finalize the proposed zero percent update for urban hospitals, which would have resulted in separate capital Federal rates for FY 2008 for rural hospitals and for urban hospitals. Thus, a single capital Federal rate for FY 2008 was determined for all hospitals.) However, taking into account an estimated increase in Medicare fee-for-service discharges in FY 2008 as compared to FY 2007, we estimated aggregate capital payments will increase by approximately 2.9 percent during this same period. Total payments to hospitals under the IPPS are relatively unaffected by changes in the capital prospective payments. Because capital payments constitute about 10 percent of hospital payments, a 1 percent change in the capital Federal rate yields only about a 0.1 percent change in actual payments to hospitals. As noted above, aggregate payments under the capital IPPS are projected to increase in FY 2008 compared to FY 2007.

1. Projected Capital Standard Federal Rate Update

a. Description of the Update Framework

Under § 412.308(c)(1), the capital standard Federal rate is updated on the basis of an analytical framework that takes into account changes in a capital input price index (CIPI) and several other policy adjustment factors. Specifically, we have adjusted the projected CIPI rate-of-increase as appropriate each year for case-mix index-related changes, for intensity, and for errors in previous CIPI forecasts. The update factor for FY 2008 under that framework is 0.9 percent based on the best data available at this time. The update factor under that framework is based on a projected 1.3 percent increase in the CIPI, a 0.0 percent adjustment for intensity, a 0.0 percent adjustment for case-mix, a −0.4 percent adjustment for the FY 2006 DRG reclassification and recalibration, and a forecast error correction of 0.0 percent. As discussed below in section III.C. of the Addendum to this final rule with comment period, we continue to believe that the CIPI is the most appropriate input price index for capital costs to measure capital price changes in a given year. We also explain the basis for the FY 2008 CIPI projection in that same section of this Addendum. As noted above, and as discussed in greater detail in section V. of the preamble of this final rule with comment period, we are not finalizing the proposed zero percent update for urban hospitals, which would have resulted in separate capital Federal rates for FY 2008 for rural hospitals and for urban hospitals. Therefore, we applied the 0.9 percent FY 2008 update factor to all hospitals. In addition, as also noted below, the capital rates have been further adjusted to account for documentation and coding improvements under the MS–DRGs discussed in section II.D. of the preamble of this final rule with comment period. Below we describe the policy adjustments that have been applied in the update framework for FY 2008.

The case-mix index is the measure of the average DRG weight for cases paid under the IPPS. Because the DRG weight determines the prospective payment for each case, any percentage increase in the case-mix index corresponds to an equal percentage increase in hospital payments.

The case-mix index can change for any of several reasons:

- The average resource use of Medicare patients changes (''real'' case-mix change);
- Changes in hospital coding of patient records result in higher weight DRG assignments (''coding effects''); and
- The annual DRG reclassification and recalibration changes may not be budget neutral (''reclassification effect'').

We define real case-mix change as actual changes in the mix (and resource requirements) of Medicare patients as opposed to changes in coding behavior that result in assignment of cases to higher weighted DRGs but do not reflect higher resource requirements. The capital update framework includes the same case-mix index adjustment used in the former operating IPPS update framework (as discussed in the May 18, 2004 IPPS proposed rule for FY 2005 (69 FR 28816)). (We no longer use an update framework to make a recommendation for updating the operating IPPS standardized amounts as discussed in section II. of Appendix B in the FY 2006 IPPS final rule (70 FR 47707).)

Absent the change to the MS–DRGs, for FY 2008, we project a 1.0 percent total increase in the case-mix index. We estimate that the real case-mix increase will also equal 1.0 percent for FY 2008. The net adjustment for change in case-mix is the difference between the projected real increase in case-mix and the projected total increase in case-mix. Therefore, the net adjustment for case-mix change in FY 2008 is 0.0 percentage points.

The capital update framework also contains an adjustment for the effects of DRG reclassification and recalibration. This adjustment is intended to remove the effect on total payments of prior year's changes to the DRG classifications and relative weights, in order to retain budget neutrality for all case-mix index-related changes other than those due to patient severity. Due to the lag time in the availability of data, there is a 2-year lag in data used to determine the adjustment for the effects of DRG reclassification and recalibration. For example, we adjusted for the effects of the FY 2006 DRG reclassification and recalibration as part of our update for FY 2008. We estimate that FY 2006 DRG reclassification and recalibration resulted in a 0.4 percent change in the case-mix when compared with the case-mix index that would have resulted if we had not made the reclassification and recalibration changes to the DRGs. Therefore, we are making a −0.4 percent adjustment for DRG reclassification in the update for FY 2008 to maintain budget neutrality.

The capital update framework also contains an adjustment for forecast error. The input price index forecast is based on historical trends and relationships ascertainable at the time the update factor is established for the upcoming year. In any given year, there may be unanticipated price fluctuations that may result in differences between the actual increase in prices and the forecast used in calculating the update factors. In setting a prospective payment rate under the framework, we make an adjustment for forecast error only if our estimate of the change in the capital input price index for any year is off by 0.25 percentage points or more. There is a 2-year lag between the forecast and the availability of data to develop a measurement of the forecast error. A forecast error of 0.10 percentage point was calculated for the FY 2006 update. That is, current historical data indicate that the forecasted FY 2006 CIPI (0.80 percent) used in calculating the FY 2006 update factor slightly understated the actual realized price increases (0.90 percent) by 0.10 percentage point. This slight underprediction was mostly due to the incorporation of newly available source data for fixed asset prices into the market basket. However, because this estimation of the change in the CIPI is less than 0.25 percentage points, it is not reflected in the update recommended under this framework. Therefore, we are making a 0.0 percent adjustment for forecast error in the update for FY 2008.

Under the capital IPPS update framework, we also make an adjustment for changes in intensity. We calculate this adjustment using the same methodology and data that were used in

the past under the framework for operating IPPS. The intensity factor for the operating update framework reflects how hospital services are utilized to produce the final product, that is, the discharge. This component accounts for changes in the use of quality-enhancing services, for changes within DRG severity, and for expected modification of practice patterns to remove noncost-effective services.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI for hospital and related services) and changes in real case-mix. The use of total charges in the calculation of the intensity factor makes it a total intensity factor; that is, charges for capital services are already built into the calculation of the factor. Therefore, we have incorporated the intensity adjustment from the operating update framework into the capital update framework. Without reliable estimates of the proportions of the overall annual intensity increases that are due, respectively, to ineffective practice patterns and the combination of quality-enhancing new technologies and complexity within the DRG system, we assume that one-half of the annual increase is due to each of these factors. The capital update framework thus provides an add-on to the input price index rate of increase of one-half of the estimated annual increase in intensity, to allow for increases within DRG severity and the adoption of quality-enhancing technology.

We have developed a Medicare-specific intensity measure based on a 5-year average. Past studies of case-mix change by the RAND Corporation (*Has DRG Creep Crept Up? Decomposing the Case Mix Index Change Between 1987 and 1988* by G.M. Carter, J.P. Newhouse, and *D.A. Relles,* R–4098–HCFA/ProPAC (1991)) suggest that real case-mix change was not dependent on total change, but was usually a fairly steady increase of 1.0 to 1.5 percent per year. However, we used 1.4 percent as the upper bound because the RAND study did not take into account that hospitals may have induced doctors to document medical records more completely in order to improve payment.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI for hospital and related services), and changes in real case-mix. As we noted above, in accordance with § 412.308(c)(1)(ii), we began updating the capital standard Federal rate in FY 1996 using an update framework that takes into account, among other things, allowable changes in the intensity of hospital services. For FYs 1996 through 2001, we found that case-mix constant intensity was declining, and we established a 0.0 percent adjustment for intensity in each of those years. For FYs 2002 and 2003, we found that case-mix constant intensity was increasing, and we established a 0.3 percent adjustment and 1.0 percent adjustment for intensity, respectively. For FYs 2004 and 2005, we found that the charge data appeared to be skewed (as discussed in greater detail below), and we established a 0.0 percent adjustment in each of those years. Furthermore, we stated that we would continue to apply a 0.0 percent adjustment for intensity until any increase in charges can be tied to intensity rather than attempts to maximize outlier payments.

As noted above, our intensity measure is based on a 5-year average, and therefore, the intensity adjustment for FY 2008 is based on data from the 5-year period beginning with FY 2002 and extending through FY 2006. We found a dramatic increase in hospital charges for each of those 5 years without a corresponding increase in the hospital case-mix index. These findings are similar to the considerable increase in hospitals' charges, which we found when we were determining the intensity factor in the FY 2004, FY 2005 and FY 2006 update recommendations as discussed in the FY 2004 IPPS final rule (68 FR 45482), the FY 2005 IPPS final rule (69 FR 49285), the FY 2006 IPPS final rule (70 FR 47500), and the FY 2007 IPPS final rule (72 FR 47500), respectively. If hospitals were treating new or different types of cases, which would result in an appropriate increase in charges per discharge, then we would expect hospitals' case-mix to increase proportionally.

As we discussed in the FY 2006 IPPS final rule (70 FR 47500) and the FY 2007 IPPS final rule (71 FR 48157), because our intensity calculation relies heavily upon charge data and we believe that these charge data may be inappropriately skewed, we established a 0.0 percent adjustment for intensity for FY 2006 and FY 2007, respectively.

On June 9, 2003, we published in the **Federal Register** revisions to our outlier policy for determining the additional payment for extraordinarily high-cost cases (68 FR 34494 through 34515). These revised policies were effective on August 8, 2003, and October 1, 2003. While it does appear that a response to these policy changes is beginning to occur, that is, the change in charges for FYs 2004 and 2005 are somewhat less than the previous 4 years, and the change in charges for FY 2006 is slightly less than FY 2005, they still show a significant annual increase in charges without a corresponding increase in hospital case-mix. The increase in charges in FY 2004, for example, is approximately 12 percent, which, while less than the increase in the previous 3 years, is still much higher than increases in years prior to FY 2001. In addition, this approximate 12 percent increase in charges for FY 2004 significantly exceeds the case mix increase for the same period. Based on the approximate 12 percent increase in charges for FY 2004, we believe residual effects of hospitals' charge practices prior to the implementation of the outlier policy revisions established in the June 9, 2003 final rule continue to appear in the data because hospitals may not have had enough time to adopt changes in their behavior in response to the new outlier policy. Thus, we believe that the FY 2004, FY 2005, and FY 2006 charge data may still be skewed. Because the intensity adjustment is based on a 5-year average, and although the new outlier policy was generally effective in FY 2004, we believe the effects of hospitals attempting to maximize outlier payments, while lessening costs, continue to skew the charge data.

Therefore, we are making a 0.0 percent adjustment for intensity for FY 2008. In the past (FYs 1996 through 2001) when we found intensity to be declining, we believed a zero (rather than negative) intensity adjustment was appropriate. Similarly, we believe that it is appropriate to apply a zero intensity adjustment for FY 2008 until any increase in charges can be tied to intensity rather than to attempts to maximize outlier payments.

Above, we described the basis of the components used to develop the 0.9 percent capital update factor under the capital update framework for FY 2008 as shown in the table below. (As noted above and as discussed in section V. of the preamble of this final rule with comment period, we are not finalizing the proposed zero percent update for urban hospitals. Thus, the 0.9 percent capital update factor discussed above was applied in determining the capital Federal rate for FY 2008 for all hospitals.)

CMS FY 2008 UPDATE FACTOR TO THE CAPITAL FEDERAL RATE FOR ALL HOSPITALS

Capital Input Price Index	1.3
Intensity:	0.0
Case-Mix Adjustment Factors:	
Real Across DRG Change	1.0
Projected Case-Mix Change	–1.0

CMS FY 2008 UPDATE FACTOR TO THE CAPITAL FEDERAL RATE FOR ALL HOSPITALS—Continued

Subtotal	0.0
Effect of FY 2005 Reclassification and Recalibration	–0.4
Forecast Error Correction	0.0
Total Update for Hospitals	0.9

b. MedPAC Update Recommendation

In the past, MedPAC has included update recommendations for capital PPS in a Report to Congress. In its March 2007 Report to Congress, MedPAC did not make an update recommendation for capital IPPS payments for FY 2008. However, in that same report, MedPAC made an update recommendation for hospital inpatient and outpatient services (page 67). MedPAC reviews inpatient and outpatient services together because they are so closely interrelated. For FY 2008, MedPAC recommended an increase in the payment rate for the operating IPPS by the projected increase in the hospital market basket index concurrent with implementation of a quality incentive payment policy. (MedPAC's Report to the Congress: Medicare Payment Policy, March 2007, Section 2A.)

2. Outlier Payment Adjustment Factor

Section 412.312(c) establishes a unified outlier payment methodology for inpatient operating and inpatient capital related costs. A single set of thresholds is used to identify outlier cases for both inpatient operating and inpatient capital related payments. Section 412.308(c)(2) provides that the standard Federal rate for inpatient capital related costs be reduced by an adjustment factor equal to the estimated proportion of capital related outlier payments to total inpatient capital related PPS payments. The outlier thresholds are set so that operating outlier payments are projected to be 5.1 percent of total operating DRG payments.

Comment: One commenter expressed concern regarding the ''significant change'' to the proposed outlier adjustment factor that has been applied in determining the proposed FY 2008 capital Federal Rate, which would have the effect of decreasing the FY 2008 capital Federal Rate by 0.88 percent (72 FR 24847). The commenter stated that there seems to be a ''large change'' in the capital outlier adjustment factor, given the fact that both the FY 2008 IPPS proposed rule (72 FR 24837) and the FY 2007 IPPS final rule (71 FR 48151) indicate that estimated capital outlier payments would equal 4.87 percent of capital IPPS payments. The commenter pointed out that, in both the FY 2008 IPPS proposed rule and the FY 2007 IPPS final rule, there appears to be inconsistencies regarding the estimated percentage of capital outlier payments. Specifically, in the FY 2007 IPPS final rule (71 FR 48151), in section II.A.4.c.ii. of the Addendum, it states that capital outlier payments are estimated to be 4.87 percent in FY 2007, while in section III.A.2. of the Addendum of that same final rule (71 FR 48158), it states that we estimate that capital outlier payments would equal 4.32 percent in FY 2007. Similarly, in the FY 2008 IPPS proposed rule (72 FR 24837), in section II.A.4.d.(2). of the Addendum, it states that capital outlier payments are estimated to be 4.87 percent in FY 2008, while in section III.A.1.b. of the Addendum of that same proposed rule (72 FR 24843), it states that we estimate that proposed capital outlier payments would equal 5.16 percent in FY 2008. The commenter requested that CMS explain the inconsistencies in estimated capital outlier payments noted above and that CMS review the calculations to ensure that the correct outlier adjustment is applied in determining the capital Federal rate for FY 2008.

Response: We appreciate the commenter bringing the inconsistencies in estimated capital outlier payments in the FY 2007 IPPS final rule and the FY 2008 IPPS proposed rule to our attention. After careful review of the calculation of the outlier adjustment factors used in determining the FY 2007 and proposed FY 2008 capital Federal rates, respectively, we have determined that the estimated 4.87 percent of capital outlier payments for both FY 2007 and FY 2008 as stated in section II.A.4.c.ii. of the Addendum of the FY 2007 IPPS final rule (71 FR 48151) and in section II.A.4.d.(2). of the Addendum of the FY 2008 IPPS proposed rule (72 FR 24837), respectively, were typographical errors. The correct estimate of capital outlier payment for FY 2007 was 4.32 percent, and therefore, we applied an outlier adjustment of 0.9568 (1 − 0.0432 = 0.9568) in determining the FY 2007 capital Federal rate, as discussed in section III.A.2. of the Addendum of the FY 2007 IPPS final rule (71 FR 48158). The correct estimate of proposed capital outlier payment for FY 2008 is 5.16 percent, and therefore, we proposed to apply an outlier offset of 0.9484 (1 − 0.0516 = 0.9484) in determining the proposed FY 2008 capital Federal rate, as stated in section III.A.1.b. of the Addendum of the FY 2008 IPPS proposed rule (72 FR 24843). We also note that we estimate that the percentage of capital outlier payments to total capital standard payments for FY 2008 will be slightly higher than the percentages for FY 2007, and that the outlier reduction factors are not applied cumulatively in determining the capital Federal rate. Therefore, the net change in the proposed outlier adjustment to the proposed capital Federal rate for FY 2008 is 0.9912 (0.9484/0.9568) or −0.88 percent. Thus, the proposed outlier adjustment decreases the proposed FY 2008 capital Federal rate by −0.88 percent compared with the FY 2007 outlier adjustment (72 FR 24843).

While it may appear that there is a ''large change'' in the estimate of capital outlier payments (and capital outlier offset) from FY 2007 to FY 2008, we wish to point out that the estimated 5.16 percent proposed for FY 2008 does not appear to be considerably different from our estimate of capital outlier payments for the past several years of 4.87 percent proposed for FY 2007 (71 FR 24196), 4.85 percent established for FY 2006 (70 FR 47501), 5.03 percent proposed for FY 2006 (70 FR 23477) and for FY 2005 (69 FR 28383), 4.94 percent established for FY 2005 (69 FR 49286), 4.77 percent established for the first half of FY 2004 (68 FR 57734), 4.92 percent established for the second half of FY 2004 (Change Request 3158; March 26, 2004), 5.45 percent proposed for FY 2004 (68 FR 27240), 5.31 percent established for FY 2003 (67 FR 50129), and 5.40 percent proposed for FY 2003 (67 FR 31514). We also note, as discussed in the FY 2008 IPPS proposed rule (72 FR 24837), we proposed a lower fixed-loss outlier threshold in FY 2008 compared to FY 2007. We explained that as we are better able to estimate the costs using CCRs and charges, and cases are paid more accurately with better recognition of severity of illness using the proposed MS–DRGS, in order to meet the 5.1 percent target for operating IPPS outlier payments, we proposed to decrease the fixed-loss outlier threshold so that more cases qualify for outlier payments. As explained below, § 412.312(c) provides for a single set of thresholds to identify outlier cases for both operating and inpatient capital IPPS payments. Therefore, we believe it is appropriate that the estimate of capital outlier payments would increase for FY 2008 as compared to FY 2007. As requested by the commenter and as stated above, we have carefully reviewed the calculations to ensure that the correct outlier adjustment, as discussed in greater detail below, is applied in determining the capital Federal rate for FY 2008. (We

note that there is usually a change in the outlier adjustment between the proposed and final rules for a given year due to the use of more updated data and any changes between proposed and finalized policies that affect payments. For example, in the FY 2007 proposed rule (71 FR 24196), the proposed FY 2007 outlier offset was 0.9513, while we established an outlier offset for FY 2007 of 0.9568, as discussed below.)

In the **Federal Register** notice establishing the final occupational mix adjusted payment rates for FY 2007 (71 FR 59890), we estimated that outlier payments for capital would equal 4.32 percent of inpatient capital related payments based on the capital Federal rate in FY 2007. Based on the thresholds as set forth in section II.A. of the Addendum to this final rule with comment period, we estimate that outlier payments for capital-related costs will equal 4.83 percent for inpatient capital-related payments based on the Federal rate in FY 2008. Therefore, we are applying an outlier adjustment factor of 0.9517 to the capital Federal rate. Thus, we estimate that the percentage of capital outlier payments to total capital standard payments for FY 2008 will be slightly higher than the percentages for FY 2007.

The outlier reduction factors are not built permanently into the capital rates; that is, they are not applied cumulatively in determining the capital Federal rate. The FY 2008 outlier adjustment of 0.9517 is a −0.53 percent change from the FY 2007 outlier adjustment of 0.9568. Therefore, the net change in the outlier adjustment to the capital Federal rate for FY 2008 is 0.9947 (0.9517/0.9568). Thus, the outlier adjustment decreases the FY 2008 capital Federal rate by 0.53 percent compared with the FY 2007 outlier adjustment.

3. Budget Neutrality Adjustment Factor for Changes in DRG Classifications and Weights and the GAF

Section 412.308(c)(4)(ii) requires that the capital Federal rate be adjusted so that aggregate payments for the fiscal year based on the capital Federal rate after any changes resulting from the annual DRG reclassification and recalibration and changes in the GAF are projected to equal aggregate payments that would have been made on the basis of the capital Federal rate without such changes. Because we implemented a separate GAF for Puerto Rico, we apply separate budget neutrality adjustments for the national GAF and the Puerto Rico GAF. We apply the same budget neutrality factor for DRG reclassifications and recalibration nationally and for Puerto Rico. Separate adjustments were unnecessary for FY 1998 and earlier because the GAF for Puerto Rico was implemented in FY 1998.

In the past, we used the actuarial capital cost model (described in Appendix B of the FY 2002 IPPS final rule (66 FR 40099)) to estimate the aggregate payments that would have been made on the basis of the capital Federal rate with and without changes in the DRG classifications and weights and in the GAF to compute the adjustment required to maintain budget neutrality for changes in DRG weights and in the GAF. During the transition period, the capital cost model was also used to estimate the regular exception payment adjustment factor. As we explain in section III.A. of the Addendum to this final rule with comment period, beginning in FY 2002, an adjustment for regular exception payments is no longer necessary. Therefore, we will no longer use the capital cost model. Instead, we are using historical data based on hospitals' actual cost experiences to determine the exceptions payment adjustment factor for special exceptions payments.

To determine the factors for FY 2008, we compared (separately for the national capital rate and the Puerto Rico capital rate) estimated aggregate capital Federal rate payments based on the FY 2007 DRG relative weights and the FY 2007 GAF to estimated aggregate capital Federal rate payments based on the FY 2008 relative weights and the FY 2008 GAF. As we established in the final FY 2007 occupational mix adjusted payment rates' notice (71 FR 59890), the budget neutrality factors were 0.9906 for the national capital rate and 0.9968 for the Puerto Rico capital rate. In making the comparison, we set the exceptions reduction factor to 1.00. To achieve budget neutrality for the changes in the national GAF, based on calculations using updated data, we applied an incremental budget neutrality adjustment of 1.0018 for FY 2008 to the previous cumulative FY 2007 adjustments of 0.9906, yielding an adjustment of 0.9924, through FY 2008. For the Puerto Rico GAF, we applied an incremental budget neutrality adjustment of 1.0008 for FY 2008 to the previous cumulative FY 2007 adjustment of 0.9968, yielding a cumulative adjustment of 0.9976 through FY 2008.

We then compared estimated aggregate capital Federal rate payments based on the FY 2007 DRG relative weights and the FY 2007 GAF to estimated aggregate capital Federal rate payments based on the FY 2008 DRG relative weights and the FY 2008 GAF. The incremental adjustment for DRG classifications and changes in relative weights is 0.9979 both nationally and for Puerto Rico. The cumulative adjustments for DRG classifications and changes in relative weights and for changes in the GAF through FY 2008 are 0.9903 nationally and 0.9955 for Puerto Rico. The following table summarizes the adjustment factors for each fiscal year:

BUDGET NEUTRALITY ADJUSTMENT FOR DRG RECLASSIFICATIONS AND RECALIBRATION AND THE GEOGRAPHIC ADJUSTMENT FACTORS

Fiscal Year	National				Puerto Rico			
	Incremental adjustment			Cumulative	Incremental adjustment			Cumulative
	Geographic adjustment factor	DRG reclassifications and recalibration	Combined		Geographic adjustment factor	DRG reclassifications and recalibration	Combined	
1992	.....	.....	.....	1.00000	.....	.....	.....	.....
1993	.....	.....	0.99800	0.99800	.....	.....	.....	.....
1994	.....	.....	1.00531	1.00330	.....	.....	.....	.....
1995	.....	.....	0.99980	1.00310	.....	.....	.....	.....
1996	.....	.....	0.99940	1.00250	.....	.....	.....	.....
1997	.....	.....	0.99873	1.00123	.....	.....	.....	.....
1998	.....	.....	0.99892	1.00015	.....	.....	.....	1.00000
1999	0.99944	1.00335	1.00279	1.00294	0.99898	1.00335	1.00233	1.00233
2000	0.99857	0.99991	0.99848	1.00142	0.99910	0.99991	0.99901	1.00134
[1]2001	0.99782	1.00009	0.99791	0.99933	1.00365	1.00009	1.00374	1.00508
[2]2001	[3]0.99771	[3]1.00009	[3]0.99780	0.99922	[3]1.00365	[3]1.00009	[3]1.00374	1.00508
2002	[4]0.99666	[4]0.99668	[4]0.99335	0.99268	[4]0.98991	[4]0.99668	[4]0.99662	0.99164
[5]2003	0.99915	0.99662	0.99577	0.98848	1.00809	0.99662	1.00468	0.99628
[6]2003	[7]0.99896	[7]0.99662	[7]0.99558	0.98830	1.00809	0.99662	1.00468	0.99628
[8]2004	[9]1.00175	[9]1.00081	[9]1.00256	0.99083	1.00028	1.00081	1.00109	0.99736
[10]2004	[9]1.00164	[9]1.00081	[9]1.00245	0.99072	1.00028	1.00081	1.00109	0.99736
[11]2005	[12]0.99967	1.00094	[12]1.00061	0.99137	0.99115	1.00094	0.99208	0.98946
[13]2005	[12]0.99946	1.00094	[12]1.00040	0.99117	0.99115	1.00094	0.99208	0.98946
2006	[14]1.00185	0.99892	[14]1.00076	0.99198	1.00762	0.99892	1.00653	0.99592
2007	1.00000	0.99858	0.99858	0.99057	1.00234	0.99858	1.00092	0.99683
2008	1.00178	0.99792	0.99970	0.99027	[15]1.00079	0.99792	0.99870	0.99554

[1] Factors effective for the first half of FY 2001 (October 2000 through March 2001).
[2] Factors effective for the second half of FY 2001 (April 2001 through September 2001).
[3] Incremental factors are applied to FY 2000 cumulative factors.
[4] Incremental factors are applied to the cumulative factors for the first half of FY 2001.
[5] Factors effective for the first half of FY 2003 (October 2002 through March 2003).
[6] Factors effective for the second half of FY 2003 (April 2003 through September 2003).
[7] Incremental factors are applied to FY 2002 cumulative factors.
[8] Factors effective for the first half of FY 2004 (October 2003 through March 2004).
[9] Incremental factors are applied to the cumulative factors for the second half of FY 2003.
[10] Factors effective for the second half of FY 2004 (April 2004 through September 2004).
[11] Factors effective for the first quarter of FY 2005 (September 2004 through December 2004).
[12] Incremental factors are applied to average of the cumulative factors for the first half (October 1, 2003 through March 31, 2004) and second half (April 1, 2004 through September 30, 2004) of FY 2004.
[13] Factors effective for the last three quarters of FY 2005 (January 2005 through September 2005).
[14] Incremental factors are applied to average of the cumulative factors for 2005.

The methodology used to determine the recalibration and geographic (DRG/GAF) budget neutrality adjustment factor is similar to the methodology used in establishing budget neutrality adjustments under the PPS for operating costs. One difference is that, under the operating PPS, the budget neutrality adjustments for the effect of geographic reclassifications are determined separately from the effects of other changes in the hospital wage index and the DRG relative weights. Under the capital PPS, there is a single DRG/GAF budget neutrality adjustment factor (the national capital rate and the Puerto Rico capital rate are determined separately) for changes in the GAF (including geographic reclassification) and the DRG relative weights. In addition, there is no adjustment for the effects that geographic reclassification has on the other payment parameters, such as the payments for serving low-income patients, indirect medical education payments, or the large urban add-on payments.

In the **Federal Register** notice establishing the final FY 2007 occupational mix adjusted payment rates (71 FR 59890), we calculated a GAF/DRG budget neutrality factor of 0.9986 for FY 2007. For FY 2008, we are establishing a GAF/DRG budget neutrality factor of 0.9997. The GAF/DRG budget neutrality factors are built permanently into the capital rates; that is, they are applied cumulatively in determining the capital Federal rate. This follows the requirement that estimated aggregate payments each year be no more or less than they would have been in the absence of the annual DRG reclassification and recalibration and changes in the GAF. The incremental change in the adjustment from FY 2007 to FY 2008 is 0.9997. The cumulative change in the capital Federal rate due to the adjustment is 0.9903 (the product of the incremental factors for FYs 1994 though 2007 and the incremental factor of 0.9997 for FY 2008). (We note that averages of the incremental factors that were in effect during FYs 2004 and 2005, respectively, were used in the calculation of the cumulative adjustment of 0.9903 for FY 2008.)

The factor accounts for DRG reclassifications and recalibration and for changes in the GAF. It also incorporates the effects on the GAF of FY 2008 geographic reclassification decisions made by the MGCRB compared to FY 2007 decisions. However, it does not account for changes in payments due to changes in the DSH and IME adjustment factors, or in the large urban add on.

4. Exceptions Payment Adjustment Factor

Section 412.308(c)(3) requires that the capital standard Federal rate be reduced by an adjustment factor equal to the estimated proportion of additional payments for both regular exceptions and special exceptions under § 412.348 relative to total capital PPS payments. In estimating the proportion of regular exception payments to total capital PPS payments during the transition period, we used the actuarial capital cost model originally developed for determining budget neutrality (described in Appendix B of the FY 2002 IPPS final rule (66 FR 40099)) to determine the exceptions payment adjustment factor, which was applied to both the Federal and hospital-specific capital rates.

An adjustment for regular exception payments is no longer necessary in determining the FY 2008 capital Federal rate because, in accordance with § 412.348(b), regular exception payments were only made for cost reporting periods beginning on or after October 1, 1991 and before October 1, 2001. Accordingly, as we explained in the FY 2002 IPPS final rule (66 FR 39949), in FY 2002 and subsequent fiscal years, no payments are made under the regular exceptions provision. However, in accordance with § 412.308(c), we still need to compute a budget neutrality adjustment for special exception payments under § 412.348(g). We describe our methodology for determining the exceptions adjustment used in calculating the FY 2007 capital Federal rate below.

Under the special exceptions provision specified at § 412.348(g)(1), eligible hospitals include SCHs, urban hospitals with at least 100 beds that have a disproportionate share percentage of at least 20.2 percent or qualify for DSH payments under § 412.106(c)(2), and hospitals with a combined Medicare and Medicaid inpatient utilization of at least 70 percent. An eligible hospital may receive special exceptions payments if it meets the following criteria: (1) a project need requirement as described at § 412.348(g)(2), which, in the case of certain urban hospitals, includes an excess capacity test as described at § 412.348(g)(4); (2) an age of assets test as described at § 412.348(g)(3); and (3) a project size requirement as described at § 412.348(g)(5).

Based on information compiled from our fiscal intermediaries, six hospitals have qualified for special exceptions payments under § 412.348(g). Because we have cost reports ending in FY 2006 for all of these hospitals, we calculated the adjustment based on actual cost experience. Using data from cost reports ending in FY 2006 from the December 2006 update of the HCRIS data, we divided the capital special exceptions payment amounts for the six hospitals that qualified for special exceptions by the total capital PPS payment amounts (including special exception payments) for all hospitals. Based on the data from cost reports ending in FY 2006, this ratio is rounded to 0.0003. Because we have not received all cost reports ending in FY 2006, we also divided the FY 2005 special exceptions payments by the total capital PPS payment amounts for all hospitals with cost reports ending in FY 2005. This ratio also rounded to 0.0003. Because special exceptions are budget neutral, we are offsetting the capital Federal rate by 0.03 percent for special exceptions payments for FY 2008. Therefore, the exceptions adjustment factor is equal to 0.9997 (1—0.0003) to account for special exceptions payments in FY 2008.

In the FY 2007 IPPS final rule (71 FR 48161), we estimated that total (special) exceptions payments for FY 2007 would equal 0.03 percent of aggregate payments based on the capital Federal rate. Therefore, we applied an exceptions adjustment factor of 0.9997 (1—0.0003) to determine the FY 2007 capital Federal rate. As we stated above, we estimate that exceptions payments in FY 2008 will equal 0.03 percent of aggregate payments based on the FY 2008 capital Federal rate. Therefore, we are applying an exceptions payment adjustment factor of 0.9997 to the capital Federal rate for FY 2008. The exceptions adjustment factor for FY 2008 is the same as the factor used in determining the FY 2007 capital Federal rate in the FY 2007 IPPS final rule (71 FR 48161), and is the same factor used for the occupational mix adjusted payment rates since the adjustments made to the wage index had no effect on capital exceptions payments (71 FR 59890). The exceptions reduction factors are not built permanently into the capital rates; that is, the factors are not applied cumulatively in determining the capital Federal rate. Therefore, the net change in the exceptions adjustment factor used in determining the FY 2008 capital Federal rate is 1.0000 (0.9997/0.9997).

5. Capital Standard Federal Rate for FY 2008

In the **Federal Register** notice that established the occupational mix adjusted payment rates for FY 2007 (71 FR 59891), we established a capital Federal rate of $427.03 for FY 2007. As discussed above and in section V. of the

preamble of this final rule with comment period, we are not finalizing the proposed zero percent update for urban hospitals, which would have resulted in separate capital Federal rates for FY 2008 rural and urban hospitals. Therefore, we are establishing an update of 0.9 percent in determining the FY 2008 capital Federal rate for all hospitals. However, under the statutory authority at section 1886(d)(3)(A)(vi) of the Act, we are applying an additional 1.2 percent reduction to the standardized amounts for both capital and operating Federal payment rates in FY 2008. The 1.2 percent reduction is based on our Actuary's analysis of the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix in light of the adoption of the MS–DRGs. Although the 1.2 percent reduction is outside the established process for developing the capital Federal payment rate, it nevertheless is a factor in the final prospective payment rate to hospitals for capital-related costs. For that reason, the capital Federal payment rates established in this final rule with comment period were determined by applying the 1.2 percent reduction. As a result of the 0.9 percent update, the 1.2 percent reduction to account for improvements in documentation and coding, and the other factors as discussed above, we are establishing a capital Federal rate of $423.34 for all hospitals for FY 2008. The capital Federal rate for FY 2008 was calculated as follows:

- The FY 2008 update factor is 1.0090, that is, the update is 0.9 percent.
- The FY 2008 budget neutrality adjustment factor that is applied to the capital standard Federal payment rate for changes in the DRG relative weights and in the GAF (for all hospitals) is 0.9997.
- The FY 2008 outlier adjustment factor is 0.9517.
- The FY 2008 (special) exceptions payment adjustment factor is 0.9997.
- The FY 2008 reduction for improvements in documentation and coding under the MS–DRGs is 1.2 percent.

Because the capital Federal rate has already been adjusted for differences in case-mix, wages, cost-of-living, indirect medical education costs, and payments to hospitals serving a disproportionate share of low income patients, we are not making additional adjustments in the capital standard Federal rate for these factors, other than the budget neutrality factor for changes in the DRG relative weights and the GAF.

We are providing the following charts that show how each of the factors and adjustments for FY 2008 affected the computation of the FY 2008 capital Federal rate in comparison to the FY 2007 capital Federal rate. The FY 2008 update factor has the effect of increasing the capital Federal rate by 0.90 percent compared to the FY 2007 capital Federal rate. The GAF/DRG budget neutrality factor has the effect of decreasing the capital Federal rate by 0.03 percent. The FY 2008 outlier adjustment factor has the effect of decreasing the capital Federal rate by 0.53 percent compared to the FY 2007 capital Federal rate. The FY 2008 exceptions payment adjustment factor remains unchanged from the FY 2007 exceptions payment adjustment factor, and therefore, has a 0.0 percent net effect on the FY 2008 capital Federal rate. In addition to the factors historically used to determine the capital Federal rate, for FY 2008, we are establishing an adjustment factor to account for improvements in documentation and coding expected to result from the MS–DRGs we are adopting, as discussed above in section III. of the Addendum to this final rule with comment period, in determining the capital Federal rate for FY 2008. The combined effect of all the changes decreases the capital Federal rate by 0.86 percent compared to the FY 2007 capital Federal rate.

COMPARISON OF FACTORS AND ADJUSTMENTS: FY 2007 CAPITAL FEDERAL RATE AND FY 2008 CAPITAL FEDERAL RATE

	FY 2007	FY 2008[4]	Change	Percent change[5]
Update Factor[1]	1.0110	1.0090	1.0090	0.00
GAF/DRG Adjustment Factor[1]	0.9986	0.9997	0.9997	−0.03
Outlier Adjustment Factor[2]	0.9568	0.9517	0.9947	−0.53
Exceptions Adjustment Factor[2]	0.9997	0.9997	1.0000	0.00
MS–DRG Upcoding Adjustment Factor[3]	.....	0.9880	0.9880	−1.20
Capital Federal Rate	$427.03	$423.34	0.9914	−0.86

[1] The update factor and the GAF/DRG budget neutrality factors are built permanently into the capital rates. Thus, for example, the incremental change from FY 2007 to FY 2008 resulting from the application of the 0.9997 GAF/DRG budget neutrality factor for FY 2008 is 0.9997.

[2] The outlier reduction factor and the exceptions adjustment factor are not built permanently into the capital rates; that is, these factors are not applied cumulatively in determining the capital rates. Thus, for example, the net change resulting from the application of the FY 2008 outlier adjustment factor is 0.9517/0.9568, or 0.9947.

[3] Adjustment to FY 2008 IPPS rates to account for upcoding expected to result from the adoption of the MS–DRGs, as discussed above in section III. of the Addendum to this final rule with comment period.

[4] Factors for FY 2008, as discussed above in section III. of the Addendum to this final rule with comment period.

[5] Percent change of individual factors may not sum due to rounding.

We are also providing the following chart that shows how the final FY 2008 capital Federal rate (for all hospitals) differs from the proposed FY 2008 capital Federal rates for rural hospitals and for urban hospitals as presented in the FY 2008 IPPS proposed rule (72 FR 24847). As noted above, we are not finalizing the proposal that would have resulted in separate capital Federal rates for FY 2008 for rural hospitals and for urban hospitals. Therefore, we applied the 0.9 percent FY 2008 update factor to all hospitals.

COMPARISON OF FACTORS AND ADJUSTMENTS: PROPOSED FY 2008 CAPITAL FEDERAL RATE AND FINAL FY 2008 CAPITAL FEDERAL RATE

	Proposed FY 2008 for rural hospitals	Proposed FY 2008 for urban hospitals	Final FY 2008 for all hospitals*	Percent change for rural hospitals**	Percent change for urban hospitals**
Update Factor	1.0080	1.0000	1.0090	0.01	0.90
GAF/DRG Adjustment Factor	1.0018	1.0018	0.9997	−0.21	−0.21
Outlier Adjustment Factor	0.9484	0.9484	0.9517	0.35	0.35
Exceptions Adjustment Factor	0.9997	0.9997	0.9997	0.00	0.00
MS–DRG Upcoding Adjustment Factor	0.9760	0.9760	0.9880	1.23	1.23
Capital Federal Rate	$417.26	$413.87	$423.34	1.46	2.29

* As discussed in section V. of the preamble of this final rule with comment period, we did not finalize the proposed zero percent update for urban hospitals, which would have resulted in different capital Federal rates for FY 2008 for rural hospitals and for urban hospitals. Consequently, in this final rule with comment period, the same update was applied for all hospitals (both urban and rural), and one capital Federal rate was established for FY 2008 for both urban and rural hospitals.

** Percent change of individual factors may not sum due to rounding.

6. Special Capital Rate for Puerto Rico Hospitals

Section 412.374 provides for the use of a blended payment system for payments to hospitals located in Puerto Rico under the PPS for acute care hospital inpatient capital-related costs. Accordingly, under the capital PPS, we computed a separate payment rate specific to hospitals located in Puerto Rico using the same methodology used to compute the national Federal rate for capital-related costs. Under the broad authority of section 1886(g) of the Act, as discussed in section V. of the preamble of this final rule with comment period, beginning with discharges occurring on or after October 1, 2004, capital payments to hospitals located in Puerto Rico are based on a blend of 25 percent of the Puerto Rico capital rate and 75 percent of the capital Federal rate. The Puerto Rico capital rate is derived from the costs of Puerto Rico hospitals only, while the capital Federal rate is derived from the costs of all acute care hospitals participating in the IPPS (including Puerto Rico).

To adjust hospitals' capital payments for geographic variations in capital costs, we applied a GAF to both portions of the blended capital rate. The GAF is calculated using the operating IPPS wage index, and varies depending on the labor market area or rural area in which the hospital is located. We used the Puerto Rico wage index to determine the GAF for the Puerto Rico part of the capital-blended rate and the national wage index to determine the GAF for the national part of the blended capital rate.

Because we implemented a separate GAF for Puerto Rico in FY 1998, we also applied separate budget neutrality adjustments for the national GAF and for the Puerto Rico GAF. However, we applied the same budget neutrality factor for DRG reclassifications and recalibration nationally and for Puerto Rico. As we stated above in section III.A.4. of the Addendum to this final rule with comment period, for Puerto Rico, the GAF budget neutrality factor is 1.0008, while the DRG adjustment is 0.9979, for a combined cumulative adjustment of 0.9987.

In computing the payment for a particular Puerto Rico hospital, the Puerto Rico portion of the capital rate (25 percent) is multiplied by the Puerto Rico-specific GAF for the labor market area in which the hospital is located, and the national portion of the capital rate (75 percent) is multiplied by the national GAF for the labor market area in which the hospital is located (which is computed from national data for all hospitals in the United States and Puerto Rico). In FY 1998, we implemented a 17.78 percent reduction to the Puerto Rico capital rate as a result of Pub. L. 105–33. In FY 2003, a small part of that reduction was restored.

For FY 2007, before application of the GAF, the special capital rate for hospitals located in Puerto Rico was $203.06 for discharges occurring on or after October 1, 2006, through September 30, 2007. With the changes we are making to the factors used to determine the capital rate, the FY 2008 special capital rate for hospitals in Puerto Rico is $199.80.

B. Calculation of the Inpatient Capital-Related Prospective Payments for FY 2008

Because the 10-year capital PPS transition period ended in FY 2001, all hospitals (except ''new'' hospitals under § 412.324(b) and under § 412.304(c)(2)) are paid based on 100 percent of the capital Federal rate in FY 2007. The applicable capital Federal rate was determined by making the following adjustments:

- For outliers, by dividing the capital standard Federal rate by the outlier reduction factor for that fiscal year; and
- For the payment adjustments applicable to the hospital, by multiplying the hospital's GAF, disproportionate share adjustment factor, and IME adjustment factor, when appropriate.

For purposes of calculating payments for each discharge during FY 2008, the capital standard Federal rate is adjusted as follows: (Standard Federal Rate) × (DRG weight) × (GAF) × (COLA for hospitals located in Alaska and Hawaii) × (1 + Disproportionate Share Adjustment Factor + IME Adjustment Factor, if applicable). The result is the adjusted capital Federal rate. (As discussed above and in section V. of the preamble of this final rule with comment period, we are eliminating the large urban add-on adjustment in existing regulations at § 412.316, beginning in FY 2008.)

Hospitals also may receive outlier payments for those cases that qualify under the thresholds established for each fiscal year. Section 412.312(c) provides for a single set of thresholds to identify outlier cases for both inpatient operating and inpatient capital-related payments. The outlier thresholds for FY 2008 are in section II.A. of the Addendum to this final rule with comment period. For FY 2008, a case qualifies as a cost outlier if the cost for the case plus the IME and DSH payments is greater than the prospective payment rate for the DRG plus the fixed-loss amount of $22,635.

An eligible hospital may also qualify for a special exceptions payment under § 412.348(g) up through the 10th year beyond the end of the capital transition period if it meets the following criteria: (1) A project need requirement described at § 412.348(g)(2), which in the case of certain urban hospitals

includes an excess capacity test as described at § 412.348(g)(4); and (2) a project size requirement as described at § 412.348(g)(5). Eligible hospitals include SCHs, urban hospitals with at least 100 beds that have a DSH patient percentage of at least 20.2 percent or qualify for DSH payments under § 412.106(c)(2), and hospitals that have a combined Medicare and Medicaid inpatient utilization of at least 70 percent. Under § 412.348(g)(8), the amount of a special exceptions payment is determined by comparing the cumulative payments made to the hospital under the capital PPS to the cumulative minimum payment level. This amount is offset by: (1) Any amount by which a hospital's cumulative capital payments exceed its cumulative minimum payment levels applicable under the regular exceptions process for cost reporting periods beginning during which the hospital has been subject to the capital PPS; and (2) any amount by which a hospital's current year operating and capital payments (excluding 75 percent of operating DSH payments) exceed its operating and capital costs. Under § 412.348(g)(6), the minimum payment level is 70 percent for all eligible hospitals.

During the transition period, new hospitals (as defined under § 412.300) were exempt from the capital IPPS for their first 2 years of operation and were paid 85 percent of their reasonable costs during that period. Effective with the third year of operation through the remainder of the transition period, under § 412.324(b) we paid the hospitals under the appropriate transition methodology (if the hold-harmless methodology were applicable, the hold-harmless payment for assets in use during the base period would extend for 8 years, even if the hold-harmless payments extend beyond the normal transition period).

Under § 412.304(c)(2), for cost reporting periods beginning on or after October 1, 2002, we pay a new hospital 85 percent of its reasonable costs during the first 2 years of operation unless it elects to receive payment based on 100 percent of the capital Federal rate. Effective with the third year of operation, we pay the hospital based on 100 percent of the capital Federal rate (that is, the same methodology used to pay all other hospitals subject to the capital PPS).

C. Capital Input Price Index

1. Background

Like the operating input price index, the capital input price index (CIPI) is a fixed-weight price index that measures the price changes associated with capital costs during a given year. The CIPI differs from the operating input price index in one important aspect—the CIPI reflects the vintage nature of capital, which is the acquisition and use of capital over time. Capital expenses in any given year are determined by the stock of capital in that year (that is, capital that remains on hand from all current and prior capital acquisitions). An index measuring capital price changes needs to reflect this vintage nature of capital. Therefore, the CIPI was developed to capture the vintage nature of capital by using a weighted-average of past capital purchase prices up to and including the current year.

We periodically update the base year for the operating and capital input prices to reflect the changing composition of inputs for operating and capital expenses. The CIPI was last rebased to FY 2002 in the FY 2006 IPPS final rule (70 FR 47387).

2. Forecast of the CIPI for FY 2008

Based on the latest forecast by Global Insight, Inc. (second quarter of 2007), we forecast that the CIPI will increase to 1.3 percent in FY 2008. This reflects a projected 1.9 percent increase in vintage-weighted depreciation prices (building and fixed equipment, and movable equipment), and a 3.1 percent increase in other capital expense prices in FY 2008, partially offset by a 2.6 percent decline in vintage-weighted interest expenses in FY 2008. The weighted average of these three factors produces the 1.3 percent increase for the CIPI as a whole in FY 2008.

IV. Changes to Payment Rates for Excluded Hospitals and Hospital Units: Rate-of-Increase Percentages

Historically, hospitals and hospital units excluded from the prospective payment system received payment for inpatient hospital services they furnished on the basis of reasonable costs, subject to a rate-of-increase ceiling. An annual per discharge limit (the target amount as defined in § 413.40(a)) was set for each hospital or hospital unit based on the hospital's own cost experience in its base year. The target amount was multiplied by the Medicare discharges and applied as an aggregate upper limit (the ceiling as defined in § 413.40(a)) on total inpatient operating costs for a hospital's cost reporting period. Prior to October 1, 1997, these payment provisions applied consistently to all categories of excluded providers (rehabilitation hospitals and units (now referred to as IRFs), psychiatric hospitals and units (now referred to as IPFs), LTCHs, children's hospitals, and cancer hospitals).

Payment for services furnished in children's hospitals and cancer hospitals that are excluded from the IPPS continues to be subject to the rate-of-increase ceiling based on the hospital's own historical cost experience. (We note that, in accordance with § 403.752(a), RNHCIs are also subject to the rate-of-increase limits established under § 413.40 of the regulations.) We had previously proposed that the FY 2008 rate-of-increase percentage for cancer and children's hospitals and RNHCIs would be the percentage increase in the FY 2008 IPPS operating market basket, estimated to be 3.3 percent. Consistent with our historical approach, if more recent data are available for the final rule, we use it to calculate the IPPS operating market basket. For this final rule with comment period, we have calculated the IPPS operating market basket for FY 2008 using the most recent data available. For cancer and children's hospitals and RNHCIs, the FY 2008 rate-of-increase percentage which is applied to FY 2007 target amounts in order to calculate FY 2008 target amounts is 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the IPPS operating market basket increase, in accordance with the applicable regulations at 42 CFR 413.40.

IRFs, IPFs, and LTCHs were previously paid under the reasonable cost methodology. However, the statute was amended to provide for the implementation of prospective payment systems for IRFs, IPFs, and LTCHs. In general, the prospective payment systems for IRFs, IPFs, and LTCHs provide transitioning periods of varying lengths of time during which a portion of the prospective payment is based on cost-based reimbursement rules under Part 413 (certain providers do not receive a transitioning period or may elect to bypass the transition as applicable under 42 CFR Part 412, Subparts N, O, and P.) We note that the various transitioning periods provided for under the IRF PPS, IPF PPS, and the LTCH PPS have ended or will soon end.

For cost reporting periods beginning on or after October 1, 2002, all IRFs are paid 100 percent of the adjusted Federal rate under the IRF PPS. Therefore, for cost reporting periods beginning on or after October 1, 2002, no portion of an IRF PPS payment is subject to Part 413. Similarly, for cost reporting periods beginning on or after October 1, 2006, all LTCHs are paid 100 percent of the adjusted Federal rate under the LTCH PPS. Therefore, for cost reporting periods beginning on or after October 1,

2006, no portion of the LTCH PPS payment is subject to 42 CFR Part 413. (We note that to the extent a portion of a LTCH's PPS payment was subject to reasonable cost principles, the Secretary utilized his broad authority under section 123 of the BBRA, amended by section 307 of BIPA, to make such portion subject to 42 CFR Part 413 and various provisions in 1886(b) of the Act.)

Except as provided in § 412.426(c), IPFs remain under a blend methodology for cost reporting periods beginning on or after January 1, 2005, and before January 1, 2008. Under the broad authority conferred upon the Secretary in section 124(a)(1) of the BBRA of 1999, the Secretary provided that, for IPFs paid under the blend methodology, the portion of the IPF PPS payment that is based on reasonable cost principles is subject to the rules of 42 CFR Part 413 and various provisions in section 1886(b) of the Act. In order to calculate the portion of the PPS payment that is based on reasonable cost principles, it is necessary to determine whether the IPF would be considered ''existing'' for purposes of section 1886(b)(3)(H) of the Act or ''new'' for purposes of section 1886(b)(7) of the Act. We note that readers should not confuse an IPF that is considered ''new'' for purposes of section 1886(b)(7) of the Act and § 413.40(f)(2)(ii) of the regulations with an IPF that is considered ''new'' under § 412.426(c) of the regulations. Any IPF that, under present or previous ownership or both, has its first cost reporting period as an IPF beginning on or after January 1, 2005, is considered ''new'' for purposes of § 412.426(c). An IPF that is considered ''new'' under § 412.426(c) is paid based on 100 percent of the Federal per diem payment amount. Consequently, only those IPFs considered ''new'' under section 1886(b)(7) of the Act, but not ''new'' under § 412.426(c) will be paid under a PPS blended payment methodology. An IPF considered ''new'' for purposes of § 413.40(f)(2)(ii) would have its ''reasonable-cost based'' portion of its prospective payment subject to the provisions of § 413.40(f)(2)(ii) and § 413.40(c)(4)(v), as applicable. An IPF considered ''new'' for purposes of section 1886(b)(7) of the Act has the target amount for its third cost reporting period determined in accordance with sections 1886(b)(7)(A)(ii) and 1886(b)(3)(A)(ii) of the Act. For the fourth and subsequent cost reporting periods, the target amount is calculated in accordance with section 1886(b)(3)(A)(ii) of the Act. An IPF that would be considered ''existing'' for purposes of section 1886(b)(3)(H) of the Act would have its target amount for the ''reasonable-cost based'' portion of its prospective payment determined in accordance with section 1886(b)(3)(A)(ii) of the Act and the provisions of § 413.40(c)(4)(ii) of the regulations.

In the FY 2008 IPPS proposed rule (72 FR 24823), the applicable percentage increase to update the target amount for the reasonable cost-based portion of the PPS payment of an IPF that is considered ''existing'' under section 1886(b)(3)(H) of the Act or ''new'' under section 1886(b)(7) of the Act, but not ''new'' under the provisions of § 412.426(c), was 3.4 percent. However, we noted that if more current data became available prior to publication of the final rule, we would use those data for updating the market basket. Based on more recent data, the applicable percentage increase to update the target amount for the reasonable cost-based portion of the PPS payment of an IPF that is considered ''existing'' under section 1886(b)(3)(H) of the Act or ''new'' under section 1886(b)(7) of the Act, but not ''new'' under § 412.426(c), is 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the excluded hospital market basket increase, in accordance with the applicable regulations at 42 CFR 413.40.

We did not receive any public comments on this section of the proposed rule.

V. Tables

This section contains the tables referred to throughout the preamble to this final rule with comment period and in this Addendum. Tables 1A, 1B, 1C, 1D, 2, 3A, 3B, 4A, 4B, 4C, 4D, 4F, 4G, 4H, 4J, 5, 6A, 6B, 6C, 6D, 6E, 6F, 6J, 6K, 7A, 7B, 8A, 8B, 8C, 9A, 9C, 10, and 11 are presented below. As explained in sections II.D.2. and II.G.8. of the preamble of this final rule with comment period, Table 6I—Complete List of Complication and Comorbidity (CC) Exclusions, is available only through the Internet on the CMS Web site at: *http://www.cms.hhs.gov/AcuteInpatientPPS/*. The tables presented below are as follows:

Table 1A—National Adjusted Operating Standardized Amounts, Labor/Nonlabor (69.7 Percent Labor Share/30.3 Percent Nonlabor Share If Wage Index Is Greater Than 1)

Table 1B—National Adjusted Operating Standardized Amounts, Labor/Nonlabor (62 Percent Labor Share/38 Percent Nonlabor Share If Wage Index Is Less Than or Equal To 1)

Table 1C—Adjusted Operating Standardized Amounts for Puerto Rico, Labor/Nonlabor

Table 1D—Capital Standard Federal Payment Rate

Table 2—Hospital Case-Mix Indexes for Discharges Occurring in Federal Fiscal Year 2006; Hospital Wage Indexes for Federal Fiscal Year 2008; Hospital Average Hourly Wages for Federal Fiscal Years 2006 (2002 Wage Data), 2007 (2003 Wage Data), and 2008 (2004 Wage Data); and 3-Year Average of Hospital Average Hourly Wages

Table 3A—FY 2008 and 3-Year Average Hourly Wage for Urban Areas by CBSA

Table 3B—FY 2008 and 3-Year Average Hourly Wage for Rural Areas by CBSA

Table 4A—Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas by CBSA—FY 2008

Table 4B—Wage Index and Capital Geographic Adjustment Factor (GAF) for Rural Areas by CBSA—FY 2008

Table 4C—Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That Are Reclassified by CBSA—FY 2008

Table 4F—Puerto Rico Wage Index and Capital Geographic Adjustment Factor (GAF) by CBSA—FY 2008

Table 4J—Out-Migration Adjustment—FY 2008

Table 5—List of Medicare Severity Diagnosis-Related Groups (MS–DRGs), Relative Weighting Factors, and Geometric and Arithmetic Mean Length of Stay

Table 6A—New Diagnosis Codes

Table 6B—New Procedure Codes

Table 6C—Invalid Diagnosis Codes

Table 6D—Invalid Procedure Codes

Table 6E—Revised Diagnosis Code Titles

Table 6F—Revised Procedure Code Titles

Table 6G—Additions to the CC Exclusions List

Table 6H—Deletions from the CC Exclusions List

Table 7A—Medicare Prospective Payment System Selected Percentile Lengths of Stay: FY 2006 MedPAR Update—March 2007 GROUPER V24.0 CMS DRGs

Table 7B—Medicare Prospective Payment System Selected Percentile Lengths of Stay: FY 2006 MedPAR Update—March 2007 GROUPER V25.0 MS DRGs

Table 8A—Statewide Average Operating Cost-to-Charge Ratios—July 2007

Table 8B—Statewide Average Capital Cost-to-Charge Ratios—July 2007

Table 8C—Statewide Average Total Cost to Charge Ratios for LTCHs July 2007
Table 9A—Hospital Reclassifications and Redesignations—FY 2008
Table 9C—Hospitals Redesignated as Rural under Section 1886(d)(8)(E) of the Act—FY 2008
Table 10—Geometric Mean Plus the Lesser of .75 of the National Adjusted Operating Standardized Payment Amount (Increased to Reflect the Difference Between Costs and Charges) or .75 of One Standard Deviation of Mean Charges by Medicare Severity Diagnosis-Related Group (MS–DRG)—July 2007
Table 11—FY 2008 MS–LTC–DRGs, Relative Weights, Geometric Average Length of Stay, Short-Stay Outlier Threshold, and IPPS Comparable Threshold

TABLE 1A.—NATIONAL ADJUSTED OPERATING STANDARDIZED AMOUNTS; LABOR/NONLABOR

[69.7 Percent Labor Share/30.3 Percent Nonlabor Share if Wage Index Greater Than 1]

Full update (3.3 percent)		Reduced update (1.3 percent)	
Labor-related	Nonlabor-related	Labor-related	Nonlabor-related
$3,459.66	$1,503.98	$3,392.68	$1,474.86

TABLE 1B.—NATIONAL ADJUSTED OPERATING STANDARDIZED AMOUNTS, LABOR/NONLABOR

[62 Percent Labor Share/38 Percent Nonlabor Share if Wage Index Less Than or Equal to 1]

Full update (3.3 percent)		Reduced update (1.3 percent)	
Labor-related	Nonlabor-related	Labor-related	Nonlabor-related
$3,077.46	$1,886.18	$3,017.87	$1,849.67

TABLE 1C.—ADJUSTED OPERATING STANDARDIZED AMOUNTS FOR PUERTO RICO, LABOR/NONLABOR

	Rates if wage index greater than 1		Rates if wage index less than or equal to 1	
	Labor	Nonlabor	Labor	Nonlabor
National	$3,459.66	$1,503.98	$3,077.46	$1,886.18
Puerto Rico	$1,454.91	$891.72	$1,377.47	$969.16

TABLE 1D.—CAPITAL STANDARD FEDERAL PAYMENT RATE

	Rate
National	$423.34
Puerto Rico	$199.80

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
010001	1.5191	0.7567	21.6546	22.1989	23.2195	22.3615
010005	1.1378	0.8629	22.4906	23.6022	23.0203	23.0415
010006	1.5126	0.7692	23.4823	23.4975	23.7502	23.5724
010007	1.0207	0.7567	18.2429	19.9329	21.3492	19.8699
010008	1.0417	0.7741	20.4591	17.9533	22.0793	19.9268
010009	0.9702	0.8629	23.2228	23.5626	25.9011	24.2272
010010	1.1043	0.8724	21.4974	27.0385	22.8602	23.5943
010011	1.6748	0.8855	27.4850	27.6658	27.4668	27.5393
010012	1.2356	0.9388	22.7020	24.4059	25.5767	24.1956
010015	1.0427	0.7613	21.5111	22.3383	27.0806	23.3440
010016	1.5770	0.8855	25.1502	24.6488	26.8611	25.5444
010018	1.7123	0.8855	22.2990	23.7048	24.8974	23.6077
010019	1.2722	0.7692	22.0906	22.8766	23.3460	22.7785
010021	1.1851	0.7567	18.6785	19.7367	21.0624	19.7975
010022	0.9498	0.9812	24.5671	25.8404	27.4318	25.9300
010023	1.8506	0.8111	27.6174	25.4272	26.1739	26.4108
010024	1.6018	0.8111	20.7265	22.0819	25.0715	22.5306

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
010025	1.3028	0.8587	21.2674	22.7635	23.6186	22.5541
010027	0.7634	0.7567	15.3705	16.4682	17.0513	16.2718
010029	1.5710	0.8587	22.6976	23.9007	25.0468	23.9133
010032	0.9313	0.7892	19.1555	19.3311	18.5545	19.0122
010033	2.0854	0.8855	26.3784	27.4181	29.1471	27.6506
010034	1.0453	0.8111	16.9686	17.7457	19.1549	17.9513
010035	1.3134	0.8724	22.2870	24.2425	24.2746	23.6062
010036	1.1619	0.7567	22.9747	21.5796	24.2887	22.9479
010038	1.2689	0.8022	21.4509	23.7039	27.0752	24.1209
010039	1.6606	0.9017	25.8820	26.9919	28.6462	27.1994
010040	1.6563	0.8144	22.8851	24.3207	24.7657	23.9967
010043	1.0807	0.8855	22.5944	21.9774	23.9121	22.8205
010044	1.0847	0.8724	21.4036	22.5009	24.4276	22.7205
010045	1.2233	0.8724	19.8803	20.4927	23.1695	21.0755
010046	1.5335	0.8144	21.6965	23.4219	25.9105	23.5410
010047	0.8960	0.7694	21.0605	26.4851	19.7542	21.9502
010049	1.1433	0.7567	20.2413	21.7888	22.4248	21.5072
010050	1.0408	0.8855	22.1584	22.9620	24.4060	23.1658
010051	0.8299	0.8530	15.2207	18.7701	18.0305	17.3881
010052	0.8767	0.7670	16.4958	25.9233	36.3638	26.9159
010053	***	*	19.0108	*	*	19.0108
010054	1.0736	0.8629	22.5554	23.3624	24.4810	23.4780
010055	1.6124	0.7567	22.3800	22.5396	22.4145	22.4451
010056	1.6378	0.8855	23.7144	23.7398	24.5754	24.0311
010058	1.0119	0.8855	18.5538	19.5092	17.0150	18.2415
010059	1.0245	0.8629	21.3237	23.0012	24.8199	23.0577
010061	0.9828	0.8108	21.9370	24.1185	25.2454	23.7791
010062	1.0225	0.7567	18.3435	21.4805	21.7112	20.4976
010064	1.6963	0.8855	26.1110	24.8155	27.6149	26.1441
010065	1.5265	0.8724	21.3785	23.0477	24.3346	22.9447
010066	0.8369	0.7567	17.6152	19.8692	25.4612	20.9377
010068	***	*	19.0789	22.7156	24.4145	22.0070
010069	1.0252	0.7567	21.3609	23.1243	23.6272	22.6667
010072	***	*	21.8169	24.4989	*	23.1419
010073	0.9793	0.7567	16.4168	18.3963	19.0046	17.9415
010078	1.6180	0.8022	21.6857	23.5279	24.3828	23.2230
010079	1.2228	0.9017	21.8199	22.7337	22.3034	22.2840
010083	1.1887	0.8123	22.3040	22.4279	24.0036	22.9553
010084	1.3254	0.8855	24.7127	26.3238	26.5079	25.8383
010085	1.3335	0.8629	24.4710	24.2609	23.6280	24.1072
010086	1.0994	0.7567	18.6081	22.2096	21.5584	20.7409
010087	1.9947	0.7947	22.5225	22.4318	24.8320	23.2268
010089	1.2932	0.8855	22.8448	25.0811	26.2628	24.6788
010090	1.7444	0.8539	23.6948	26.0494	26.3957	25.3396
010091	0.9568	0.7613	18.6912	23.1310	22.5272	21.3026
010092	1.5529	0.8530	24.4592	26.6796	26.9959	26.0279
010095	0.8468	0.8530	13.9326	16.5250	17.0024	15.8689
010097	0.7113	0.8111	16.7549	19.4511	19.2481	18.5000
010098	0.9805	*	14.3076	*	*	14.3076
010099	0.9660	0.7567	18.7910	20.8383	20.6736	20.0891
010100	1.6851	0.8123	21.2915	23.8919	25.1460	23.5431
010101	1.1060	0.8724	21.6593	24.2575	25.0974	23.6323
010102	0.9334	0.7567	21.0902	25.6158	26.9859	24.5977
010103	1.8910	0.8855	26.1163	27.8272	28.9636	27.5991
010104	1.8838	0.8855	24.7394	27.6471	28.3126	26.8465
010108	1.0938	0.8111	28.4624	24.6740	25.4325	26.1487
010109	0.9828	0.8018	21.6194	17.6733	21.0449	20.0231
010110	0.7586	0.7781	17.5957	26.0038	19.8738	20.8832
010112	0.9652	0.7567	16.8902	17.1833	20.4027	18.1182
010113	1.6646	0.7947	21.4121	22.3282	24.7170	22.7864
010114	1.3662	0.8855	22.3752	25.6152	25.7090	24.6272
010115	0.6881	*	21.7477	*	*	21.7477
010118	1.2151	0.8162	19.7673	21.4630	22.7191	21.2742
010120	0.9625	0.7567	20.9450	20.9019	22.1868	21.3553
010121	***	*	24.0867	*	*	24.0867
010125	1.0635	0.8043	18.4113	21.5123	22.8911	20.8639
010126	1.1765	0.8111	23.1381	23.9327	24.4957	23.8552

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
010128	0.8778	0.7613	21.4200	23.6647	24.9881	23.3836
010129	1.0394	0.7701	21.3555	22.1574	21.8502	21.7888
010130	1.0252	0.8855	23.2488	23.7528	24.5644	23.8767
010131	1.3963	0.9017	25.7837	26.4297	27.2707	26.5327
010137	1.2204	0.8855	24.7366	27.5782	28.5843	26.9190
010138	0.6023	0.7633	13.8476	16.7602	14.5551	15.1032
010139	1.5875	0.8855	25.3014	26.8726	28.1473	26.8270
010143	1.2118	0.8724	22.0215	26.2762	24.0674	24.0861
010144	1.6376	0.7947	20.8209	22.5133	22.3916	21.9338
010145	1.4727	0.8530	24.9531	24.5092	25.8293	25.1083
010146	1.0794	0.8022	20.8917	22.6586	22.6879	22.1063
010148	0.8692	0.7567	20.5589	23.9246	23.5714	22.6800
010149	1.2877	0.8111	26.5854	24.4805	25.4354	25.4861
010150	1.0284	0.8111	21.6377	23.6080	24.4098	23.2040
010152	1.2978	0.7947	22.6202	22.4075	23.7803	22.9411
010157	1.1357	0.7692	24.3559	23.3828	24.2206	23.9837
010158	1.1916	0.7832	24.3531	23.5533	25.5905	24.4669
010162	***	*	*	33.8777	*	33.8777
010163	***	*	*	*	34.0325	34.0325
010164	1.1737	0.7975	*	*	23.2447	23.2447
010165	***	*	*	*	28.8040	28.8040
010166	***	*	*	*	29.7256	29.7256
010167	1.4919	0.8855	*	*	*	*
010168	1.1249	0.9019	*	*	*	*
020001	1.7991	1.2083	32.8120	35.4232	36.5298	34.9510
020004	1.1287	*	32.0966	31.8004	*	31.9467
020006	1.3160	1.2083	36.0540	34.3752	37.0211	35.7758
020008	1.2411	1.2083	35.9236	36.1250	39.3432	37.1503
020012	1.3780	1.2083	31.8995	32.5975	33.9375	32.8391
020014	1.1294	1.2083	32.0894	29.4472	30.9722	30.8221
020017	1.9188	1.2083	33.5852	35.4119	35.8804	34.9149
020018	0.9273	1.9278	*	*	*	*
020019	0.8687	1.9278	*	*	*	*
020024	1.1780	1.2083	33.0644	29.5195	38.6934	33.4500
020026	1.4935	1.9278	*	*	*	*
020027	0.9341	1.9278	*	*	*	*
030001	1.5488	1.0110	29.9840	32.4791	33.4178	31.9042
030002	2.0931	1.0110	29.0519	30.2200	31.0818	30.0874
030006	1.6975	0.9416	25.8872	27.0599	27.7421	26.9373
030007	1.4495	1.1187	29.6174	31.1928	33.7213	31.5818
030009	***	*	22.3993	26.5408	*	23.8204
030010	1.4087	0.9416	24.8275	28.5684	30.6261	28.0431
030011	1.4962	0.9416	25.1361	28.1423	28.8203	27.4688
030012	1.3876	0.9961	26.3859	27.3895	29.1042	27.6846
030013	1.4744	1.0085	25.7050	27.0111	31.2815	28.0280
030014	1.5918	1.0110	25.6259	29.6582	29.8296	28.4308
030016	1.2374	1.0110	26.7003	29.1980	30.7896	28.9890
030017	2.0652	1.0110	26.2452	30.6007	34.4852	30.7776
030018	1.3205	1.0110	28.9476	29.4566	31.8056	30.0512
030019	1.3316	1.0110	27.3156	29.5921	30.1934	29.0814
030022	1.5703	1.0110	26.4404	30.5710	30.3746	29.2068
030023	1.7873	1.1551	33.8333	34.2142	35.8287	34.6826
030024	2.0639	1.0110	31.6658	31.9247	33.1797	32.2883
030027	0.9709	*	20.4032	*	*	20.4032
030030	1.5768	1.0110	30.2712	32.0994	34.4166	32.2546
030033	1.2960	1.1187	26.6531	28.7508	29.9383	28.4685
030036	1.4588	1.0110	30.3521	30.9834	33.0523	31.6117
030037	2.1478	1.0110	28.6453	31.2877	34.1079	31.4098
030038	1.6801	1.0110	29.5509	29.9314	31.7238	30.2225
030040	0.9098	*	24.8145	27.5322	*	26.1823
030043	1.2683	0.8854	24.7932	26.5834	27.3856	26.2806
030055	1.4591	0.9576	24.5202	27.1473	27.1621	26.3554
030060	1.0894	*	24.3523	24.8373	*	24.5964
030061	1.6799	1.0110	25.5529	28.0696	28.1337	27.3140
030062	1.2025	0.8854	23.8068	26.6880	28.9587	26.5838
030064	1.9657	0.9416	25.4922	28.3853	29.8226	28.0126
030065	1.5912	1.0110	27.1646	29.5883	31.0817	29.3880

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
030067	1.0582	0.9152	20.4376	20.7591	27.4497	22.9601
030068	1.1135	0.8854	20.8846	23.1394	23.8792	22.6625
030069	1.4256	0.9333	26.3518	30.2224	29.7802	28.7293
030071	0.8920	1.4400	*	*	*	*
030073	1.0393	1.4400	*	*	*	*
030074	0.8727	1.4400	*	*	*	*
030077	0.7686	1.4400	*	*	*	*
030078	0.9911	1.4400	*	*	*	*
030080	1.5497	0.9416	25.2077	27.1360	28.6568	27.0149
030083	1.4230	1.0110	27.5353	27.4983	33.5302	29.3979
030084	0.9008	1.4400	*	*	*	*
030085	1.5896	0.9416	24.5792	26.8364	28.1388	26.6166
030087	1.6937	1.0110	26.6594	29.5962	31.2331	29.4038
030088	1.3707	1.0110	26.6796	27.8604	29.9758	28.2309
030089	1.6397	1.0110	27.1835	28.9068	30.1591	28.8100
030092	1.4993	1.0110	27.3203	31.7512	30.6343	30.0167
030093	1.2962	1.0110	25.8955	26.4430	27.8821	26.8453
030094	1.4039	1.0110	29.5948	31.5422	33.4050	31.6120
030099	0.8736	0.8854	26.3236	27.1402	26.9227	26.8026
030100	2.0564	0.9416	29.0691	31.5628	34.7532	31.7816
030101	1.4424	1.1222	26.1927	27.8302	30.6764	28.3394
030102	2.3653	1.0110	29.0942	31.6285	33.6247	31.5058
030103	1.7635	1.0110	30.1994	31.7322	32.2833	31.3997
030105	2.2401	1.0110	31.3094	31.2970	32.7449	31.8780
030106	1.7527	1.0110	34.7221	32.9840	36.4667	34.9449
030107	1.9168	1.0110	*	35.6197	35.5386	35.5721
030108	2.0446	1.0110	*	*	29.9395	29.9395
030109	***	*	*	16.5906	*	16.5906
030110	1.6188	1.0110	*	31.4852	29.7949	30.5015
030111	1.0309	0.9416	*	*	33.3711	33.3711
030112	1.9762	1.0110	*	*	36.6601	36.6601
030113	0.8959	1.4400	*	*	*	*
030114	1.3883	0.9416	*	*	*	*
030115	1.3514	1.0110	*	*	*	*
030117	1.1079	0.9333	*	*	*	*
030118	1.0969	0.9961	*	*	*	*
030119	1.1665	1.0110	*	*	*	*
040001	1.0776	0.8871	23.7718	22.9327	22.9948	23.2132
040002	1.2042	0.7516	20.1384	21.2020	25.0000	22.0327
040004	1.7265	0.8871	25.0286	27.1741	28.1117	26.7791
040007	1.7562	0.8960	25.7142	40.1291	29.1941	31.6856
040010	1.4682	0.8871	23.0274	24.2315	26.5287	24.6226
040011	1.0455	0.7516	20.3970	21.0967	22.2431	21.2830
040014	1.3571	0.8725	25.3451	26.4777	28.9855	26.8514
040015	0.9961	0.7516	19.2831	20.4279	20.1061	19.9379
040016	1.7616	0.8960	22.1228	25.8056	26.5911	24.8386
040017	1.0969	0.8714	21.9875	21.9147	23.8768	22.5741
040018	1.0812	0.8052	23.6044	24.0026	25.6751	24.3852
040019	1.1088	0.8963	23.7328	23.8706	24.9113	24.1695
040020	1.5861	0.8963	21.6603	22.6497	23.9470	22.7542
040021	1.5370	0.8960	25.6917	25.4046	26.1853	25.7538
040022	1.5695	0.8871	25.4052	29.5000	27.9902	27.5948
040026	1.5090	0.9105	25.4072	27.7931	29.5299	27.6091
040027	1.4827	0.8619	21.1412	21.4252	23.8220	22.1274
040029	1.4947	0.8960	24.0704	24.8409	25.1479	24.6992
040036	1.6105	0.8960	26.3226	27.6234	29.7150	27.9675
040039	1.2755	0.8153	19.5998	21.2712	21.4819	20.7976
040041	1.1732	0.8725	22.1531	23.7787	26.4964	24.1438
040042	1.3805	0.9313	19.9627	21.1716	19.8709	20.3344
040045	1.0416	*	17.2281	*	*	17.2281
040047	1.1288	0.7633	21.9163	22.4249	23.0358	22.4531
040050	1.2290	0.7516	16.3930	17.6906	18.5119	17.5660
040051	0.9632	0.7516	19.1400	21.3342	22.0394	20.8386
040053	***	*	20.7823	*	*	20.7823
040054	***	*	18.2685	18.0509	19.5353	18.6008
040055	1.5244	0.8052	23.3156	23.0448	24.9164	23.7097
040062	1.6625	0.8052	23.3082	23.8994	25.2303	24.1355

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
040067	1.1373	0.7523	16.8800	19.0471	18.9872	18.2681
040069	1.0183	0.8963	24.4662	24.8060	24.9996	24.7603
040071	1.4578	0.8725	24.3824	25.4680	25.2840	25.0575
040072	1.1153	0.7516	19.9009	22.4741	22.1058	21.4220
040074	1.1975	0.8960	25.2423	25.2699	26.2661	25.5884
040075	***	*	18.3253	*	*	18.3253
040076	1.0000	0.8725	20.6272	23.5742	23.0954	22.4197
040077	0.9991	*	18.2082	*	*	18.2082
040078	1.5994	0.9105	24.5377	23.5915	26.1937	24.6735
040080	1.0440	0.8503	22.3392	24.1921	24.8760	23.8555
040081	0.8581	0.7873	15.1081	16.8437	17.2536	16.4124
040084	1.1949	0.8960	24.7225	27.7626	26.6449	26.4201
040085	0.9758	0.8963	29.8444	22.9916	25.7215	25.8637
040088	1.4610	0.7764	22.6183	22.4860	23.6276	22.9191
040091	1.1764	0.7781	23.1320	24.2398	23.1913	23.5100
040100	1.3403	0.8725	20.0460	21.3051	22.6131	21.3769
040105	1.0556	*	18.2182	*	*	18.2182
040109	1.1066	*	22.8801	*	*	22.8801
040114	1.8129	0.8960	24.8992	26.7581	27.7928	26.5383
040118	1.4728	0.8503	24.7363	26.0388	26.8908	25.8812
040119	1.4205	0.8725	21.0103	24.3680	24.2419	23.2187
040126	***	*	14.0700	15.6985	17.3715	15.6137
040132	***	*	28.1393	*	22.0054	24.3534
040134	2.3671	0.8960	27.3412	31.9325	32.2832	30.5661
040137	1.3102	0.8960	25.2907	25.9979	27.7360	26.2750
040138	1.4215	0.8871	25.7513	27.8584	28.3342	27.5137
040141	0.8436	0.8871	24.0901	26.1041	30.3475	26.8847
040142	1.4672	0.9105	27.9696	21.4222	23.8620	24.1239
040143	***	*	*	37.1976	*	37.1976
040144	***	*	*	21.4008	*	21.4008
040145	1.7860	0.8503	*	*	24.4367	24.4367
040146	***	*	*	*	33.7876	33.7876
040147	1.7139	0.8960	*	*	*	*
050002	1.3854	1.5353	34.1948	35.5184	41.7336	37.3207
050006	1.6408	1.2651	30.5373	33.5751	37.1639	33.5391
050007	1.4971	1.4946	38.7033	43.4440	45.8773	42.7095
050008	1.2726	1.4826	39.1539	49.3167	46.8706	45.1816
050009	1.8133	1.4267	39.6393	43.0584	46.2186	43.0443
050013	1.9732	1.4267	31.9837	35.7591	43.5623	36.9784
050014	1.2471	1.2918	33.0373	36.0305	37.4135	35.5238
050015	1.3247	*	30.7940	32.2188	*	31.5274
050016	1.3297	1.2054	26.2161	24.5768	31.0653	27.2795
050017	1.9740	1.3067	36.6593	39.6653	42.2200	39.5192
050018	1.1994	1.1735	22.3472	23.3204	31.8310	25.3549
050022	1.5661	1.1735	29.8632	31.6467	33.0592	31.4883
050024	1.1366	1.1735	27.5587	29.4062	33.4334	30.2003
050025	1.8859	1.1735	36.1622	33.5466	32.7476	34.1071
050026	1.5103	1.1735	28.3027	31.5250	33.1277	31.0373
050028	1.2341	1.1735	26.6160	27.3826	28.5736	27.5339
050030	1.2224	1.1735	24.9707	27.2945	30.9014	27.6434
050036	1.5133	1.1735	32.7929	33.8000	36.0905	34.2482
050038	1.6423	1.5439	38.7527	44.2265	48.7483	44.0206
050039	1.6082	1.1735	31.6734	35.2630	36.6943	34.5173
050040	1.2674	1.1735	34.3279	35.8322	35.7054	35.3257
050042	1.5020	1.2651	33.9415	37.3760	40.3326	37.2065
050043	1.6341	1.5353	43.1589	45.4887	48.2283	45.6945
050045	1.3077	1.1735	23.8408	25.0150	27.0676	25.4080
050046	1.1412	1.1735	25.6875	26.1926	29.1125	26.9715
050047	1.7685	1.4826	40.9874	55.9367	45.1675	47.4627
050054	1.1914	1.1735	24.1262	21.3650	24.0338	23.1316
050055	1.3290	1.4826	37.5879	42.9516	44.2926	41.4282
050056	1.3794	1.1735	27.9330	30.6126	32.7693	30.4552
050057	1.6643	1.1735	29.4351	30.0236	31.7467	30.4506
050058	1.6021	1.1735	33.8215	33.1409	37.2538	34.6985
050060	1.4479	1.1735	27.3282	29.9762	32.0196	29.7255
050061	***	*	32.2172	*	*	32.2172
050063	1.3845	1.1735	33.3039	34.0906	36.3085	34.5048

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050065	***	*	34.0280	34.9110	38.2421	35.7006
050067	1.1973	1.2019	31.9597	38.8070	40.1393	37.4080
050069	1.7482	1.1735	31.2172	34.6353	35.3850	33.8185
050070	1.2780	1.4946	45.3382	47.4099	46.4009	46.4522
050071	1.2898	1.5343	44.9464	50.7602	49.6495	48.7326
050072	1.3417	1.5343	44.2651	49.4344	50.0343	48.1855
050073	1.3036	1.5343	45.9765	49.9730	49.0069	48.5026
050075	1.3055	1.5353	47.2356	54.4089	49.8290	50.5649
050076	1.8910	1.5343	46.4991	52.3788	50.2039	49.9372
050077	1.6158	1.1735	32.0245	34.8660	36.5384	34.5331
050078	1.2608	1.1735	31.1425	32.0133	30.4274	31.1478
050079	1.5056	1.5343	47.8597	47.3449	48.8994	47.9784
050082	1.6846	1.1735	37.7783	38.2878	37.8905	37.9882
050084	1.5633	1.1941	33.0179	35.5196	39.5748	36.0222
050088	***	*	25.7385	*	*	25.7385
050089	1.3519	1.1735	33.5324	33.9593	36.4018	34.5988
050090	1.2783	1.4800	32.9584	33.8953	37.7421	34.8400
050091	1.0225	1.1735	30.8560	32.1301	37.1223	33.3203
050093	1.5015	1.1735	33.4118	36.9481	36.8486	35.7397
050096	1.2246	1.1735	24.6679	34.9237	33.1322	30.9608
050099	1.4850	1.1735	31.0437	33.4174	32.0650	32.2103
050100	1.8315	1.1735	29.6949	31.4404	33.3959	31.5609
050101	1.2932	1.5343	40.3195	42.4589	47.9327	43.6371
050102	1.2847	1.1735	29.1364	32.0617	32.8434	31.6405
050103	1.5381	1.1735	34.2529	34.0935	35.6773	34.7050
050104	1.4331	1.1735	29.7326	32.3043	33.6204	31.9100
050107	1.5168	1.1735	33.1358	32.5846	33.5687	33.0959
050108	1.9263	1.3067	35.5711	38.8672	42.0131	38.9520
050110	1.2783	1.1735	26.1453	26.8408	28.0670	27.0290
050111	1.2625	1.1735	28.1588	28.7875	31.8766	29.6686
050112	1.5360	1.1735	36.8026	37.7281	38.9483	37.8620
050113	1.2266	1.4946	33.8064	39.4882	42.8884	38.6364
050114	1.4296	1.1735	31.1295	34.0309	35.7274	33.6746
050115	1.4671	1.1735	30.9288	28.8051	32.5257	30.7642
050116	1.7151	1.1735	34.5109	36.8825	37.6018	36.4210
050117	***	*	32.4413	34.2020	35.0531	33.2964
050118	1.2250	1.2019	35.4044	39.9683	41.6701	39.0065
050121	1.2978	1.1735	27.9537	30.6105	34.6244	31.1240
050122	1.5193	1.1941	34.2416	33.9812	34.0259	34.0785
050124	1.2869	1.1735	28.0288	30.2522	29.9944	29.4697
050125	1.5000	1.5439	41.7020	44.9523	47.7578	44.7946
050126	1.4916	1.1735	29.3360	31.7619	32.6686	31.2868
050127	1.3314	1.3067	26.1222	32.0355	40.7610	31.7807
050128	1.4725	1.1735	31.0662	31.1308	33.4233	31.8929
050129	1.8417	1.1735	32.2680	34.7359	36.9887	34.5850
050131	1.3370	1.4800	40.5321	45.3152	47.5257	44.5040
050132	1.4264	1.1735	35.1544	35.9199	39.6807	36.9017
050133	1.5413	1.2918	31.3530	31.9527	33.1814	32.2802
050135	1.0333	1.1735	24.3927	25.1813	25.3209	25.0624
050136	1.3553	1.4800	37.4560	43.3747	46.6619	42.5341
050137	1.4485	1.1735	38.4827	39.1496	40.2457	39.4250
050138	1.7510	1.1735	46.9557	45.3727	40.6343	43.8129
050139	1.3026	1.1735	37.6217	37.8986	38.7385	38.1892
050140	1.3857	1.1735	39.6269	40.9725	39.4954	39.9747
050144	***	*	33.5109	33.6662	38.2424	35.1804
050145	1.4357	1.4593	42.3134	42.2921	48.0796	44.3363
050146	1.7450	*	*	*	*	*
050148	1.0844	*	27.3005	28.2305	*	27.7734
050149	1.4992	1.1735	33.2270	35.8821	37.3616	35.7587
050150	1.2109	1.2918	31.7560	33.6583	37.9946	34.4499
050152	1.4661	1.4826	43.6487	46.1553	51.6567	47.1769
050153	1.4470	1.5439	43.3190	42.8955	47.6374	44.7563
050155	***	*	21.8550	16.9516	16.7756	18.0652
050158	1.3557	1.1735	35.1326	35.7805	39.9160	36.9712
050159	1.4329	1.1735	31.3199	32.5704	34.6915	32.9769
050167	1.3248	1.1941	28.5179	31.4798	34.0418	31.2303
050168	1.6239	1.1735	33.2506	37.9784	40.5973	37.3823

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050169	1.4402	1.1735	27.4644	29.4693	31.4115	29.5647
050172	***	*	28.5604	*	*	28.5604
050173	1.3511	1.1735	30.3582	29.0576	31.6717	30.3454
050174	1.5310	1.4800	40.1747	44.4199	48.1740	44.3520
050175	***	*	30.5733	33.3061	35.0152	32.9392
050177	***	*	25.1442	24.0717	*	24.6196
050179	1.2416	1.2019	27.1155	30.4973	31.6651	30.0130
050180	1.5481	1.5343	40.2504	42.0358	45.7099	42.7961
050188	1.4245	1.5439	39.5110	41.0943	43.7381	41.3973
050189	1.0027	1.4593	29.1279	30.1155	28.7580	29.3259
050191	1.5039	1.1735	34.2091	37.7805	37.8756	36.5700
050192	0.9795	1.1735	27.0424	27.1400	27.8386	27.3401
050193	1.2009	1.1735	29.6421	33.9520	29.0623	30.7523
050194	1.3918	1.5719	40.9096	44.7107	49.0030	44.8987
050195	1.5358	1.5353	48.4358	48.8595	53.5583	50.3395
050196	1.0252	1.1735	32.1933	34.0956	32.8293	33.0383
050197	2.1090	1.5343	48.9053	50.0728	52.9998	50.6892
050204	1.4292	1.1735	28.6423	32.0121	35.3954	32.0139
050205	1.4338	1.1735	27.8611	29.3334	30.6322	29.3026
050207	***	*	29.5214	30.0062	31.3431	30.2629
050211	1.2807	1.5353	41.2166	35.0515	35.0289	36.9047
050214	***	*	23.9972	25.4647	*	24.7211
050215	***	*	43.7985	48.8112	50.7578	47.7260
050219	1.2434	1.1735	22.4065	26.4143	25.8378	24.8927
050222	1.7011	1.1735	29.1094	32.3882	33.7510	31.8388
050224	1.7135	1.1735	29.3143	32.5010	35.7280	32.5355
050225	1.4565	1.1735	29.9656	34.0836	35.1227	33.2224
050226	1.6587	1.1735	30.5867	32.4411	35.4597	32.8050
050228	1.2780	1.4826	42.4226	43.7939	47.1430	44.4650
050230	1.5630	1.1735	32.9555	34.0600	35.8490	34.3219
050231	1.6220	1.1735	30.9607	32.1813	33.7139	32.3034
050232	1.7586	1.2054	27.4099	26.3004	34.3242	29.3642
050234	1.1638	1.1735	29.6561	32.3726	34.8308	32.2031
050235	1.5172	1.1735	29.2979	30.5405	37.0858	32.3689
050236	1.4069	1.1735	32.1647	33.0686	32.6462	32.6402
050238	1.5198	1.1735	31.1764	33.3346	34.0823	32.9745
050239	1.6081	1.1735	31.0963	33.1148	35.9041	33.4240
050240	***	*	35.5735	36.1154	40.7427	37.4962
050242	1.3910	1.5719	44.3130	46.4844	50.9882	47.3502
050243	1.6367	1.1735	31.4883	32.9385	36.1209	33.6114
050245	1.3986	1.1735	28.6527	27.3866	33.2556	29.8371
050248	1.0733	1.4593	35.3864	*	40.4941	37.6896
050251	***	*	27.2675	27.8452	*	27.5819
050253	***	*	24.0044	23.5381	*	23.7879
050254	1.2483	1.3067	27.0041	31.2386	33.0865	30.5679
050256	***	*	29.8194	29.6793	32.7159	30.6561
050257	0.9657	1.1735	21.3216	20.1829	24.0737	21.8495
050261	1.3143	1.1735	27.3234	29.2150	30.8704	29.2688
050262	2.1509	1.1735	44.0256	39.9946	41.4835	41.8533
050264	1.3224	1.5353	41.1211	47.7024	43.4181	44.0806
050270	***	*	32.4812	33.6855	36.0111	34.0811
050272	1.3840	1.1735	27.1989	29.4671	30.9290	29.2682
050276	1.1508	1.5343	39.3778	41.1406	43.7943	41.5076
050277	1.0162	1.1735	32.5213	35.4443	35.0079	34.2968
050278	1.5556	1.1735	29.9244	31.8712	34.3798	32.1741
050279	1.1670	1.1735	27.6573	29.7118	31.6738	29.7052
050280	1.6965	1.2809	35.2030	38.8341	41.3912	38.4324
050281	1.3944	1.1735	27.3824	29.4882	31.6639	29.5782
050283	1.4818	1.5353	43.0638	44.3122	43.6855	43.6928
050289	1.6753	1.4946	41.1774	44.2814	50.1762	45.4611
050290	1.7010	1.1735	34.5482	37.3563	40.6192	37.4597
050291	1.9433	1.4800	35.3653	38.4365	41.2100	38.2986
050292	1.0703	1.1735	26.8879	26.9786	27.3365	27.0752
050295	1.4721	1.1735	36.1950	34.7382	38.4256	36.5470
050296	1.1731	1.5439	39.0060	39.9842	42.5405	40.5415
050298	1.1699	1.1735	27.7416	30.2022	33.7864	30.5471
050299	***	*	31.5435	35.1249	32.3707	32.9747

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050300	1.4383	1.1735	30.7148	30.2874	33.6821	31.6610
050301	1.2929	1.4146	31.9995	35.9491	37.1103	35.1041
050305	1.4781	1.5353	44.8630	44.9681	48.5339	46.1773
050308	1.5103	1.5439	43.0691	43.7413	46.4180	44.3895
050309	1.4582	1.3067	34.4145	38.2659	40.1499	37.7086
050312	***	*	33.9022	36.8498	*	35.1423
050313	1.2035	1.1941	31.8003	35.0478	37.5024	34.9828
050315	1.2649	1.1735	28.5933	33.2038	32.5538	31.5496
050320	1.3051	1.5353	40.2352	45.7686	46.2071	44.0268
050324	1.7775	1.1735	32.9792	34.5503	36.3474	34.6949
050325	1.2706	1.1768	30.6116	31.3730	37.0441	33.1665
050327	1.7326	1.1735	33.0087	33.9507	35.9349	34.3185
050329	1.2912	1.1735	26.2121	23.2927	33.0390	27.5539
050331	1.1678	*	20.2692	*	*	20.2692
050333	1.0046	1.1735	23.4009	19.6352	18.6534	20.3803
050334	1.6297	1.4593	40.7467	43.9656	47.2968	44.0650
050335	1.3979	1.1768	28.9403	30.9928	34.7192	31.6181
050336	1.2364	1.1941	28.5659	30.4664	31.5480	30.2596
050342	1.2383	1.1735	26.8507	29.2244	30.4226	28.9062
050348	1.7681	1.1735	37.7898	31.5156	32.7107	33.8510
050349	0.9573	1.1735	17.4791	24.4863	25.4266	22.6536
050350	1.3644	1.1735	31.1833	31.0136	31.7908	31.3398
050351	1.5102	1.1735	30.8661	30.6599	33.3064	31.6205
050352	1.3903	1.3067	33.9362	36.7673	37.0807	35.9210
050353	1.4804	1.1735	31.8291	29.4215	30.4206	30.5535
050357	1.4436	1.1735	32.3095	32.6763	36.2089	33.9116
050359	1.1695	1.1735	25.7739	29.8345	31.3391	29.0490
050360	1.4971	1.4800	37.0769	47.4497	52.3811	45.4210
050366	1.1802	1.1750	31.1854	33.6714	37.1527	33.8230
050367	1.4016	1.5343	38.7727	38.6330	40.1904	39.2572
050369	1.4153	1.1735	29.5697	30.6439	32.2467	30.8346
050373	1.5107	1.1735	31.9271	35.1380	34.3737	33.8407
050376	1.5472	1.1735	32.9393	34.3539	35.2837	34.2241
050378	0.9463	1.1735	34.2417	37.9904	40.1923	37.5531
050379	***	*	32.9576	*	*	32.9576
050380	1.6789	1.5439	42.0781	46.0276	49.4258	45.7911
050382	1.3885	1.1735	29.4323	30.4014	32.6683	30.8167
050385	1.3083	1.4800	34.5183	36.8107	36.4188	35.9492
050390	1.1270	1.1735	26.0066	27.3183	27.9359	27.0767
050391	***	*	18.1005	17.2141	*	17.6460
050393	1.4101	1.1735	30.0661	34.1743	35.6356	33.2874
050394	1.6049	1.1735	27.5061	27.4861	32.1894	29.1045
050396	1.6109	1.1735	33.5699	32.4918	37.3972	34.4575
050397	0.7608	1.1735	28.1639	28.3671	29.6825	28.7688
050407	1.1110	1.4826	37.9066	42.2748	44.6839	41.6954
050410	***	*	21.3814	*	*	21.3814
050411	1.3617	1.1735	37.8064	38.8294	38.6328	38.4664
050414	1.3219	1.3067	34.6672	38.7585	41.8688	38.5190
050417	1.2763	1.1735	29.5031	32.9341	36.1222	32.8901
050419	0.8450	*	33.3124	*	*	33.3124
050420	***	*	24.9401	35.2869	39.9237	32.7481
050423	1.0733	1.1735	30.6416	28.3768	31.9751	30.4055
050424	1.9946	1.1735	31.0730	34.5680	36.6091	34.1652
050425	1.3231	1.3067	42.4177	49.2245	46.6628	46.3213
050426	1.4953	1.1735	30.6899	33.2031	34.9855	32.9985
050430	0.9678	1.1735	25.0604	23.9045	24.5327	24.4191
050432	***	*	30.8030	33.1876	35.2416	33.0686
050433	1.6238	1.1735	23.0807	21.3573	21.1287	21.8785
050434	1.0477	1.1735	26.1622	32.6255	33.7794	31.2611
050435	1.2745	1.1735	28.0305	30.6530	33.0372	30.6068
050438	1.5345	1.1735	27.2662	36.3026	36.2044	33.3758
050441	1.9501	1.5439	42.9765	44.5694	46.6160	44.7589
050444	1.3280	1.2213	30.5504	34.6313	37.6821	34.7268
050447	0.9382	1.1735	25.2573	26.7960	29.0780	27.0889
050448	1.3449	1.1735	27.9759	30.6201	32.7748	30.3937
050454	1.9048	1.4826	43.5311	38.5833	40.2811	40.7579
050455	1.6157	1.1735	22.7235	30.4606	34.5445	29.0773

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050456	1.2382	1.1735	22.5630	21.6261	27.7659	24.0209
050457	1.6411	1.4826	45.5828	47.8947	50.0282	47.8438
050464	1.6927	1.2019	37.3692	38.3058	41.6235	39.0262
050468	1.5316	1.1735	29.5448	31.1111	35.7409	32.2602
050469	1.0345	*	28.9080	30.6502	*	29.7684
050470	1.1011	1.1735	24.6755	27.8678	31.0466	28.1052
050471	1.7531	1.1735	34.5211	35.4768	36.8680	35.6234
050476	1.4502	1.4146	34.6585	38.7856	41.1042	38.1894
050477	***	*	34.6995	37.7668	40.1566	37.8028
050478	0.9888	1.1735	33.3999	40.2558	41.1668	38.4344
050481	1.4426	1.1735	33.7445	36.1394	38.8650	36.2140
050485	1.6524	1.1735	31.4233	36.1488	34.6219	34.0204
050488	1.3381	1.5353	42.9904	42.6854	45.0630	43.6228
050491	***	*	32.1379	34.3598	*	33.1420
050492	1.2500	1.1735	27.1540	28.0826	30.7718	28.6561
050494	1.3595	1.2918	35.9910	38.1177	40.6384	38.1894
050496	1.7137	1.5343	42.2672	48.2468	51.6363	47.5810
050498	1.3353	1.3067	33.0298	37.1667	41.0350	37.0348
050502	1.7120	1.1735	29.5616	28.7046	31.8872	30.0325
050503	1.5059	1.1735	31.6418	34.0994	37.3605	34.4052
050506	1.6121	1.2054	36.0164	37.7420	39.8586	37.9166
050510	1.1736	1.5343	47.5510	52.5376	49.4533	49.9483
050512	1.4090	1.5353	46.9233	50.9264	48.8057	49.0411
050515	1.4085	1.1735	38.9978	38.9542	40.2957	39.4965
050516	1.4990	1.3067	36.2772	39.8161	43.0249	39.7478
050517	1.2487	1.1735	23.9007	20.0213	22.4096	21.9265
050523	1.2609	1.5343	35.5452	40.6535	43.4579	39.9385
050526	1.3236	1.1735	31.3744	28.1997	33.3964	30.8791
050528	1.1384	1.1735	29.6838	31.4941	36.2908	32.6332
050531	1.0427	1.1735	26.9420	27.1974	28.3348	27.4859
050534	1.4830	1.1735	29.8603	33.1666	36.6447	33.1978
050535	***	*	32.3723	34.6143	37.8174	35.0680
050537	1.4153	1.3067	31.3844	34.9931	38.2145	35.0179
050539	***	*	29.8242	*	*	29.8242
050541	1.5793	1.5343	46.1121	52.5908	48.0867	48.9365
050543	0.7499	1.1735	26.1103	29.4443	24.4913	26.5587
050545	0.8097	1.1735	30.5554	31.3080	35.3209	32.3832
050546	0.6608	1.1735	30.2329	33.2245	36.5099	33.2376
050547	0.9370	1.4800	33.2204	34.8401	33.8036	33.9243
050548	0.8110	1.1735	30.3775	39.2234	41.1075	36.6565
050549	1.5409	1.1735	34.9818	35.2792	38.3927	36.2153
050550	***	*	30.2301	30.9612	34.9476	31.9494
050551	1.3354	1.1735	31.6165	34.0467	37.2506	34.3701
050552	1.0600	1.1735	27.1744	33.0711	33.9810	31.2584
050557	1.6021	1.2019	31.8048	33.3654	35.7023	33.6767
050561	1.5394	1.1735	38.8652	38.0196	38.2543	38.3445
050567	1.6001	1.1735	32.9829	35.7063	37.6384	35.4790
050568	1.1557	1.1735	24.4061	25.2337	26.0908	25.2915
050569	1.3188	*	33.0259	31.6785	*	32.3431
050570	1.5431	1.1735	34.0171	34.5161	38.4373	35.7023
050571	***	*	33.6156	34.7627	39.0649	35.8458
050573	1.6281	1.1735	34.1991	34.7279	35.2842	34.7594
050575	1.2413	1.1735	25.2513	25.1457	23.7990	24.6725
050577	***	*	30.8841	32.3744	*	31.6437
050578	1.5073	1.1735	33.8825	35.2390	31.3639	33.5051
050579	***	*	39.4976	42.5081	*	40.8657
050580	1.2333	1.1735	31.6256	31.5806	34.1531	32.4721
050581	1.4916	1.1735	32.1801	34.0136	37.7567	34.6700
050583	1.6463	1.1735	33.3697	34.5747	37.4450	35.0070
050584	1.3197	1.1735	24.8180	30.3434	30.7839	28.6031
050585	***	*	22.7121	22.2521	*	22.4798
050586	1.2833	1.1735	27.4173	26.4782	31.3513	28.3870
050588	1.3520	1.1735	32.8212	32.7556	37.7387	34.4140
050589	1.1529	1.1735	30.9546	34.5100	37.6886	34.3942
050590	1.2947	1.3067	32.2142	38.4971	41.7519	37.3616
050591	***	*	28.8549	30.6106	34.7133	31.3307
050592	***	*	24.4542	27.3606	31.8053	27.4568

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050594	***	*	34.7946	36.5256	42.0788	37.6355
050597	1.2585	1.1735	27.5691	28.8294	31.5625	29.3959
050599	1.8926	1.3067	38.1975	32.7835	34.7187	35.1751
050601	1.5530	1.1735	34.7409	36.0572	39.7717	36.8588
050603	1.4447	1.1735	30.2464	34.0275	35.0279	33.2305
050604	1.3981	1.5439	49.9428	55.0821	49.4446	51.2951
050608	1.2664	1.1735	23.3630	30.4169	31.2909	28.2962
050609	1.2820	1.1735	41.1797	41.7208	39.7397	40.7273
050613	***	*	*	42.8108	42.9930	42.8892
050615	***	*	33.2909	35.9547	39.1299	36.0890
050616	1.5105	1.1735	36.9017	37.7284	37.1200	37.2515
050618	0.9805	1.1735	27.4539	31.3182	33.1472	30.7682
050623	***	*	32.0627	*	*	32.0627
050624	1.2787	1.1735	32.2907	33.9594	35.9346	4.1566
050625	1.7417	1.1735	36.3631	38.6591	41.0439	38.7106
050630	***	*	30.9410	*	*	30.9410
050633	1.2282	1.2054	35.3734	36.8302	38.4916	36.8992
050636	1.2917	1.1735	30.5156	32.5576	33.0718	32.0958
050641	1.2925	1.1735	21.4612	39.6921	32.3586	29.3383
050644	0.9879	1.1735	27.6547	28.8237	30.7981	29.0878
050660	1.7387	*	*	*	*	*
050662	0.8701	1.5439	32.6362	33.2446	38.3017	34.3633
050663	1.2787	1.1735	25.7747	27.7334	17.7035	22.5204
050667	0.8474	1.4267	26.3937	24.2771	25.9161	25.5327
050668	1.2080	1.4826	31.8065	56.6555	51.6049	44.4447
050674	1.1462	1.3067	42.6866	48.0893	47.0720	46.1691
050677	1.4838	1.1735	38.7984	38.5770	39.2161	38.8994
050678	1.3184	1.1735	30.7219	32.4473	33.7633	32.3842
050680	1.2329	1.5343	38.3946	38.2871	37.9856	38.2008
050682	0.8469	1.1735	21.7792	17.9077	22.2193	20.5433
050684	1.1133	1.1735	26.4234	27.5256	28.8378	27.6192
050686	1.2184	1.1735	40.9486	41.0188	39.7757	40.4752
050688	1.2024	1.5439	41.9325	44.1510	49.4062	45.3230
050689	1.5246	1.5343	42.2018	45.0951	48.8533	45.3625
050690	1.1505	1.4800	47.2769	50.9094	49.0226	49.1863
050693	1.3838	1.1735	35.0621	34.5797	39.6838	36.3980
050694	1.0491	1.1735	28.9544	30.7858	32.1065	30.6719
050695	***	*	35.6548	39.6004	49.0340	41.9291
050696	2.2803	1.1735	35.9220	37.3837	39.8963	37.7297
050697	1.1042	1.2809	25.1984	16.6605	22.1441	20.8111
050699	***	*	26.8211	28.9083	21.5725	25.9115
050701	1.3268	1.1735	29.6253	31.9529	34.9876	32.5132
050704	1.0048	1.1735	25.3488	29.7740	31.6097	29.0145
050707	1.2478	1.4946	34.0550	35.7311	43.5555	37.4838
050708	1.5880	1.1735	22.5034	30.5860	31.8442	27.9326
050709	1.4145	1.1735	25.6119	26.8549	24.5621	25.5804
050710	1.4535	1.1735	39.9858	45.8022	44.2482	43.5809
050713	***	*	20.2803	21.1273	21.4825	20.8079
050714	1.3819	1.5719	33.6676	31.9527	34.1542	33.3149
050717	1.4472	1.1735	38.0796	39.3227	38.8773	38.7316
050718	***	*	21.4996	25.5140	31.9622	26.0529
050720	0.9087	1.1735	30.0811	29.4726	30.3595	29.9462
050722	0.9937	1.1735	*	31.4867	33.7991	32.6970
050723	1.3661	1.1735	35.0119	38.5446	38.7140	37.6299
050724	1.9875	1.1735	34.4267	31.6910	35.2344	33.8380
050725	0.8900	1.1735	21.7816	24.3100	30.0580	25.0169
050726	1.4849	1.2019	27.8433	30.6479	28.6361	29.1183
050727	1.2033	1.1735	24.3026	33.9118	32.7783	30.6217
050728	***	*	36.0820	39.3581	41.8263	38.7034
050729	***	*	34.2580	36.5432	38.1882	36.3976
050730	***	*	51.5425	37.0629	39.2046	42.2691
050732	2.3947	1.1735	*	*	33.6831	33.6831
050733	1.6531	1.2809	*	*	40.1517	40.1517
050734	***	*	*	*	31.2883	31.2883
050735	1.3414	1.1735	*	*	*	*
050736	1.2215	1.1735	*	*	*	*
050737	1.4935	1.1735	*	*	*	*

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
050738	1.3812	1.1735	*	*	*	*
050739	1.6758	1.1735	*	*	*	*
050740	1.3840	1.1735	*	*	*	*
050741	1.4977	1.1735	*	*	*	*
050742	1.3973	1.1735	*	*	*	*
050744	1.9639	1.1735	*	*	*	*
050745	1.3614	1.1735	*	*	*	*
050746	1.7868	1.1735	*	*	*	*
050747	1.4029	1.1735	*	*	*	*
050748	1.0605	1.1941	*	*	*	*
050749	1.2549	1.1735	*	*	*	*
050750	1.4161	1.2019	*	*	*	*
050751	3.3418	1.1735	*	*	*	*
050752	1.4159	1.1735	*	*	*	*
050753	1.7076	1.1735	*	*	*	*
050754	1.2457	1.4946	*	*	*	*
050755	1.4141	1.1735	*	*	*	*
050756	1.9522	1.1735	*	*	*	*
050758	3.6091	1.1735	*	*	*	*
060001	1.5654	1.0454	26.8470	29.6191	31.0018	29.1634
060003	1.3970	1.0454	24.2224	29.4809	31.3616	28.3333
060004	1.2505	1.0454	29.9649	32.4609	32.0095	31.4837
060006	1.3300	0.9447	24.5704	25.2139	27.2057	25.6628
060008	1.2032	0.9447	23.3859	23.0947	26.5175	24.3270
060009	1.4945	1.0454	28.7645	31.5210	32.4208	30.9678
060010	1.6912	0.9732	28.9850	27.1916	29.5304	28.5344
060011	1.6330	1.0454	27.2833	35.1573	32.1001	31.3632
060012	1.4825	0.9466	26.2469	27.3885	28.7724	27.4500
060013	1.5046	0.9447	24.5994	26.8675	27.9145	26.4238
060014	1.8610	1.0454	31.2588	31.0542	31.9389	31.4097
060015	1.7851	1.0454	30.4533	32.5285	32.2927	31.6808
060016	1.2417	0.9447	25.6527	26.5427	27.1430	26.4586
060018	1.2836	0.9447	25.7628	24.1086	25.3897	25.0879
060020	1.6165	0.9447	22.6748	24.5992	25.9147	24.3734
060022	1.6516	0.9466	26.5238	28.2944	29.3379	28.0339
060023	1.6699	1.0454	27.7644	29.5760	31.1556	29.4769
060024	1.8432	1.0454	29.0130	30.0279	31.5411	30.2384
060027	1.6691	1.0454	28.0909	29.6121	30.9212	29.6273
060028	1.5125	1.0454	30.0448	31.6900	32.1656	31.3047
060030	1.4488	0.9732	26.6251	27.8642	29.9513	28.1546
060031	1.5591	0.9466	26.3650	27.8345	29.3907	27.8462
060032	1.4850	1.0454	30.4247	31.0686	32.7383	31.4187
060034	1.6640	1.0454	29.8445	30.9359	32.1252	30.9377
060036	1.1018	0.9447	20.7131	20.3226	22.8256	21.2502
060041	0.8785	0.9447	23.4978	24.6142	25.9710	24.7303
060043	1.1879	0.9447	18.7897	18.2143	21.9955	19.6596
060044	1.2127	0.9447	25.0360	26.5611	24.8352	25.4581
060049	1.2787	0.9579	29.0598	29.3724	30.2192	29.5665
060054	1.4508	1.0135	22.3490	24.3389	25.0980	23.9188
060064	1.7308	1.0454	31.3105	32.3681	33.2428	32.1357
060065	1.3983	1.0454	31.1987	32.4735	33.8538	32.5473
060071	1.1697	0.9447	25.7248	27.6657	28.1762	27.2779
060075	1.3389	1.0135	32.7563	32.2545	37.6023	34.1968
060076	1.2662	0.9447	26.8236	26.5631	30.7808	28.0383
060096	1.5564	1.0454	30.0602	32.1310	37.8243	33.2697
060100	1.6916	1.0454	32.1537	32.6104	33.2145	32.6673
060103	1.3607	1.0454	30.3003	31.6314	32.9690	31.6638
060104	1.3818	1.0454	32.0889	32.4232	35.4409	33.2464
060107	1.4409	1.0454	26.1883	26.8388	28.0660	27.0405
060112	1.6549	1.0454	*	34.9272	34.7116	34.8116
060113	1.4257	1.0454	*	*	32.6073	32.6073
060114	1.3815	1.0454	*	*	34.8536	34.8536
060115	0.8094	0.9447	*	*	*	*
060116	1.4020	1.0454	*	*	*	*
060117	1.5297	0.9447	*	*	*	*
060118	1.2063	0.9447	*	*	*	*
070001	1.6191	1.2625	34.0302	35.8958	37.0403	35.6798

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
070002	1.7625	1.2432	31.1530	33.4398	34.7636	33.1056
070003	1.1124	1.2432	32.4197	34.1352	35.6320	34.0741
070004	1.1690	1.2432	29.2544	29.4448	29.9557	29.5654
070005	1.3939	1.2625	32.1668	33.7813	34.9404	33.6347
070006	1.3734	1.3001	36.8469	37.9148	39.3935	38.0396
070007	1.3262	1.2432	31.7125	35.9617	36.2914	34.6709
070008	1.1977	1.2432	26.4806	28.5506	30.7305	28.5900
070009	1.1826	1.2432	30.2706	32.9299	35.5670	32.9116
070010	1.7655	1.3001	32.5798	35.3730	36.7227	34.9766
070011	1.4443	1.2432	29.9105	31.8987	31.6843	31.1785
070012	1.2719	1.2432	44.1424	29.4216	31.9345	33.9309
070015	1.3965	1.3001	33.4595	35.3385	37.3454	35.4457
070016	1.5006	1.2625	31.0904	31.4930	33.2391	31.9056
070017	1.3588	1.2625	31.7223	34.0490	35.6456	33.8516
070018	1.4240	1.3001	37.6081	39.7515	41.8460	39.8228
070019	1.3281	1.2625	31.8148	34.5125	33.7246	33.3670
070020	1.3289	1.2432	31.0935	33.6453	32.9714	32.5833
070021	1.1631	1.2432	33.2357	36.9241	38.5623	36.2063
070022	1.6736	1.2625	35.4120	39.0462	40.2283	38.2889
070024	1.3628	1.2432	32.0430	35.2323	34.7419	34.0490
070025	1.8086	1.2432	30.9938	32.4085	34.5887	32.6669
070027	1.4467	1.2432	31.8018	29.8513	30.4433	30.7112
070028	1.5979	1.3001	31.5035	35.1966	38.0855	34.9184
070029	1.3082	1.2432	27.7213	30.9299	31.0662	29.9131
070031	1.2692	1.2625	28.9189	30.1915	30.4054	29.8553
070033	1.4708	1.3001	37.1929	40.1594	41.7955	39.7822
070034	1.3978	1.3001	36.3899	38.3965	40.1685	38.3201
070035	1.2876	1.2432	27.5585	30.7440	32.2766	30.1626
070036	1.6060	1.2432	36.1610	38.3413	42.3391	39.0110
070038	1.3936	1.2625	25.7516	25.7914	35.8053	27.8684
070039	0.9371	1.2625	31.2269	36.1369	34.7219	33.8193
070040	0.9999	1.2432	*	*	*	*
080001	1.6247	1.0765	30.0242	32.0105	33.5310	31.8696
080002	***	*	27.7932	29.6800	31.3391	29.5960
080003	1.5716	1.0765	29.2266	30.7697	34.3048	31.5058
080004	1.5142	1.0666	27.4921	30.1094	32.2443	30.0060
080006	1.3077	1.0104	25.6160	27.4749	28.8862	27.4041
080007	1.3915	1.0498	27.0074	30.1100	31.1645	29.4885
090001	1.7715	1.0675	35.0413	36.6577	38.3043	36.6494
090003	1.2497	1.0675	29.2660	31.0419	32.1960	30.9276
090004	1.9608	1.0675	32.2021	35.6964	37.3798	35.0400
090005	1.3882	1.0675	30.7728	33.0178	33.7448	32.5073
090006	1.4079	1.0675	29.5590	29.4912	31.3562	30.1264
090008	1.3376	1.0675	29.1059	32.0745	33.7471	31.3884
090011	2.0575	1.1016	34.0693	36.7579	38.0654	36.2932
100001	1.5331	0.9089	24.4060	26.4631	27.2809	26.0728
100002	1.4368	1.0247	25.3389	27.2350	28.7068	27.1087
100004	0.9210	*	16.5974	*	*	16.5974
100006	1.6452	0.9284	26.3789	29.1505	28.3673	27.9603
100007	1.6373	0.9284	26.5378	28.5702	29.0472	28.0969
100008	1.7213	1.0008	27.4314	29.1705	30.3392	29.0493
100009	1.4490	1.0008	25.9381	27.4424	27.8618	27.0421
100012	1.6154	0.9485	26.3788	28.4600	29.8353	28.2813
100014	1.4083	0.9170	24.5862	25.1524	27.4019	25.7601
100015	1.3028	0.9170	24.6038	26.0916	27.2483	25.9359
100017	1.6275	0.9170	26.1580	27.9654	28.2402	27.5020
100018	1.6508	0.9618	28.1481	30.2423	30.6545	29.7108
100019	1.6608	0.9380	27.6179	28.6630	30.3008	28.8670
100020	***	*	23.9414	27.1257	*	25.5458
100022	1.7420	1.0247	29.9345	32.8088	36.7912	33.2233
100023	1.5160	0.9170	23.0074	25.2652	25.4270	24.5739
100024	1.1780	1.0008	30.2395	29.1894	29.5423	29.6470
100025	1.6816	0.8733	22.1580	23.3843	26.7013	24.0625
100026	1.5788	0.8733	21.4703	23.4730	26.0147	23.7184
100027	***	*	16.1223	18.9432	*	17.4007
100028	1.3580	0.9380	26.8661	27.7497	27.5664	27.4076
100029	1.2822	1.0008	27.5844	28.8842	30.5382	29.0530

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
100030	1.2839	0.9284	24.0943	24.6314	25.3513	24.7170
100032	1.8022	0.9170	25.2450	26.8162	26.9275	26.3598
100034	1.8268	1.0008	25.9415	28.1280	27.2915	27.0674
100035	1.5677	0.9770	26.9407	29.4803	30.2382	28.8750
100038	1.8213	1.0247	29.8583	31.3403	31.6657	30.9770
100039	1.5152	1.0247	28.4627	28.2531	29.3699	28.6922
100040	1.7005	0.9089	23.6443	26.2429	27.2835	25.7456
100043	1.3766	0.9170	25.2273	26.4221	27.0054	26.2287
100044	1.4158	1.0035	28.3596	30.3659	33.1141	30.6154
100045	1.3353	0.9170	26.9641	29.7375	26.5413	27.7587
100046	1.3025	0.9170	26.3673	26.9469	26.7702	26.6963
100047	1.8643	0.9770	25.0404	26.7674	29.9729	27.2658
100048	0.9265	0.8733	18.8770	19.3226	20.2657	19.5008
100049	1.1601	0.8834	22.9809	24.0385	24.5571	23.8789
100050	1.1287	1.0008	19.8713	21.5101	25.3354	22.2763
100051	1.3531	0.9284	23.1940	28.0946	28.6225	26.7140
100052	1.4482	0.8834	22.3920	23.6796	23.4036	23.1677
100053	1.2917	1.0008	27.3224	28.5118	31.7415	29.1121
100054	1.3029	0.8733	28.0512	28.7646	30.5515	29.0987
100055	1.4149	0.9170	23.5332	25.6243	27.3826	25.3801
100057	1.4545	0.9284	25.3897	24.8010	26.3134	25.5307
100061	1.5462	1.0008	29.2565	31.4413	30.4528	30.3973
100062	1.6808	0.8733	25.2340	25.1280	25.9597	25.4599
100063	1.3031	0.9170	24.7026	25.5097	26.4139	25.5745
100067	1.4065	0.9170	26.1213	26.8628	27.4762	26.8565
100068	1.6610	0.9170	25.9202	26.1341	27.6576	26.5514
100069	1.4494	0.9170	24.7442	25.7450	27.2108	25.8887
100070	1.7132	0.9770	24.8883	26.8461	29.2005	26.9667
100071	1.2744	0.9170	24.9682	26.3768	25.3667	25.5850
100072	1.3878	0.9170	26.0459	25.7962	27.1889	26.3540
100073	1.7724	1.0247	30.3358	30.5845	29.4165	30.1139
100075	1.4514	0.9170	25.1691	25.7612	27.6534	26.2376
100076	1.1671	1.0008	21.9483	23.4551	24.0412	23.1092
100077	1.3562	0.9770	26.0347	30.6925	30.7564	29.1495
100079	1.5014	*	*	*	*	*
100080	1.7114	1.0247	27.0126	28.2188	29.5346	28.2767
100081	0.9416	0.8733	15.6661	16.9756	19.5711	17.4305
100084	1.7873	0.9284	26.3393	27.4947	32.7503	28.7737
100086	1.2965	1.0247	28.2641	28.5971	29.9072	28.9234
100087	1.8981	0.9770	27.1531	29.5823	30.5938	29.1299
100088	1.5782	0.9089	25.9182	26.7574	28.2825	27.0232
100090	1.4904	0.9089	24.2422	26.5703	27.6175	26.1889
100092	1.5158	0.9380	28.4789	27.8341	26.6315	27.6313
100093	1.7127	0.8733	21.3524	21.6438	22.5555	21.8792
100099	1.0873	0.8834	21.3035	25.8454	26.2395	24.4525
100102	1.0996	0.8858	23.8596	26.1015	27.8551	25.9619
100105	1.4480	0.9851	26.8091	29.9745	30.9915	29.2009
100106	1.0560	0.8733	24.0389	24.7650	24.8098	24.5435
100107	1.2347	0.9485	26.1337	27.4760	30.5764	28.1079
100108	0.8046	0.8733	22.0750	21.3540	22.6270	21.9880
100109	1.2508	0.9170	24.9951	25.5669	26.2446	25.6303
100110	1.6550	0.9284	29.1494	29.4788	29.5985	29.4188
100113	2.0264	0.9301	26.3806	28.0440	29.2429	27.9271
100114	1.3817	1.0008	29.2195	29.2862	30.2544	29.5959
100117	1.2145	0.9089	26.4536	27.7198	28.4928	27.6036
100118	1.3596	0.9089	28.0569	27.6438	27.0981	27.5188
100121	1.1043	0.8834	24.8579	26.2990	27.9353	26.4264
100122	1.2268	0.8733	23.4751	24.6285	26.7175	24.9538
100124	1.1542	0.8733	22.7023	24.0333	24.8880	23.9087
100125	1.1875	1.0008	26.7452	29.7750	31.7749	29.5544
100126	1.3314	0.9170	24.4515	29.6247	28.3213	27.4142
100127	1.5666	0.9170	24.4485	26.0923	27.4632	26.0315
100128	2.2084	0.9170	29.4979	29.2566	30.0324	29.6033
100130	1.1786	1.0247	24.2046	26.0268	28.3651	26.1504
100131	1.4165	1.0008	29.2462	27.8164	29.7647	28.9653
100132	1.2457	0.9170	24.3293	26.0526	27.8180	26.1461
100134	0.8565	0.8733	20.9243	20.7367	21.6544	21.1186

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
100135	1.6113	0.9027	24.0024	26.7030	29.1856	26.5350
100137	1.2884	0.8834	25.1974	24.8519	26.8391	25.6704
100139	0.8316	0.9301	17.5489	18.2197	21.1310	18.9563
100140	1.0862	0.9089	26.4720	26.1352	27.8352	26.8143
100142	1.2095	0.8733	22.9577	24.8853	25.6999	24.5446
100150	1.2689	1.0008	26.1990	26.8492	27.7740	26.9185
100151	1.7476	0.9089	28.1322	30.6447	29.7267	29.4931
100154	1.5849	1.0008	27.6127	28.2506	29.7332	28.5816
100156	1.1335	0.9301	26.7092	27.5706	28.3927	27.6111
100157	1.5749	0.9170	27.3851	29.7455	30.3086	29.2306
100160	1.1427	0.8733	26.9851	30.7454	30.6902	29.5445
100161	1.5163	0.9284	28.8077	28.0545	29.5673	28.8155
100166	1.4671	0.9770	27.9618	28.8685	30.1811	28.9924
100167	1.3044	1.0247	30.3694	30.2166	31.7813	30.8188
100168	1.4077	1.0247	27.1292	27.6739	27.0938	27.2997
100172	1.2812	1.0008	18.2735	20.7857	22.2183	20.2634
100173	1.6816	0.9170	24.8721	26.5436	28.6402	26.6632
100175	0.9376	0.8733	23.5455	23.9665	25.0913	24.2153
100176	1.9322	1.0247	31.2694	30.7087	33.3181	31.7301
100177	1.3034	0.9380	26.6781	28.0089	29.6284	28.1072
100179	1.8025	0.9089	29.5619	29.1111	29.2795	29.3153
100180	1.3656	0.9170	27.1804	29.9238	31.0099	29.4514
100181	1.0916	1.0008	21.8540	24.3708	23.9656	23.5712
100183	1.2331	1.0008	27.4951	29.0270	30.5042	28.9860
100187	1.2405	1.0008	27.3653	27.8144	30.7705	28.5922
100189	1.3212	1.0247	28.4136	28.8320	29.9376	29.0848
100191	1.3251	0.9170	26.6341	28.3710	29.4533	28.2035
100200	1.3568	1.0247	29.8963	28.7694	29.6400	29.4296
100204	1.5564	0.9301	25.7537	27.4763	27.2819	26.8493
100206	1.3044	0.9170	25.2196	27.0295	27.7551	26.6843
100209	1.4511	1.0008	26.6245	26.8473	28.5336	27.3567
100210	1.6418	1.0247	28.9486	29.8515	32.0830	30.2959
100211	1.1980	0.9170	24.7095	24.7533	26.2859	25.2466
100212	1.5281	0.8733	24.7566	26.1846	27.7960	26.2590
100213	1.5667	0.9770	27.1936	27.9283	29.5218	28.1998
100217	1.2128	0.9851	25.2907	27.3989	27.7683	26.8879
100220	1.7272	0.9485	26.0905	28.3868	29.3601	28.0186
100223	1.5830	0.8733	24.7015	25.0332	26.1115	25.3049
100224	1.2841	1.0247	24.8077	26.6446	28.0455	26.4947
100225	1.2966	1.0247	28.4316	28.5259	30.8782	29.2134
100226	1.2741	0.9089	29.3317	28.8165	28.8791	28.9967
100228	1.3720	1.0247	29.8952	28.1396	30.1635	29.3741
100230	1.3872	1.0247	28.1703	29.8493	31.9448	29.9638
100231	1.7057	0.8733	25.5175	25.7037	26.6773	25.9676
100232	1.2525	0.9301	24.9322	28.5537	28.3892	27.3025
100234	1.2967	1.0247	26.3601	27.4456	28.8835	27.5798
100236	1.4833	0.9770	26.6585	28.9955	28.3017	27.9879
100237	1.9061	1.0247	31.3543	31.7848	33.1536	32.0709
100238	1.6524	0.9170	28.4302	30.1094	31.4198	30.0500
100239	1.2450	0.9770	27.7592	28.6893	29.0650	28.5164
100240	1.0067	1.0008	25.3265	27.3523	29.7000	27.5097
100242	1.4462	0.8733	24.0990	25.6083	26.1988	25.3024
100243	1.5930	0.9170	26.1131	27.4534	28.3894	27.3449
100244	1.4214	0.9485	25.2584	26.6876	28.2881	26.8124
100246	1.5767	1.0035	28.9894	29.3310	30.1061	29.4946
100248	1.5245	0.9170	27.7798	28.8082	30.2133	28.9513
100249	1.2736	0.9170	23.2084	24.9876	26.4676	24.9134
100252	1.1775	0.9851	25.8540	27.8256	27.1639	26.9484
100253	1.3700	1.0247	25.7121	27.4927	28.7770	27.3747
100254	1.5053	0.9027	25.7338	26.1406	27.4900	26.4898
100255	1.2926	0.9170	24.4808	26.5571	27.3866	26.1585
100256	1.8509	0.9170	28.8856	30.3081	30.2093	29.8134
100258	1.5137	1.0247	31.2482	31.2203	33.8630	32.1172
100259	1.2826	0.9170	26.0175	27.4809	29.0612	27.5355
100260	1.3247	1.0035	27.5188	26.7129	28.2301	27.4901
100264	1.3409	0.9170	25.5489	26.8216	28.0370	26.7874
100265	1.2691	0.9170	24.1454	25.7432	26.3326	25.4676

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
100266	1.4175	0.8733	23.2340	23.0208	24.2517	23.5318
100267	1.3146	0.9770	27.3769	28.7259	28.9674	28.3539
100268	1.1557	1.0247	29.2898	29.0668	30.5750	29.6378
100269	1.3557	1.0247	26.7450	26.6047	27.8407	27.0869
100271	2.3567	*	*	*	*	*
100275	1.2876	1.0247	26.0361	26.8943	28.7797	27.3049
100276	1.2417	1.0247	30.0576	29.7606	30.5720	30.1327
100277	1.4051	1.0008	16.5427	20.4791	24.1122	20.4492
100279	1.3366	0.9485	26.8606	28.6383	29.2257	28.2861
100281	1.3703	1.0247	28.6660	29.6698	30.9131	29.8017
100284	1.0113	1.0008	23.8170	22.3134	25.2637	23.6827
100285	1.2689	1.0247	*	*	41.9481	41.9481
100286	1.6191	0.9618	29.4284	28.3645	25.8085	27.6610
100287	1.3868	1.0247	28.3427	28.1051	29.7536	28.7018
100288	1.5156	1.0247	33.8141	28.7902	31.0506	31.0802
100289	1.6865	1.0247	29.2915	29.6376	31.9011	30.3063
100290	1.1899	0.9315	23.5080	27.1011	28.7111	26.4179
100291	1.2458	0.9380	*	28.4722	28.1515	28.2974
100292	1.3544	0.8733	*	26.7063	27.7644	27.2418
100293	***	*	*	32.7963	*	32.7963
100294	***	*	*	30.7557	*	30.7557
100295	***	*	*	26.1983	*	26.1983
100296	1.3408	1.0008	*	*	29.3870	29.3870
100297	***	*	*	*	32.1536	32.1536
100298	0.8217	0.9027	*	*	19.0297	19.0297
100299	1.2623	0.9770	*	*	34.3697	34.3697
100300	1.5491	0.9770	*	*	*	*
100301	2.4311	0.8733	*	*	*	*
100302	1.1232	0.9284	*	*	*	*
110001	1.3413	0.8582	25.3102	26.4338	26.5640	26.1063
110002	1.3627	0.9812	25.3897	26.4715	26.2228	26.0377
110003	1.2925	0.7861	21.4002	22.7066	24.2097	22.7660
110004	1.3576	0.8962	23.9911	24.9978	25.1846	24.7384
110005	1.2344	0.9812	22.8999	28.1209	27.2826	26.2185
110006	1.5283	0.9996	28.6090	28.3839	*	28.4953
110007	1.5851	0.8666	23.8729	26.6396	26.3133	25.6316
110008	1.3081	0.9812	27.1711	29.2947	30.9757	29.1807
110010	2.2316	0.9812	29.7142	31.7185	33.2396	31.5599
110011	1.2246	0.9812	26.0899	28.0598	28.5892	27.5869
110015	1.0599	0.9812	26.6610	28.1274	28.8796	27.9810
110016	1.2630	0.8587	21.7610	22.7263	24.3563	22.9378
110018	1.1608	0.9812	28.2431	26.8016	30.1849	28.3512
110020	1.3212	0.9812	26.8501	28.3822	27.5559	27.6146
110023	1.2983	0.9812	27.3029	29.8061	29.3282	28.8606
110024	1.4918	0.8890	25.7205	27.0225	27.3357	26.6955
110025	1.4750	0.9764	26.1311	31.0703	30.2845	29.1378
110026	1.1088	0.7861	21.2827	21.8018	22.8820	21.9825
110027	1.0967	0.7861	20.2175	22.6058	25.5291	22.6326
110028	1.7895	0.9598	28.1619	30.4641	31.4568	30.0489
110029	1.8257	0.9812	24.8893	27.3618	29.2134	27.2823
110030	1.3179	0.9812	26.4770	29.6841	29.9531	28.7936
110031	1.2864	0.9812	24.7874	27.1989	29.5533	27.2214
110032	1.1823	0.7861	21.9407	23.2586	25.1896	23.4280
110033	1.4755	0.9812	28.3210	30.3415	32.4178	30.4701
110034	1.7240	0.9598	26.9986	27.2338	28.7915	27.6795
110035	1.7468	0.9812	27.4583	28.9408	30.1852	28.9129
110036	1.8443	0.8890	26.8789	26.6664	27.2280	26.9397
110038	1.5056	0.8454	21.2138	22.2720	22.9685	22.1533
110039	1.3676	0.9598	24.7248	26.3503	26.2485	25.8081
110040	1.0900	0.9812	19.7509	20.9487	23.9526	21.5987
110041	1.2685	0.9812	23.4073	24.8864	26.1948	24.8276
110042	1.0546	0.9812	28.6873	34.9954	33.4391	32.3610
110043	1.7588	0.8890	26.6323	27.8477	28.8551	27.7751
110044	1.1550	0.7861	20.9654	23.3039	24.3772	22.8675
110045	1.0604	0.9812	24.9821	24.4275	27.7619	25.7235
110046	1.1564	0.9812	23.8292	26.7464	*	25.2689
110050	1.0878	0.8582	26.1319	27.5985	27.0651	26.9506

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
110051	1.1325	0.7861	19.4276	20.1756	21.4898	20.4314
110054	1.3879	0.9812	25.7085	28.9254	29.4691	28.1296
110059	1.1614	0.7861	20.5565	23.2137	24.7838	22.7781
110064	1.5600	0.9019	24.2739	24.1219	26.9363	25.1484
110069	1.3210	0.9567	24.1669	26.2085	29.9098	26.8651
110071	1.1303	0.7861	18.0224	21.3963	21.2041	20.2222
110073	1.0732	0.7861	18.6336	18.5753	23.3571	20.1191
110074	1.5633	0.9996	27.1207	27.9190	31.0062	28.6224
110075	1.2368	0.8890	22.0935	23.7585	24.8244	23.5723
110076	1.4789	0.9812	26.3506	28.7871	29.4344	28.2028
110078	2.0203	0.9812	29.5779	29.9625	30.5196	30.0318
110079	1.4371	0.9812	23.1024	26.8412	27.3274	25.6718
110080	***	*	22.3213	18.4714	*	20.3904
110082	1.9484	0.9812	29.8366	30.8320	30.1072	30.2642
110083	1.9004	0.9812	27.8245	30.4287	34.0610	30.7539
110086	1.2918	0.7861	21.1508	21.6898	22.9959	21.9535
110087	1.4785	0.9812	28.0471	28.1633	31.0403	29.1240
110089	1.1256	0.7861	21.9509	23.9026	24.3327	23.4318
110091	1.2985	0.9812	26.5523	29.5337	27.0994	27.7306
110092	1.0708	0.7861	18.5527	20.8911	21.4168	20.2706
110095	1.4671	0.8666	23.4846	26.3075	28.0526	25.9759
110100	0.9760	0.8651	16.5600	16.2575	20.8201	17.8670
110101	1.0211	0.7928	16.4269	19.4257	21.0983	18.9322
110104	1.0922	0.7861	18.7951	20.3777	21.8966	20.4323
110105	1.3384	0.7861	21.1077	23.1405	23.4010	22.5530
110107	1.9638	0.9748	26.2526	28.9352	30.1027	28.5426
110109	1.0216	0.7861	21.4279	23.0376	21.6023	22.0301
110111	1.1565	0.9598	29.2189	25.1270	25.7084	26.4563
110112	0.9102	0.7861	24.2464	22.7672	26.4089	24.5417
110113	0.9646	0.9598	19.1752	21.3417	22.0793	20.8903
110115	1.6861	0.9812	32.0198	31.5074	32.7927	32.1145
110121	1.0425	0.8454	21.6637	26.2336	23.4571	23.8303
110122	1.5379	0.8454	23.7589	25.1934	25.4439	24.7899
110124	1.0500	0.7861	22.7058	22.9212	22.9571	22.8637
110125	1.2981	0.9567	22.4238	23.7834	24.7347	23.6390
110128	1.2619	0.8890	24.4596	25.7839	25.4190	25.2198
110129	1.5740	0.9019	23.3631	25.9625	30.0444	26.3986
110130	0.9401	0.7861	18.7549	19.1284	20.4349	19.4669
110132	0.9900	0.7861	19.2307	20.2502	21.2642	20.2556
110135	1.2746	0.7861	20.4412	22.5346	24.0945	22.4857
110136	***	*	15.8573	18.8212	*	17.2827
110142	0.9496	0.8046	18.1980	21.3935	21.6286	20.4908
110143	1.4032	0.9812	27.7055	28.6583	29.9139	28.7963
110146	1.0451	0.9089	23.9067	27.0987	29.0193	26.6351
110149	***	*	27.1477	28.4040	*	27.8380
110150	1.3058	0.9812	22.6624	25.3742	26.9884	24.9555
110153	1.1347	0.9567	24.5368	25.7467	29.3305	26.5481
110161	1.5077	0.9812	29.3201	30.4885	31.5001	30.4389
110163	1.4442	0.8666	26.0764	28.2169	27.7679	27.3543
110164	1.6466	0.9748	27.0600	28.8946	30.0145	28.6658
110165	1.3804	0.9812	26.8378	27.0977	28.7902	27.5702
110166	***	*	26.8070	*	*	26.8070
110168	1.8202	0.9812	27.0022	28.5700	29.7774	28.4702
110172	1.3257	0.9812	29.1703	31.1234	31.3999	30.6003
110177	1.7868	0.9598	26.7504	28.8356	29.7079	28.4491
110179	***	*	26.0759	*	*	26.0759
110183	1.2715	0.9812	29.6132	28.6208	28.3505	28.8254
110184	1.2398	0.9812	26.5240	28.3545	29.4071	28.1771
110186	1.3729	0.9019	25.0298	27.4925	28.2880	26.9617
110187	1.2163	0.9812	24.2933	25.2139	26.9638	25.5788
110189	1.1273	0.9812	26.7654	26.1418	26.2799	26.3816
110190	1.0370	0.8102	14.2518	23.3204	24.5224	20.0525
110191	1.3276	0.9812	26.8277	27.7760	30.9481	28.4955
110192	1.3990	0.9812	26.7852	28.8267	30.0843	28.6181
110193	***	*	27.3341	27.9161	*	27.6234
110194	0.9359	0.7861	18.4776	19.1920	21.0826	19.6210
110198	1.3957	0.9812	31.7748	31.0557	32.8171	31.8629

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
110200	1.9226	0.9019	22.3249	24.9236	27.2974	24.7904
110201	1.4598	0.9748	28.2232	31.0841	32.0967	30.4769
110203	0.9675	0.9812	26.8768	29.7888	32.3441	29.6046
110205	1.1514	0.8368	19.7408	22.0207	23.9738	21.9564
110209	0.5324	0.7861	19.0450	21.1534	21.2428	20.5456
110212	1.2000	0.8204	40.5120	*	*	40.5120
110214	***	*	*	37.1450	*	37.1450
110215	1.2911	0.9812	25.7886	27.5566	29.5238	27.7250
110219	1.4241	0.9812	27.0362	28.8814	32.2603	29.4317
110220	***	*	*	37.5741	*	37.5741
110221	***	*	*	28.0500	*	28.0500
110222	***	*	*	35.6189	*	35.6189
110223	***	*	*	*	25.3071	25.3071
110224	***	*	*	*	33.6464	33.6464
110225	1.1627	0.9812	*	*	29.5373	29.5373
110226	1.1705	0.9812	*	*	*	*
110228	0.6858	0.9812	*	*	*	*
120001	1.7954	1.1305	34.7715	34.1385	39.6348	36.0753
120002	1.2128	1.0740	29.9913	32.3784	34.1709	32.1936
120004	1.3302	1.1305	28.6527	30.0668	31.3555	30.0081
120005	1.3171	1.0740	29.3405	31.1985	33.6942	31.4363
120006	1.2693	1.1305	31.2285	31.6785	34.2231	32.3972
120007	1.7199	1.1305	30.4247	30.2473	30.8773	30.5122
120010	1.8852	1.1305	30.1659	29.5714	30.8526	30.1903
120011	1.5612	1.1305	34.1643	37.1792	39.1941	36.8951
120014	1.2810	1.0740	28.6416	30.3463	30.9839	30.0257
120016	***	*	19.6039	*	*	19.6039
120019	1.1328	1.0740	30.3809	30.4257	33.0114	31.2831
120022	1.9275	1.1305	26.6100	29.9527	32.5326	29.5914
120025	***	*	30.2367	*	*	30.2367
120026	1.4060	1.1305	30.3293	32.4566	34.2244	32.4725
120027	1.3547	1.1305	28.6717	28.7905	29.5825	29.0488
120028	1.3018	1.1305	30.3794	32.4847	34.0451	32.3420
120029	***	*	*	*	44.6382	44.6382
130002	1.4431	0.8706	23.6078	24.7871	24.7266	24.4032
130003	1.3970	0.9614	27.6345	28.6158	28.6136	28.2894
130005	***	*	25.7523	*	*	25.7523
130006	1.7752	0.9496	25.3221	27.2158	28.0048	26.8675
130007	1.8212	0.9496	24.9562	28.7246	30.4958	27.9567
130013	1.3847	0.9496	27.9209	30.9609	36.1570	31.7470
130014	1.2226	0.9496	24.3885	27.2543	27.5936	26.3567
130018	1.7059	0.9272	26.4125	27.3439	28.4041	27.3783
130021	***	*	16.1658	*	*	16.1658
130024	1.1822	0.8493	23.3347	23.6212	24.8035	23.9293
130025	1.2426	0.7818	20.1452	21.1998	22.7962	21.4285
130028	1.4835	0.9186	26.3443	27.2195	28.4934	27.4962
130049	1.6067	1.0226	26.9749	27.3597	29.0185	27.8229
130062	***	*	20.6642	25.6467	29.1925	24.9270
130063	1.3933	0.9496	22.5904	26.0955	27.7607	25.3662
130065	1.9742	0.9272	*	21.9792	30.4547	26.6750
130066	2.0724	0.9674	*	*	28.9883	28.9883
130067	0.5728	0.9272	*	*	21.3867	21.3867
130068	2.6786	0.9674	*	*	*	*
140001	1.1034	0.8714	22.3170	22.3001	22.2003	22.2726
140002	1.3394	0.8982	24.6954	27.0165	27.4779	26.4101
140007	1.3523	1.0588	28.3482	30.7378	31.4024	30.1866
140008	1.4485	1.0588	28.5297	29.1767	31.8008	29.7872
140010	1.5341	1.0588	35.1024	31.8806	40.1360	35.1264
140B10 [3]	.....	1.0471	35.1024	31.8806	40.1360	35.1264
140011	1.1265	0.8345	22.4091	23.8575	25.8864	24.1284
140012	1.1597	1.0471	28.6564	29.0336	31.8213	29.7772
140013	1.4752	0.9385	23.3065	23.9269	25.0951	24.0826
140015	1.4276	0.8982	23.0600	24.4687	24.6409	24.0661
140016	1.0141	*	18.1242	*	*	18.1242
140018	1.4713	1.0588	27.7548	26.3533	30.7398	28.2267
140019	0.9076	0.8345	18.9228	21.3438	22.3179	20.8686
140024	***	*	17.5249	*	*	17.5249

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
140026	1.1369	0.8660	23.0470	25.9669	26.0493	25.0156
140029	1.5629	1.0588	28.6565	30.2688	36.7722	31.7994
140030	1.5605	1.0588	29.7771	30.2776	31.6822	30.5819
140032	1.2251	0.8982	24.0573	26.7310	27.5367	26.1095
140033	0.7592	1.0471	25.6068	27.9993	29.5256	27.5611
140034	1.1489	0.8982	23.0033	24.0470	24.4653	23.8461
140040	1.2143	0.9225	22.2969	23.2293	24.5589	23.3454
140043	1.2831	0.8893	26.7996	27.3469	29.8633	28.0422
140045	***	*	20.6548	*	*	20.6548
140046	1.5047	0.8982	23.2127	24.7334	25.6230	24.5835
140048	1.2906	1.0588	28.2222	29.3877	30.6686	29.4175
140049	1.4765	1.0588	27.4009	29.0976	30.8617	29.2268
140051	1.5046	1.0588	27.7901	30.9696	32.1730	30.2784
140052	1.2926	0.8982	23.5662	25.9617	26.9907	25.5002
140053	1.8975	0.8942	24.8455	27.4518	28.4513	26.9029
140054	1.4482	1.0588	31.8564	33.1406	34.2378	33.0651
140058	1.2520	0.8982	22.8423	24.6058	25.2568	24.2526
140059	1.0745	0.8982	22.4652	22.6743	21.6230	22.2390
140061	***	*	20.8063	*	*	20.8063
140062	1.3499	1.0588	34.7704	34.1230	36.8271	35.2283
140063	1.4161	1.0588	27.8306	28.6559	30.5465	28.9957
140064	1.1956	0.9225	22.0407	23.8639	25.7551	23.9579
140065	1.4090	1.0588	29.4678	30.1856	31.5510	30.3798
140066	1.0931	0.8982	21.9771	22.1524	22.0225	22.0498
140067	1.8440	0.9385	25.3986	28.3506	29.8982	27.9265
140068	1.2030	1.0588	27.3956	28.3938	26.7166	27.5195
140075	1.3290	1.0588	27.9325	26.2626	35.9507	29.4588
140077	1.0118	0.8982	19.1363	20.3999	21.6468	20.4044
140080	1.4044	1.0588	23.2575	28.8791	29.9067	27.0464
140082	1.5865	1.0588	25.6645	28.3429	31.0516	28.3204
140083	0.9167	1.0588	26.2972	26.8919	27.2189	26.8114
140084	1.3044	1.0471	29.2515	30.5036	30.7251	30.1522
140088	1.9227	1.0588	32.4978	30.5450	32.6866	31.9069
140089	1.2571	0.8345	23.3401	24.1066	24.9120	24.1080
140091	1.7600	0.9315	26.8518	27.8536	28.2095	27.6630
140093	1.2233	0.9244	25.3127	28.3298	28.6709	27.3188
140094	1.0741	1.0588	27.9273	27.3841	28.7647	28.0321
140095	1.1840	1.0588	27.6799	28.7617	29.7385	28.6923
140100	1.4114	1.0471	37.0820	41.3374	37.2961	38.7112
140101	1.2087	1.0588	28.5365	29.4081	28.9723	28.9915
140103	1.1471	1.0588	23.3258	23.6406	24.0926	23.6947
140105	2.4503	1.0588	27.4531	29.5274	29.6590	28.8385
140109	1.2813	*	19.5675	*	*	19.5675
140110	1.1010	1.0471	27.9844	28.6364	30.3432	29.0082
140113	1.6263	0.9315	26.7969	29.5452	30.2542	28.8718
140114	1.4998	1.0588	28.3014	28.2151	29.8316	28.7971
140115	1.1211	1.0588	25.1498	26.0383	25.4576	25.5430
140116	1.2804	1.0588	31.9902	34.5537	34.3876	33.6671
140117	1.5489	1.0588	26.8802	27.7201	30.9679	28.4756
140118	1.5337	1.0588	29.7570	32.5518	33.1987	31.8004
140119	1.8437	1.0588	36.1419	34.2118	32.2185	34.0199
140120	1.2654	0.9385	22.7375	23.9724	25.9275	24.2583
140122	1.4644	1.0588	28.4188	30.5653	30.2888	29.7419
140124	1.2540	1.0588	36.1327	35.7563	38.2191	36.7032
140125	1.1728	0.8982	20.4014	22.7571	26.5801	23.2037
140127	1.5916	0.9483	24.1658	25.6668	27.8363	25.8841
140130	1.2387	1.0471	29.5247	32.6209	32.5425	31.6158
140133	1.2958	1.0588	28.0339	31.0269	30.3259	29.7606
140135	1.4316	0.8345	22.3264	23.3196	24.6645	23.4680
140137	1.0331	0.8982	21.4699	23.4174	31.4349	24.5880
140141	***	*	21.7872	*	*	21.7872
140143	1.1598	1.0471	26.2954	27.4499	26.1126	26.6046
140145	1.0894	0.8982	23.4608	26.0875	25.2040	24.9380
140147	1.1114	0.8345	19.8541	21.0686	21.1817	20.6906
140148	1.7334	0.8942	24.7031	25.5677	27.0038	25.7606
140150	1.7108	1.0588	35.2711	52.0970	35.5951	40.9580
140151	0.8038	1.0588	23.4879	27.0312	26.0825	25.5372

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
140152	1.1775	1.0588	27.6086	30.2209	29.8647	29.2051
140155	1.3616	1.0471	28.9724	29.5734	32.7960	30.4671
140158	1.3843	1.0588	27.0986	27.3721	30.4445	28.3050
140160	1.2234	0.9703	24.5373	25.8684	27.6905	26.0399
140161	1.0989	1.0471	23.1647	25.2898	28.8266	25.7893
140162	1.5902	0.9483	27.4471	29.4121	32.1810	29.6162
140164	1.8223	0.8982	23.7457	24.6009	25.9726	24.8076
140165	***	*	16.6304	*	*	16.6304
140166	1.1619	0.8345	23.1005	26.4800	26.2875	25.2809
140167	1.1608	0.8345	22.8911	22.8703	24.9904	23.5836
140172	1.3652	1.0588	29.8568	32.1220	33.0926	31.7168
140174	1.5704	1.0588	27.8131	30.5905	31.2231	29.9167
140176	1.2291	1.0588	31.3490	32.9794	32.6145	32.3408
140177	0.9037	1.0588	22.5610	26.4340	25.5725	24.9321
140179	1.2694	1.0588	27.6376	29.3657	30.2944	29.1090
140180	1.1722	1.0588	28.3629	27.8887	29.1352	28.4623
140181	1.1314	1.0588	25.0101	25.0226	27.6835	25.9072
140182	1.5031	1.0588	28.2211	30.1755	32.8972	30.2922
140184	1.2951	0.8345	21.1802	25.2327	26.6104	24.4280
140185	1.4648	0.8982	23.8531	25.2423	26.5398	25.2116
140186	1.5398	1.0471	30.6951	29.8022	30.7212	30.4067
140187	1.5456	0.8982	23.2892	24.8332	25.5873	24.5668
140189	1.1669	0.8345	23.7198	22.5965	24.7013	23.6837
140190	***	*	19.8296	*	*	19.8296
140191	1.3318	1.0588	25.8678	28.5836	31.9943	28.7069
140197	1.2406	1.0588	23.0684	24.0463	24.9103	23.9565
140199	1.0545	*	22.0315	*	*	22.0315
140200	1.4401	1.0588	26.3379	28.8435	30.6641	28.5880
140202	1.5516	1.0471	29.7870	32.7915	32.9433	31.9581
140206	1.2638	1.0588	30.6561	29.7953	29.6275	30.0202
140207	1.2121	1.0588	24.1048	26.0535	28.2262	26.0084
140208	1.6599	1.0588	29.4708	29.5380	31.4035	30.1416
140209	1.5570	0.9385	24.5376	26.3230	29.7965	26.7808
140210	1.0667	0.8345	19.2640	20.6954	19.2053	19.6895
140211	1.3090	1.0588	29.7054	30.3286	31.4539	30.5683
140213	1.2470	1.0588	30.2945	31.6926	32.1031	31.3688
140217	1.5498	1.0588	31.5324	32.1277	32.9404	32.2271
140223	1.4787	1.0588	30.4923	31.7267	33.5083	31.9322
140224	1.3760	1.0588	28.2177	29.6181	31.2237	29.6765
140228	1.5681	0.9804	25.6419	27.9456	28.2855	27.2863
140231	1.4308	1.0588	30.6410	30.0236	34.8291	31.8587
140233	1.6653	1.0471	28.6305	29.7093	31.5168	29.9830
140234	1.0454	0.8660	23.6928	24.5476	25.7353	24.6552
140239	1.5950	0.9804	29.0092	31.1879	31.0918	30.4218
140240	1.4146	1.0588	28.7310	31.5637	32.7986	30.9712
140242	1.5032	1.0588	32.0522	34.6120	35.2351	33.9225
140250	1.2378	1.0588	28.5971	29.6305	31.2533	29.8441
140251	1.3940	1.0588	27.1687	28.0622	28.3598	27.8740
140252	1.4020	1.0588	33.3351	34.4268	35.8762	34.5480
140258	1.5174	1.0588	30.2639	34.2333	33.0093	32.5353
140275	1.3123	0.8893	26.1473	27.8186	28.5064	27.4339
140276	1.8647	1.0588	29.8325	31.6359	32.1048	31.2217
140280	1.4651	0.8893	23.4447	24.9401	26.6536	24.9140
140281	1.7584	1.0588	30.4838	33.3903	35.6589	33.1771
140285	***	*	20.7576	*	*	20.7576
140286	1.1539	1.0588	29.1543	30.3237	32.0048	30.4851
140288	1.5228	1.0588	29.3988	31.5197	31.5944	30.8910
140289	1.3067	0.8982	22.6211	23.8452	25.6847	24.0649
140290	1.3576	1.0588	31.7341	31.8135	32.5247	32.0531
140291	1.6115	1.0471	29.8958	31.9052	33.8706	31.9796
140292	1.1022	1.0588	27.6285	28.5094	30.6917	28.8381
140294	1.1266	0.8345	23.4503	24.0750	26.1595	24.6196
140300	1.1884	1.0588	34.8568	35.1494	42.5240	37.4107
140301	1.1568	1.0588	31.7073	49.9507	39.4295	38.1755
140303	2.2073	1.0588	*	29.6470	*	29.6470
150001	1.1331	0.9717	29.6844	28.9075	31.8089	30.1191
150002	1.4417	1.0471	25.0063	26.6222	27.6481	26.6696

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
150003	1.7490	0.8676	25.3458	26.7585	26.9771	26.3734
150004	1.4753	1.0471	26.8458	28.7336	30.9626	28.8237
150005	1.2795	0.9717	27.2369	29.5371	30.5367	29.1856
150006	1.3979	0.9503	26.4062	25.6265	27.1364	26.4180
150007	1.3720	0.9463	26.6073	29.4971	30.0500	28.8176
150008	1.3865	1.0471	26.6928	27.5703	27.0525	27.1187
150009	1.4332	0.9029	22.2147	25.4496	25.7616	24.5212
150010	1.4963	0.9463	26.8523	27.2272	28.4118	27.4601
150011	1.2451	0.9589	24.3490	25.3178	26.7686	25.4614
150012	1.5620	0.9643	27.3029	30.0348	31.2282	29.5432
150013	***	*	21.8465	*	*	21.8465
150015	1.3250	0.8899	26.2434	28.0931	27.3811	27.2243
150017	1.8561	0.9041	25.2342	26.3973	26.3379	26.0051
150018	1.7221	0.9540	26.3289	27.3689	29.1137	27.6515
150021	1.8096	0.9041	29.6967	28.9196	30.0030	29.5366
150022	1.0788	0.8726	22.6773	23.1041	23.8971	23.1999
150023	1.5637	0.9589	23.7159	26.9095	27.7520	25.8891
150024	1.4818	0.9717	27.1589	28.1655	28.4170	27.8897
150026	1.3161	0.9540	28.1127	28.6517	30.4967	29.1723
150027	1.0482	*	17.4862	*	*	17.4862
150029	1.4657	0.9643	26.9680	28.7187	29.9307	28.4271
150030	1.1967	0.9589	26.9534	29.1493	29.3588	28.5143
150033	1.5576	0.9717	27.9995	28.6838	29.7744	28.8059
150034	1.4561	1.0471	26.0465	28.6429	28.0434	27.6127
150035	1.5977	0.9241	26.6620	26.9700	27.8904	27.1979
150037	1.3217	0.9717	28.5451	31.0935	29.0161	29.5237
150038	1.1328	0.9717	28.8054	29.3156	33.0112	30.3936
150042	1.3921	0.8823	23.0102	22.8786	25.1403	23.6714
150044	1.3927	0.9029	23.7066	25.2137	25.2685	24.7693
150045	1.0745	0.9041	25.2225	26.9818	27.5340	26.5867
150046	1.4882	0.8823	21.9369	24.5593	26.5876	24.4158
150047	1.7159	0.9041	25.8348	25.5194	25.8497	25.7351
150048	1.3899	0.9661	27.1817	27.1233	28.1525	27.5023
150049	1.3604	*	22.3370	*	*	22.3370
150051	1.6346	0.9589	23.7061	26.5655	28.9157	26.4848
150052	1.0751	*	20.6339	*	*	20.6339
150056	1.9446	0.9717	28.2842	28.8727	29.3500	28.8453
150057	2.0988	0.9717	24.8605	28.9529	30.3287	27.8807
150058	1.5711	0.9643	27.5341	29.1444	29.1255	28.6425
150059	1.5551	0.9717	28.5715	31.4987	31.3362	30.4971
150060	***	*	24.8544	*	*	24.8544
150061	1.1275	0.8568	22.2822	21.3711	22.6746	22.1018
150062	1.1339	*	24.6088	*	*	24.6088
150064	1.2000	0.8568	23.7707	25.4987	28.7978	26.0980
150065	1.2625	0.9589	25.9461	27.9283	30.2053	27.9985
150069	1.1757	0.9661	25.2656	26.2028	26.0909	25.8564
150072	1.1657	0.8673	20.5111	21.2120	21.7644	21.1633
150074	1.4427	0.9717	25.2586	25.9321	28.5655	26.5901
150075	1.0975	0.9041	24.0745	25.1568	25.7245	24.9787
150076	1.2881	0.9503	28.1874	29.3249	30.1120	29.2167
150079	1.1099	*	21.4067	*	*	21.4067
150082	1.6825	0.8568	25.5860	28.3494	26.4544	26.8048
150084	1.8395	0.9717	29.3905	31.1720	33.1784	31.1870
150086	1.1722	0.9661	23.9404	25.1992	26.6745	25.3042
150088	1.2748	0.9589	23.6253	27.2103	29.1509	26.6306
150089	1.6023	0.8568	25.0449	24.7233	24.8045	24.8596
150090	1.6407	1.0471	26.2899	30.4835	30.6412	29.1401
150091	1.1638	0.9041	30.6209	30.4234	32.1627	31.1005
150097	1.1290	0.9717	25.0367	27.7468	29.1359	27.3220
150100	1.6877	0.8568	24.3530	25.7997	26.9724	25.6239
150101	1.0665	0.9041	29.1657	29.0301	30.5475	29.5654
150102	1.0330	0.9241	24.5923	25.7424	25.8742	25.4603
150104	1.0856	0.9717	25.5872	28.2552	28.7788	27.5177
150106	1.0158	*	20.9387	*	*	20.9387
150109	1.4641	0.8676	23.5865	25.3367	26.8464	25.2376
150112	1.4978	0.9589	26.5643	28.0068	29.8540	28.1787
150113	1.2888	0.9589	24.8760	24.7960	25.9814	25.2159

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
150115	1.4230	0.8568	19.3411	22.0747	22.5793	21.2670
150122	1.3185	*	26.0173	*	*	26.0173
150124	***	*	21.3933	*	*	21.3933
150125	1.5103	1.0471	26.7666	27.6535	29.3596	27.9342
150126	1.4164	1.0471	26.9887	28.9454	29.4300	28.4467
150128	1.4409	0.9717	26.4976	28.7810	29.5008	28.2807
150129	1.1548	0.9717	29.9099	29.7398	31.4317	30.3985
150130	1.6136	*	21.7400	*	*	21.7400
150132	***	*	25.6257	27.6560	*	26.6249
150133	1.2457	0.9041	22.7292	25.1322	24.2538	24.0313
150134	1.0198	0.9029	23.8525	26.3249	21.6740	23.7590
150136	***	*	26.2704	*	*	26.2704
150146	1.1370	0.9041	29.3383	29.5256	30.3343	29.7676
150147	1.5120	1.0471	22.8456	27.2339	26.1646	25.6998
150149	1.0014	0.8568	23.6360	23.7026	24.9629	24.1402
150150	1.3167	0.9041	25.5331	27.0542	26.7700	26.4920
150151	***	*	38.1445	*	*	38.1445
150152	***	*	44.7145	*	*	44.7145
150153	2.4172	0.9717	*	32.1022	35.0617	33.7428
150154	2.5712	0.9717	*	29.8514	29.8894	29.8711
150155	***	*	*	45.0121	*	45.0121
150156	***	*	*	25.9681	*	25.9681
150157	1.6761	0.9717	*	*	32.3106	32.3106
150158	1.2402	0.9717	*	*	*	*
150160	2.0073	0.9717	*	*	*	*
150161	1.4755	0.9717	*	*	*	*
150162	1.7836	0.9717	*	*	*	*
150163	1.1054	0.9029	*	*	*	*
160001	1.2039	0.9222	25.1220	24.5108	25.7255	25.1337
160005	1.2097	0.8476	21.8949	23.1034	24.7755	23.2878
160008	1.0516	0.8476	20.7200	22.1402	22.4758	21.7846
160013	1.2974	0.8655	23.7163	24.0956	24.4099	24.0734
160014	***	*	20.5882	*	*	20.5882
160016	1.5636	0.9222	23.3619	24.5338	27.1460	24.9575
160020	1.1531	*	19.5554	*	*	19.5554
160024	1.5654	0.9157	26.2392	27.4158	29.3756	27.6168
160026	***	*	24.7424	*	*	24.7424
160028	1.3092	0.9473	26.2948	27.8535	30.0576	28.1943
160029	1.6382	0.9423	27.9277	28.7324	30.6687	29.0931
160030	1.3868	1.0016	26.7068	28.7786	30.9415	28.8521
160031	0.7988	*	19.7368	*	*	19.7368
160032	1.0669	0.8711	23.4727	25.4662	26.2935	25.1093
160033	1.7485	0.8893	24.6768	26.5315	27.2060	26.1337
160034	1.0217	*	19.3503	*	*	19.3503
160039	0.9129	*	22.1180	*	*	22.1180
160040	1.2906	0.8719	23.9053	25.9032	26.8110	25.5671
160045	1.6881	0.8684	25.4153	26.6463	27.5289	26.5339
160047	1.3936	0.9473	25.2072	26.0227	28.1280	26.4469
160048	***	*	19.5831	*	*	19.5831
160050	1.0566	*	24.5402	*	*	24.5402
160057	1.2590	0.9137	23.0937	25.1272	25.6274	24.6663
160058	1.9710	0.9423	27.1646	28.4167	28.9924	28.2025
160064	1.6011	0.9113	28.6139	28.7668	28.4209	28.5968
160066	0.9354	*	22.7709	*	*	22.7709
160067	1.3637	0.8719	23.4060	24.8137	26.0243	24.7721
160069	1.5286	0.8875	25.3402	27.4473	27.6157	26.8150
160079	1.4774	0.8684	23.7234	24.7372	26.1618	24.8787
160080	1.2832	0.8893	23.1837	25.8252	27.2370	25.4033
160081	***	*	23.1930	*	*	23.1930
160082	1.7698	0.9157	26.4398	27.4718	28.7831	27.5581
160083	1.6593	0.9157	28.2193	27.3004	28.3921	27.9725
160089	1.2887	0.9137	22.6551	23.2149	23.2888	23.0562
160091	***	*	17.9862	*	*	17.9862
160101	1.0750	0.9157	25.1000	25.0503	25.4740	25.2122
160104	1.6546	0.8893	24.9134	28.1891	29.8126	27.8799
160110	1.5341	0.8719	24.9434	26.6633	28.8134	26.8749
160112	1.2895	0.8476	23.0672	24.7957	25.2886	24.4326

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
160117	1.3823	0.8875	25.0278	25.4659	27.3927	25.9740
160118	***	*	19.7764	*	*	19.7764
160122	1.0947	0.8476	22.5872	23.9177	24.4996	23.6844
160124	1.1525	0.8476	23.1690	22.5482	24.3063	23.3383
160126	1.0265	*	19.8323	*	*	19.8323
160146	1.3905	0.9083	22.9897	22.6949	24.8485	23.4694
160147	1.2941	0.9222	26.6438	28.6303	29.8992	28.4676
160153	1.7364	0.9083	28.9881	29.9378	30.6173	29.8520
160154	1.1302	*	*	*	*	*
160155	1.7147	0.8893	*	*	*	*
170001	1.1457	0.7979	21.9131	23.1260	23.8863	22.9705
170006	1.3231	0.8966	21.9019	24.2068	27.1033	24.4549
170009	1.0518	0.9318	29.2588	30.9025	29.6386	29.9250
170010	1.2444	0.7979	24.0008	23.9707	25.5573	24.5518
170012	1.6127	0.8717	24.7392	26.1367	27.1195	25.9606
170013	1.6234	0.8717	25.0419	25.2476	26.7124	25.6577
170014	1.0200	0.9318	23.5960	23.8135	24.2322	23.8856
170015	***	*	20.2368	*	*	20.2368
170016	1.6402	0.8556	25.9482	25.8061	26.7536	26.1671
170017	1.0743	0.8938	24.7771	26.9657	27.2925	26.3737
170019	1.1990	*	22.0251	*	*	22.0251
170020	1.5974	0.8717	23.1800	23.2757	24.1149	23.5243
170022	1.1485	*	22.2878	*	*	22.2878
170023	1.4198	0.8717	23.9808	24.0561	23.9812	24.0054
170027	1.3961	0.7979	22.5103	23.1766	23.4037	23.0169
170033	1.3489	0.8717	20.7864	21.9709	24.1882	22.2852
170039	0.9451	0.8938	21.5203	26.9852	26.0952	24.6299
170040	1.9800	0.9318	28.2856	28.4458	30.2468	29.0256
170049	1.5227	0.9318	24.7895	25.2070	26.4086	25.4876
170052	***	*	18.5291	*	*	18.5291
170058	1.0973	0.9318	23.3398	22.9210	26.5949	24.2599
170068	1.2243	0.9151	22.6087	23.0635	23.8812	23.1883
170070	***	*	16.0162	*	*	16.0162
170074	1.2229	0.7979	21.0565	23.7829	23.0567	22.6765
170075	0.8299	0.7979	16.5444	19.7760	19.9351	18.7474
170085	0.6104	*	*	*	*	*
170086	1.5806	0.8556	24.0812	26.1362	26.3615	25.5525
170093	***	*	16.5553	*	*	16.5553
170094	0.9369	0.7979	21.3887	21.5295	16.5136	19.6903
170098	***	*	20.1242	*	*	20.1242
170103	1.2869	0.8938	22.8707	23.8042	24.2003	23.6452
170104	1.4622	0.9318	26.9671	26.2990	27.6211	26.9584
170105	1.0944	0.7979	21.4422	21.9606	22.7412	22.0343
170109	1.0365	0.9318	23.2626	23.1088	23.8515	23.4041
170110	0.8838	0.7979	22.9195	23.3260	23.9572	23.4236
170114	0.9064	*	18.9158	*	*	18.9158
170120	1.3860	0.8966	21.0499	22.0253	22.2805	21.7560
170122	1.6825	0.8938	25.3982	26.6605	28.7175	26.8262
170123	1.6951	0.8938	27.2239	27.6653	27.0843	27.3131
170133	1.0455	0.9318	22.9309	23.1226	25.2301	23.8079
170137	1.2778	0.7979	23.8862	24.7096	25.3395	24.6697
170142	1.4000	0.8452	22.5778	23.9527	24.6019	23.7457
170143	***	*	20.4459	*	*	20.4459
170144	***	*	24.6259	*	*	24.6259
170145	1.0844	0.7979	21.5756	23.2162	23.3967	22.7065
170146	1.5046	0.9318	29.1358	29.8858	29.0720	29.3567
170147	***	*	21.4753	22.4973	24.3268	22.5630
170150	1.1567	0.8145	18.5744	20.9448	19.6160	19.7250
170166	0.9972	0.7979	19.2842	21.0762	22.6968	21.0440
170175	1.4183	0.8717	23.9304	25.6281	26.7229	25.4235
170176	1.5941	0.9318	26.2366	27.2332	29.0735	27.5811
170180	***	*	25.1368	32.5010	*	27.5335
170182	1.4404	0.9318	25.7443	27.3503	28.9710	27.3812
170183	1.9426	0.8938	24.5539	25.8340	26.1890	25.5209
170185	1.2377	0.9318	26.7797	27.8139	28.1780	27.6778
170186	2.6627	0.8938	31.7896	32.8392	30.2613	31.6196
170187	1.4872	0.7979	23.3702	22.8493	24.1461	23.4565

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
170188	1.9667	0.9318	29.9751	30.6844	32.2573	31.0137
170190	1.0160	0.8452	22.8729	22.9540	26.2625	24.0473
170191	1.7207	0.7979	21.3069	22.1197	24.3813	22.6600
170192	1.9119	0.8938	27.9704	26.2724	27.7421	27.3099
170193	1.4210	0.8717	24.7429	20.6821	24.8531	23.2189
170194	1.0835	0.9318	27.9903	29.9014	27.6989	28.5239
170195	2.2763	0.9318	*	30.1001	29.5947	29.8108
170196	2.3666	0.8938	*	*	32.1832	32.1832
180001	1.2557	0.9661	25.4217	27.6917	29.7423	27.6443
180002	1.0602	0.8073	22.9727	25.7862	26.5488	25.1142
180004	1.0972	0.7810	19.5437	22.0797	20.8805	20.8284
180005	1.1194	0.8724	24.5561	24.9779	25.6159	25.0807
180006	***	*	14.8011	*	*	14.8011
180007	1.5249	0.9002	22.7606	25.7042	27.1924	25.2359
180009	1.7050	0.8878	25.3837	26.4101	27.3228	26.4316
180010	1.8883	0.9002	24.7256	25.6153	27.7600	26.0458
180011	1.5427	0.8797	22.7364	25.5463	24.9909	24.4168
180012	1.4909	0.9029	24.6642	25.6000	26.7279	25.6690
180013	1.5074	0.9364	22.9512	23.7075	24.8125	23.8157
180016	1.3302	0.9029	23.1832	24.8408	24.7091	24.2487
180017	1.3231	0.7978	20.8630	21.8885	21.9715	21.5934
180018	1.3148	0.7810	19.0992	20.9857	23.3035	21.1384
180019	1.0932	0.9661	24.1342	24.0283	24.6279	24.2639
180020	1.0481	0.7810	21.9494	24.6953	25.9975	24.2711
180021	0.9698	0.7810	18.5966	20.7950	22.0740	20.5368
180024	1.1161	0.9029	32.1824	31.1159	26.3532	29.7120
180025	1.1421	0.9029	19.1543	22.6897	28.5935	23.5037
180026	1.0693	*	18.2120	*	*	18.2120
180027	1.2468	0.8095	23.8763	20.8303	21.7639	22.0496
180028	0.9153	*	24.7967	*	*	24.7967
180029	1.3898	0.8797	23.0536	25.6479	26.1528	24.9999
180035	1.6203	0.9661	29.8438	31.0794	32.8461	31.2815
180036	1.2418	0.8878	25.1154	25.2972	25.6959	25.3664
180037	1.3241	0.9029	25.7361	26.3132	27.8506	26.6118
180038	1.5448	0.8697	24.6348	26.0440	26.9752	25.9113
180040	1.9692	0.9029	26.2125	27.9979	28.5162	27.6103
180043	1.1554	0.7810	19.0617	20.9326	20.6439	20.2180
180044	1.7146	0.8724	23.0971	24.4569	25.8060	24.4869
180045	1.3291	0.9661	25.8349	27.4732	29.4127	27.6339
180046	0.9468	0.9002	27.2244	27.1034	27.0962	27.1405
180047	***	*	21.8036	*	*	21.8036
180048	1.2971	0.9029	21.6571	23.9230	24.3696	23.3120
180049	1.4467	0.8797	23.3407	22.4769	24.3699	23.3961
180050	1.1550	0.7810	22.6473	26.3604	25.9557	24.9976
180051	1.2878	0.8218	21.3312	23.5299	24.3916	23.1293
180053	0.9914	0.7810	19.1578	21.3044	22.1921	20.9808
180055	1.1922	*	20.7237	*	*	20.7237
180056	1.1773	0.8465	22.8910	24.3074	24.5326	23.9077
180063	1.1034	*	17.9741	*	*	17.9741
180064	1.1693	0.8124	16.2638	17.1009	20.1799	17.8239
180066	1.0839	0.9364	24.9543	22.2713	23.7860	23.6485
180067	2.0260	0.9002	25.4080	26.0238	27.9852	26.5262
180069	1.0876	0.8724	22.3673	26.3701	26.6714	25.1966
180070	1.1689	0.8049	20.1308	20.6741	20.2189	20.3433
180078	1.1526	0.8724	26.2636	27.6806	28.2762	27.4283
180079	1.1914	0.8069	19.7791	20.2100	23.6005	21.2540
180080	1.2789	0.8012	21.7380	21.5818	23.7788	22.3758
180087	1.2564	0.7810	18.4331	20.8841	22.0302	20.4642
180088	1.6692	0.9029	27.5767	28.0916	28.6107	28.1051
180092	1.1840	0.9002	22.5679	23.7909	23.7866	23.3989
180093	1.6493	0.8123	20.5422	20.5807	21.4392	20.8528
180095	1.0472	0.7810	17.9677	17.9146	21.5639	18.9610
180101	1.1640	0.9002	25.4796	27.4506	28.1621	27.0742
180102	1.5933	0.8095	18.4388	21.0896	25.2343	21.3176
180103	2.1748	0.9002	26.9407	28.4583	28.1734	27.8598
180104	1.5693	0.8095	24.9441	25.6157	25.9689	25.5126
180105	0.8863	0.7810	19.7615	21.6002	23.1917	21.5276

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
180106	0.8981	0.7810	17.8020	20.2884	20.7220	19.6713
180115	0.9198	0.7810	20.9831	20.5539	20.3089	20.6170
180116	1.2129	0.8345	22.7353	23.5354	25.8927	24.0625
180117	0.9573	0.7810	21.1854	22.8469	24.7378	22.8812
180124	1.3102	0.9364	23.1917	24.8292	25.4664	24.5483
180127	1.3502	0.9029	23.4765	24.6774	26.3947	24.8368
180128	0.9285	0.7810	20.8406	22.6056	23.8144	22.4361
180130	1.6785	0.9029	26.0278	27.8900	29.1712	27.7427
180132	1.4705	0.8797	23.7652	24.5105	25.3789	24.5776
180134	0.9988	*	18.6779	*	*	18.6779
180138	1.2338	0.9029	27.3400	28.1901	28.6871	28.0932
180139	0.9711	0.7810	23.5363	23.3569	24.7575	23.8896
180141	1.8039	0.9029	25.3042	25.3357	27.5912	26.1155
180143	1.6427	0.9002	25.1613	28.1924	30.8734	28.2381
180144	***	*	*	29.5052	*	29.5052
180147	***	*	*	*	31.1615	31.1615
180148	***	*	*	*	30.1250	30.1250
180149	0.9785	0.7810	*	*	*	*
190001	1.1366	0.7586	19.7516	22.1394	22.1569	21.3062
190002	1.6414	0.8322	22.0056	23.3368	24.6984	23.3292
190003	1.4785	0.8322	23.4977	25.8294	26.7844	25.3504
190004	1.5564	0.7975	23.3290	25.3473	25.0803	24.6173
190005	4.8105	0.8711	22.3208	22.6029	24.2899	23.0169
190006	1.4684	0.8322	22.2467	22.7979	24.8836	23.2631
190007	1.1753	0.7586	19.7528	21.8205	23.1426	21.5670
190008	1.7624	0.7975	24.0111	24.6074	26.3638	24.9678
190009	1.2890	0.7977	19.8404	21.1005	24.0696	21.5285
190010	***	*	21.6889	*	*	21.6889
190011	0.9912	0.7869	19.7319	21.4052	21.6991	20.9430
190013	1.4546	0.7783	20.8626	21.4573	23.7333	22.0204
190014	1.1832	0.7586	22.4596	22.7151	22.6405	22.6128
190015	1.3272	0.8711	22.8875	23.7789	25.1767	23.9766
190017	1.3890	0.7773	21.5033	24.5390	24.7537	23.6080
190019	1.7987	0.7977	23.7168	24.0468	25.4624	24.4141
190020	1.2331	0.8009	21.6136	22.1967	23.4602	22.4018
190025	1.3046	0.7586	20.8950	23.5007	24.5024	22.9204
190026	1.6225	0.7977	22.5087	23.7702	24.1556	23.4858
190027	1.6702	0.7783	21.2526	24.3006	26.7132	24.0310
190034	1.2388	0.7775	19.6943	20.7334	21.2130	20.5411
190036	1.6983	0.8711	24.8152	25.4164	25.6551	25.3044
190037	0.6483	0.7783	18.6393	19.4071	20.7271	19.5622
190039	1.6426	0.8711	25.6665	24.4386	25.4003	25.1722
190040	1.3451	0.8711	26.7428	28.6297	28.0169	27.7947
190041	1.4801	0.8551	24.6734	28.5376	28.0050	27.0392
190043	***	*	17.3477	*	*	17.3477
190044	1.3206	0.7846	19.5567	20.9993	21.2604	20.6016
190045	1.6104	0.8711	25.3854	25.8238	27.1996	26.1757
190046	1.4983	0.8711	24.2128	23.8552	24.7370	24.2698
190048	1.0173	*	19.6288	*	*	19.6288
190050	1.0996	0.7630	19.1076	21.0259	20.9142	20.3649
190053	1.1445	0.7686	16.4968	17.9788	18.5819	17.7257
190054	1.3646	0.7671	20.1108	23.1471	22.7011	22.0095
190060	1.4954	0.7783	23.6278	23.7393	22.6291	23.3259
190064	1.6406	0.8009	23.3617	23.1358	23.7298	23.4086
190065	1.6036	0.8009	23.7450	22.1880	23.1202	23.0047
190077	0.9332	*	18.8409	*	*	18.8409
190078	1.0556	0.7773	21.3786	22.2431	22.2346	21.9592
190079	1.2228	0.8711	21.2546	24.0985	23.8192	23.0910
190081	0.8766	0.7586	15.6146	20.0121	21.4510	18.9734
190086	1.2998	0.7764	19.8823	22.0610	22.2895	21.4355
190088	1.0983	0.8551	22.3480	23.8562	23.1638	23.1096
190090	1.0644	0.7586	20.2045	23.1241	24.3303	22.5642
190095	***	*	18.0174	*	*	18.0174
190098	1.7671	0.8551	24.6353	25.6854	25.7449	25.3598
190099	1.0514	0.8009	20.4597	22.0610	23.2343	21.9199
190102	1.5319	0.8322	25.2267	27.3126	26.9700	26.4749
190106	1.1179	0.7977	21.7228	23.5376	26.6227	23.8316

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
190109	1.2697	*	18.6524	*	*	18.6524
190111	1.6595	0.8551	24.4998	25.5729	26.5722	25.5481
190114	1.0528	0.7586	15.8031	17.2678	19.1586	17.4128
190115	1.2579	0.8551	26.6295	28.2066	26.0797	26.9667
190116	1.1795	0.7671	20.3845	22.3710	23.4013	22.0638
190118	0.9119	0.8551	19.7024	22.8809	21.2580	21.3081
190122	1.3165	0.8009	23.7082	22.0072	22.2371	22.6302
190124	***	*	24.6675	26.0032	27.9484	26.2122
190125	1.5999	0.7869	23.9649	25.5463	24.8256	24.7616
190128	1.1274	0.8009	27.9136	28.3257	29.6682	28.6616
190131	1.2853	0.8009	25.1917	27.8465	28.6795	27.2765
190133	0.8990	0.7687	13.6266	18.2045	22.4311	19.4522
190135	***	*	26.8238	27.7540	30.5646	28.1639
190140	0.9706	0.7621	17.6936	18.9652	23.0485	19.9125
190144	1.1642	0.8551	21.7547	22.9181	23.7875	22.8280
190145	0.9239	0.7676	18.9678	19.9265	20.8579	19.9365
190146	1.5689	0.8711	26.1792	27.4824	28.7200	27.4158
190149	1.0427	*	18.8819	*	*	18.8819
190151	0.9473	0.7586	18.6293	18.7467	18.8391	18.7428
190152	1.5619	0.8711	27.6099	28.1334	30.8512	28.8848
190158	***	*	26.3042	26.4787	30.6450	27.6757
190160	1.6083	0.7869	21.6740	22.9325	24.7822	22.9872
190161	1.2550	0.7783	19.1022	22.6187	22.9035	21.4144
190162	***	*	25.0328	25.2953	*	25.1543
190164	1.1717	0.8198	22.8599	25.2560	26.6207	24.9939
190167	1.2689	0.8322	24.3185	26.4669	25.3283	25.3447
190175	1.3803	0.8711	27.1531	26.0547	27.4256	26.8730
190176	1.7567	0.8711	25.6997	25.8826	26.2596	25.9476
190177	1.7190	0.8711	27.4621	27.7792	28.2751	27.8348
190182	***	*	28.4799	27.1682	29.8656	28.5188
190183	1.1703	0.7975	19.8084	22.6928	22.0119	21.4403
190184	1.0091	0.7764	23.9608	24.9476	24.1626	24.3753
190185	***	*	24.7912	25.6394	28.9759	26.4364
190190	0.9347	0.7747	16.1195	24.3327	26.7043	22.8841
190191	1.3288	0.8322	23.5734	24.1923	26.1628	24.6319
190196	0.9294	0.8322	24.7135	24.0385	25.8472	24.8787
190197	1.3883	0.7869	24.3735	25.8071	26.4825	25.5498
190199	1.0219	0.8009	14.1409	27.3304	32.0194	23.0028
190200	***	*	27.5681	28.8173	27.4781	27.9971
190201	1.2441	0.7783	24.5877	25.1010	24.4563	24.7120
190202	1.3990	0.8009	24.7944	27.6084	29.6612	27.4877
190203	***	*	26.8795	28.1832	29.9753	28.2129
190204	1.5165	0.8711	28.3684	28.1033	30.5140	28.9472
190205	1.6775	0.8322	24.4540	26.6832	28.2484	26.4802
190206	1.5731	0.8711	26.0139	26.7401	29.2371	27.2862
190208	0.8612	0.7586	24.2588	28.7308	27.9908	27.1395
190218	1.1033	0.8551	25.0356	26.7262	28.1039	26.6017
190236	1.4943	0.8551	23.6824	24.7142	26.4614	24.9863
190241	1.2264	0.7975	23.9700	25.2123	25.7906	25.0883
190242	1.1676	0.8009	23.0072	24.8461	25.0035	24.3294
190245	1.7027	0.7869	27.1786	25.5751	26.7642	26.5210
190246	1.6612	0.7747	*	*	22.7833	22.7833
190247	***	*	*	32.7499	*	32.7499
190248	***	*	*	23.2220	*	23.2220
190249	1.8972	0.8009	*	20.0468	25.2523	22.1292
190250	2.1185	0.8711	*	31.5101	33.3302	32.3430
190251	1.2888	0.8009	*	21.4464	23.8389	22.5823
190252	***	*	*	23.6924	*	23.6924
190253	***	*	*	22.8060	23.8037	23.3049
190254	***	*	*	32.9290	*	32.9290
190255	0.7428	0.8322	*	22.2412	16.1593	18.2998
190256	0.8040	0.8711	*	*	25.9577	25.9577
190257	1.6107	0.7647	*	*	26.5505	26.5505
190258	1.0203	0.8551	*	31.3715	26.1141	28.3735
190259	1.8072	0.8322	*	*	26.5084	26.5084
190260	***	*	*	*	29.3947	29.3947
190261	1.6813	0.7869	*	*	27.0441	27.0441

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
190262	***	*	*	*	30.3719	30.3719
190263	2.4748	0.8322	*	*	26.4202	26.4202
190264	***	*	*	*	26.5842	26.5842
190265	0.7095	0.7869	*	*	22.6231	22.6231
190266	1.9424	0.8009	*	*	*	*
190267	1.2028	0.8711	*	*	*	*
190268	1.3593	0.8322	*	*	*	*
190270	1.7939	0.8711	*	*	*	*
190272	1.5530	0.8322	*	*	*	*
190273	1.6476	0.8009	*	*	*	*
200001	1.3864	0.9881	25.1144	25.2542	26.3045	25.5700
200002	1.0776	0.8408	25.7478	25.7212	27.1151	26.1903
200008	1.3373	0.9991	27.4412	27.7137	29.1836	28.1476
200009	1.9781	0.9991	31.1056	30.7510	32.5812	31.4774
200012	1.3475	*	25.7623	*	*	25.7623
200013	***	*	24.4131	*	*	24.4131
200018	1.2583	0.8408	23.6337	23.5632	22.5027	23.1555
200019	1.2478	0.9991	25.1367	25.6649	27.7896	26.2304
200020	1.2349	1.0173	31.7083	32.6436	34.0916	32.8279
200021	1.2526	0.9991	24.5519	27.1381	29.2054	27.0896
200024	1.5917	0.9589	26.0080	27.5410	29.7817	27.8465
200025	1.1475	0.9991	26.0573	26.3124	28.5750	27.0015
200027	***	*	26.3118	*	*	26.3118
200028	***	*	24.3271	*	*	24.3271
200031	1.2583	0.8408	21.9489	21.2370	22.2151	21.8012
200032	1.1121	0.8874	25.5227	26.3322	26.8993	26.2493
200033	1.8746	0.9881	28.6479	29.3108	31.7007	29.9421
200034	1.3358	0.9589	26.2926	27.0582	27.0103	26.8004
200037	1.2367	0.8408	23.2333	24.1732	24.9418	24.1299
200039	1.3017	0.9589	25.1196	25.1179	26.6409	25.6399
200040	1.2319	0.9991	25.5405	25.9893	27.8053	26.5224
200041	1.1511	0.8408	24.5532	24.9670	26.6777	25.4297
200050	1.2555	0.9881	26.4992	27.6825	29.5033	27.9408
200052	1.0971	0.8408	21.8726	22.5159	24.4204	22.9910
200063	1.1426	0.9589	25.0167	25.8623	27.9748	26.3221
210001	1.3534	0.9442	27.7561	28.2858	29.3471	28.4871
210002	1.9675	1.0030	26.4992	32.3005	33.7388	30.7141
210003	1.6589	1.0675	29.8684	34.1109	30.7334	31.5417
210004	1.4229	1.1016	34.2392	33.6056	31.7132	33.1035
210005	1.2759	1.1016	28.7557	28.9554	29.5835	29.1066
210006	1.0873	1.0030	25.4081	25.9005	27.3620	26.2242
210007	1.8886	1.0030	30.2548	31.8767	30.7124	30.9328
210008	1.3842	1.0030	25.2833	24.3341	28.8850	26.1403
210009	1.6931	1.0030	26.2360	27.7900	30.2661	28.0855
210010	***	*	25.7775	*	*	25.7775
210011	1.3772	1.0030	27.5031	30.8575	31.0966	29.8770
210012	1.6040	1.0030	27.4103	30.3078	31.1778	29.7278
210013	1.2771	1.0030	25.1348	28.5328	28.9917	27.5062
210015	1.2770	1.0030	28.2029	29.9261	32.2774	30.1836
210016	1.7522	1.1016	32.2081	32.3506	33.5493	32.6964
210017	1.1905	0.8911	23.2167	25.1890	26.8592	25.1002
210018	1.1898	1.1016	29.1870	29.5533	29.6521	29.4662
210019	1.7927	0.8911	26.1824	27.3731	28.7844	27.4744
210022	1.3934	1.1016	33.8015	35.4727	37.3092	35.4772
210023	1.4341	1.0109	30.4656	32.1812	33.0212	31.9645
210024	1.7296	1.0030	29.5579	30.6359	32.9434	31.0668
210025	1.2742	0.8911	26.0771	23.8552	24.8570	24.7700
210027	1.5326	0.8911	26.0111	24.6343	24.4821	25.0058
210028	1.0538	0.9423	25.9221	26.3469	26.7462	26.3461
210029	1.2601	1.0030	27.9741	31.0266	31.8539	30.2810
210030	1.2157	0.8911	29.5635	26.9763	32.2033	29.6024
210032	1.1523	1.0666	26.1829	27.0727	27.9359	27.1028
210033	1.1658	1.0030	29.0420	28.5534	29.2504	28.9511
210034	1.2970	1.0030	28.4308	30.2908	32.3827	30.4309
210035	1.2764	1.0675	26.1083	28.6484	27.3901	27.4000
210037	1.1898	0.8911	27.0973	27.3287	27.8394	27.4525
210038	1.2307	1.0030	29.5980	29.8121	32.3206	30.5517

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
210039	1.1414	1.0675	27.6940	30.4991	32.4139	30.2667
210040	1.2133	1.0030	29.3514	28.3559	29.2390	28.9752
210043	1.2979	1.0109	27.5657	26.6524	32.6961	28.8477
210044	1.3213	1.0030	28.8700	29.7339	30.3349	29.6367
210045	0.9662	0.8911	15.6380	14.2223	16.3724	15.4690
210048	1.2751	1.0030	28.4638	27.5043	26.0650	27.2655
210049	1.2023	1.0030	26.9656	26.0900	27.0161	26.6997
210051	1.3644	1.0675	29.2998	29.8892	29.5219	29.5723
210054	1.2933	1.0675	26.2295	27.4328	27.7607	27.1406
210055	1.1642	1.0675	29.9708	30.6941	31.4905	30.7118
210056	1.2997	1.0030	28.6091	30.0810	32.3518	30.4754
210057	1.3572	1.1016	32.2883	31.6787	32.8299	32.2617
210058	1.0863	1.0030	29.7841	31.0873	31.1988	30.7830
210060	1.1804	1.0675	28.5087	27.1764	29.9626	28.5557
210061	1.2433	0.8911	23.6662	23.1645	25.0253	23.9970
220001	1.1993	1.1354	29.0014	30.6070	31.2316	30.2898
220002	1.3836	1.1487	30.3598	32.4356	33.6649	32.2137
220003	1.1827	*	22.0549	*	*	22.0549
220006	***	*	30.8599	30.7673	33.6438	31.7232
220008	1.2814	1.1303	30.1043	31.3385	34.7924	32.1143
220010	1.2471	1.1303	29.7998	30.7804	32.0925	30.8934
220011	1.1289	1.1487	34.4064	34.7655	36.5640	35.2410
220012	1.5403	1.2611	35.7872	37.8763	39.7564	37.8806
220015	1.1909	1.0450	28.3397	29.6315	32.4903	30.2089
220016	1.1221	1.0450	28.0608	30.4813	32.5863	30.3587
220017	1.2751	1.1843	29.7108	31.6170	33.3020	31.5466
220019	1.0840	1.1354	23.2544	24.4009	25.7855	24.4947
220020	1.2035	1.1303	26.5305	28.5288	30.8458	28.6772
220024	1.2983	1.0450	27.3488	28.7342	31.9491	29.2912
220025	1.0403	1.1354	23.0637	25.6478	30.4369	26.1069
220028	***	*	32.0980	31.7122	39.3089	34.1922
220029	1.1319	1.1303	28.6970	30.6935	31.6363	30.3492
220030	1.1315	1.0450	24.4289	26.8849	28.1347	26.5400
220031	1.6670	1.1843	34.8183	36.8477	38.9433	36.9174
220033	1.2129	1.1303	28.2539	31.8249	32.3495	30.8022
220035	1.4179	1.1303	28.6238	31.4470	34.8739	32.8577
220036	1.5119	1.1843	31.5184	33.1436	35.9124	33.5798
220046	1.4766	1.0052	28.1396	30.4460	31.4510	30.0573
220049	1.2148	1.1487	27.7518	30.4740	32.4652	30.2584
220050	1.0817	1.0450	26.3768	28.3434	29.5194	28.1065
220051	1.3058	0.9705	29.8380	30.2552	30.1022	30.0683
220052	1.1342	1.1843	29.8577	32.4130	32.3532	31.5202
220058	0.9584	1.1354	24.9642	25.7247	27.8893	26.1881
220060	1.1735	1.1843	32.3362	32.5477	34.7336	33.2260
220062	0.5718	1.1354	24.2779	25.0766	25.4224	24.9426
220063	1.2551	1.1487	27.3968	30.2866	32.9283	30.2274
220065	1.2422	1.0450	26.5513	27.6009	30.1103	28.0583
220066	1.3440	1.0450	27.1317	27.8073	29.9736	28.3106
220067	1.1846	1.1843	29.8911	30.2222	32.4019	30.8648
220070	1.1331	1.1487	31.9283	33.1299	34.2598	33.1439
220071	1.8639	1.1843	32.2936	36.5065	37.4087	35.4748
220073	1.1778	1.1303	31.3566	34.2989	36.0289	33.8953
220074	1.3058	1.1303	28.4930	30.5607	31.4730	30.1564
220B74 [4]	.....	1.1843	28.4930	30.5607	31.4730	30.1564
220075	1.5116	1.1843	29.1588	30.9175	32.2957	30.7771
220076	***	*	29.7507	27.5148	*	28.6235
220077	1.6762	1.1025	30.2684	31.7325	34.0168	32.0323
220080	1.2068	1.1303	28.9835	29.9595	31.1268	30.0450
220082	1.2840	1.1487	26.9841	30.0611	30.8230	29.3142
220083	1.0834	1.1843	32.9143	34.5118	34.5969	33.9912
220084	1.2052	1.1487	32.5711	30.9527	31.6955	31.7158
220086	1.8146	1.1843	34.3667	34.2388	35.3451	34.6686
220088	1.8790	1.1843	28.5462	35.8255	34.7637	32.6700
220089	***	*	31.1708	32.6305	34.8205	32.8410
220090	1.1951	1.1354	30.8685	32.9011	34.1963	32.7325
220095	1.1073	1.1354	27.4273	28.0673	30.8626	28.8006
220098	1.1432	1.1487	28.8314	30.5869	31.5403	30.3885

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
220100	1.3485	1.1843	29.6912	31.9859	34.6599	32.1947
220101	1.2863	1.1487	33.1690	35.3464	37.7809	35.5307
220105	1.2082	1.1487	31.9421	33.2625	34.4029	33.2435
220108	1.1284	1.1843	30.6252	32.6131	33.8854	32.3646
220110	2.0146	1.1843	36.6084	39.2167	40.7382	38.9261
220111	1.2052	1.1843	31.1850	33.6167	34.2498	33.0681
220116	1.9487	1.1843	32.9988	36.4149	38.8799	36.0050
220119	1.0940	1.1843	30.1056	30.9965	32.0863	31.1230
220126	1.1444	1.1843	28.7805	31.4882	32.6938	30.9694
220133	***	*	33.6003	29.4855	34.9182	32.6345
220135	1.3229	1.2611	33.9866	36.0203	37.5189	35.8946
220153	***	*	*	*	19.8085	19.8085
220154	0.9781	1.1843	28.6461	*	28.7898	28.7112
220162	1.6210	*	*	*	*	*
220163	1.5708	1.1354	33.6484	34.4874	37.4968	35.2942
220171	1.7187	1.1487	30.4036	32.7414	35.9948	33.0860
220174	1.2041	1.1303	31.7572	30.0406	30.9503	30.8602
220175	1.2664	*	*	*	*	*
220176	1.6820	1.1354	*	*	*	*
230002	1.2938	1.0143	29.1410	32.9010	32.7578	31.6084
230003	1.2256	0.9474	26.1278	27.5824	28.4716	27.4080
230004	1.7418	0.9968	26.7206	29.3934	31.5136	29.3059
230005	1.2619	0.9381	24.1902	25.8768	27.7463	25.8963
230006	1.0740	*	23.8835	*	*	23.8835
230013	1.3243	1.0243	23.7822	24.6511	27.2075	25.1219
230015	1.1456	0.9203	24.6571	26.2782	27.2541	26.0748
230017	1.6997	1.0500	29.5178	31.8821	32.5396	31.3897
230019	1.6525	1.0243	28.4575	32.3401	34.3213	31.6365
230020	1.7510	1.0143	29.2869	28.5646	29.5324	29.1347
230021	1.5938	1.0146	24.9551	26.5659	28.6169	26.7256
230022	1.3116	0.9906	23.3000	25.6683	30.1195	26.2393
230024	1.6711	1.0143	30.0813	32.1483	32.5892	31.6103
230027	1.0649	*	23.5511	*	*	23.5511
230029	1.6033	1.0243	29.0935	32.3538	32.3845	31.2338
230030	1.2720	0.8974	22.3174	23.8082	25.1100	23.7840
230031	1.3712	1.0033	25.4679	29.7232	30.0120	28.2715
230034	1.3767	0.8908	26.7967	24.4845	24.4141	25.2370
230035	1.2614	0.9374	21.2317	24.8822	25.6715	24.0699
230036	1.4568	0.9394	28.3622	29.3754	29.9642	29.2271
230037	1.3478	1.0143	26.2000	28.9244	28.5311	27.9038
230038	1.7887	0.9474	26.3480	28.2012	29.1263	27.9600
230040	1.2065	0.9374	24.2349	25.5154	26.3190	25.3856
230041	1.6028	0.9394	26.1760	27.8853	27.9569	27.3833
230042	***	*	26.2037	*	*	26.2037
230046	1.9067	1.0498	30.3591	31.6235	32.2924	31.4692
230047	1.4044	1.0095	28.1351	31.1771	31.7075	30.3611
230053	1.6335	1.0143	29.8703	32.5711	32.1566	31.5479
230054	1.8867	0.9357	24.9905	25.7591	26.3251	25.7015
230055	1.2660	0.8908	25.4143	27.4349	28.4787	27.1074
230058	1.1260	0.8908	24.0657	25.9291	27.3156	25.7990
230059	1.5526	0.9474	25.5350	27.9091	28.5875	27.3993
230060	1.2205	0.8908	25.5015	28.2874	27.0288	26.9333
230065	***	*	28.4631	32.6255	*	29.9929
230066	1.3080	0.9968	27.4928	30.6184	30.2104	29.5137
230069	1.1594	1.0243	29.5556	30.2663	31.3406	30.4158
230070	1.6379	0.9122	24.2342	25.6778	26.8315	25.5687
230071	0.8679	1.0243	26.3907	28.3064	29.6728	28.1431
230072	1.3908	0.9474	24.4933	26.2838	27.4742	26.0946
230075	1.3788	1.0099	27.6193	28.2540	30.9525	28.9620
230077	1.9004	1.0243	27.6157	29.8538	30.5567	29.3470
230078	1.0892	0.8908	23.9902	25.6809	25.7232	25.1289
230080	1.3052	0.9394	21.2314	24.1573	24.5432	23.3438
230081	1.1911	0.8908	23.0788	24.7374	26.4337	24.7718
230082	1.6774	*	22.2165	*	*	22.2165
230085	1.1931	1.0500	22.7313	23.4959	25.4289	23.9146
230087	***	*	16.9168	*	*	16.9168
230089	1.3368	1.0143	28.7015	31.0522	32.8450	30.6488

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
230092	1.3633	1.0143	26.3584	28.6829	29.3442	28.2036
230093	1.2101	0.8966	26.4967	25.5804	27.4463	26.5309
230095	1.3084	0.8908	21.3916	22.8681	25.1854	23.1780
230096	1.1209	1.0146	28.7681	30.6024	31.7399	30.4267
230097	1.7979	0.9374	26.5773	28.2526	29.8962	28.2268
230099	1.2073	1.0143	26.4882	29.0221	29.3720	28.3183
230100	1.1880	0.8908	21.8895	24.1881	25.2118	23.7862
230101	1.2029	0.8908	24.3772	25.4839	28.4372	26.1557
230103	***	*	21.6609	*	*	21.6609
230104	1.5968	1.0143	30.5570	32.4634	32.4125	31.7994
230105	1.8559	0.9394	27.2705	32.4583	30.5515	30.1274
230106	1.1782	0.9474	24.3980	25.3243	27.8584	25.9492
230108	1.1225	0.8908	18.4064	20.2539	24.4337	20.8956
230110	1.2978	0.8908	28.7704	27.0040	25.7196	27.1027
230117	1.8739	1.0500	29.4775	32.7994	33.0602	31.7183
230118	1.0425	0.8908	22.3636	23.6110	24.8890	23.5923
230119	1.3965	1.0143	30.2441	30.7488	31.9696	31.0539
230120	1.1884	*	24.1485	*	*	24.1485
230121	1.2817	0.9906	24.5220	26.4940	26.8361	25.9746
230130	1.7325	1.0243	26.6076	30.1608	31.2744	29.4079
230132	1.4181	1.1012	30.5318	32.3939	35.5304	32.7891
230133	1.3876	0.8908	24.3174	23.9442	25.0647	24.4539
230135	1.4429	1.0143	25.8407	25.9583	23.6005	25.1118
230141	1.6587	1.1012	28.6326	31.6152	33.2553	31.1646
230142	1.2476	1.0143	26.9433	27.8377	29.7417	28.1870
230143	***	*	21.4083	*	*	21.4083
230144	2.3494	1.0498	*	*	*	*
230146	1.3924	1.0143	26.3432	26.8156	27.2621	26.8179
230151	1.3157	1.0243	28.2243	27.4546	29.8366	28.4831
230153	***	*	22.8644	*	*	22.8644
230156	1.6271	1.0498	31.1909	32.3755	33.9034	32.4969
230165	1.6925	1.0143	28.9636	29.6376	31.4242	30.0168
230167	1.6197	1.0047	27.4562	29.8071	31.0657	29.4630
230169	***	*	31.8442	*	*	31.8442
230172	1.1867	*	25.7402	*	*	25.7402
230174	1.2752	0.9474	27.6920	30.0563	29.7488	29.1588
230176	1.2853	1.0143	27.3605	28.1498	28.9798	28.2393
230180	1.1328	0.8908	24.7358	26.0707	24.9696	25.2514
230184	***	*	23.6706	34.6295	*	25.2502
230186	***	*	26.2282	*	*	26.2282
230189	***	*	23.0100	*	*	23.0100
230190	0.8738	1.0500	29.9603	30.7875	33.8229	31.5779
230193	1.2839	1.0033	23.3565	25.1626	26.4728	25.0025
230195	1.4446	1.0095	28.2892	29.5656	30.9702	29.6539
230197	1.5799	1.1012	30.0367	32.0063	33.7128	31.9307
230204	1.3299	1.0095	29.1466	31.5615	32.2882	31.0169
230207	1.3461	1.0243	24.5201	25.4268	25.1983	25.0567
230208	1.1990	0.9374	21.9651	23.7523	24.3476	23.3648
230212	0.9926	1.0498	29.7981	31.9818	32.8567	31.5065
230216	1.5505	1.0033	27.5230	29.0147	29.2061	28.5839
230217	1.3820	1.0099	28.6074	30.1136	31.9732	30.2664
230222	1.3803	0.9394	26.9724	29.9341	30.6482	29.2060
230223	1.2980	1.0243	29.2854	28.6745	29.8430	29.2661
230227	1.5005	1.0095	29.5798	30.8218	33.6716	31.2208
230230	1.5223	1.0047	27.9607	29.8763	31.1712	29.6595
230235	1.0691	*	21.8777	*	*	21.8777
230236	1.5042	0.9474	28.4754	31.3110	30.8556	30.2130
230239	1.2714	0.8908	22.1040	21.0814	22.1579	21.7759
230241	1.2149	1.0033	27.4890	27.6106	28.5516	27.9012
230244	1.4375	1.0143	26.4326	29.6283	30.0405	28.6466
230254	1.5090	1.0243	28.1216	29.2653	29.5874	28.9733
230257	0.9484	1.0095	27.8198	29.6712	30.6372	29.3897
230259	1.2662	1.0498	26.8677	27.4217	27.5982	27.2972
230264	1.8524	1.0095	19.2398	22.7768	28.5416	23.0410
230269	1.5020	1.0243	28.8187	31.3226	31.3800	30.6060
230270	1.2636	1.0143	27.8488	28.5372	28.8173	28.4111
230273	1.5130	1.0143	29.9307	31.9862	31.5396	31.1383

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
230275	0.4718	0.9122	23.1095	23.8104	25.2133	24.0702
230277	1.4057	1.0243	29.1973	29.8372	31.4023	30.1462
230279	0.4951	1.0243	24.7673	27.2816	27.9726	26.6926
230283	***	*	26.2622	33.5531	*	27.8105
230289	***	*	29.7721	*	*	29.7721
230291	***	*	30.9656	*	*	30.9656
230292	***	*	31.8943	*	*	31.8943
230294	***	*	*	31.6195	*	31.6195
230295	***	*	*	27.1298	*	27.1298
230296	***	*	*	*	34.2107	34.2107
230297	1.6768	1.0095	*	*	*	*
230299	0.7569	1.0095	*	*	*	*
230300	2.9905	1.0095	*	*	*	*
240001	1.5368	1.0896	31.5753	33.1499	34.7673	33.1702
240002	1.8838	1.0081	28.9860	31.6000	33.1051	31.2232
240004	1.5928	1.0896	30.8072	32.7010	32.5777	32.0088
240006	1.0956	1.0490	30.1949	31.0777	33.4777	31.6176
240010	2.0512	1.0490	31.3733	33.4668	32.7261	32.5154
240013	***	*	28.3860	*	*	28.3860
240014	1.0234	1.0896	29.8623	29.8905	30.7519	30.1868
240016	1.2729	*	26.7814	*	*	26.7814
240017	1.1862	*	24.4417	24.3596	*	24.4015
240018	1.2793	0.9918	25.6236	28.1432	29.4995	27.7723
240019	1.0504	1.0081	28.6723	33.7546	32.7052	31.5906
240020	1.0690	1.0896	31.2443	31.3874	33.2449	31.9653
240021	1.0320	*	27.1236	*	*	27.1236
240022	1.0313	0.9113	25.2066	26.1920	27.3137	26.2644
240027	0.9334	*	18.2482	*	*	18.2482
240029	0.9036	*	25.3568	*	*	25.3568
240030	1.3356	1.0322	24.7154	26.5508	27.1312	26.1217
240031	***	*	26.7778	*	*	26.7778
240036	1.6944	1.1058	28.0812	32.7028	34.2980	31.6464
240038	1.5433	1.0896	31.0779	31.9891	33.0554	32.0416
240040	1.0727	1.0081	27.4895	27.5074	28.9009	27.9569
240043	1.2167	0.9113	21.8684	23.3489	24.0708	23.1186
240044	1.0578	0.9738	22.0973	25.0988	26.8681	24.6231
240047	1.5014	1.0081	28.8289	28.6406	29.7835	29.0980
240050	1.1121	1.0896	26.4854	27.5553	30.9805	28.4152
240052	1.2203	0.9113	26.4256	28.7206	29.4617	28.2289
240053	1.4790	1.0896	29.5315	31.4324	33.1148	31.4053
240056	1.2476	1.0896	31.6623	33.1728	34.0845	32.9884
240057	1.8390	1.0896	30.6258	30.7703	33.4713	31.6052
240059	1.1410	1.0896	29.7916	31.0911	32.4803	31.1825
240061	1.8232	1.0490	30.6383	33.1799	32.0828	31.9873
240063	1.6425	1.0896	32.3487	33.7895	35.2877	33.8358
240064	1.1840	0.9956	29.9662	34.3757	27.2407	30.4845
240066	1.5079	1.0896	33.4532	35.3441	36.0705	35.0117
240069	1.2056	1.0490	28.9496	29.3718	30.9719	29.7863
240071	1.1303	1.0490	28.0586	28.6950	31.7754	29.4920
240075	1.1560	1.0322	26.1956	27.5039	29.1171	27.5983
240076	1.0339	1.0896	29.8561	30.6936	33.1439	31.3353
240078	1.7528	1.0896	32.3235	32.5785	34.6118	33.2014
240080	1.9192	1.0896	31.6828	32.5725	34.8064	32.9942
240083	1.2282	*	26.6582	*	*	26.6582
240084	1.1711	1.0081	26.8141	26.5975	27.0995	26.8366
240088	1.2869	1.0322	28.0825	28.0603	29.1387	28.4292
240093	1.4134	1.0896	25.5805	27.2928	29.1717	27.3783
240100	1.3073	0.9113	27.6299	30.8391	31.5774	30.0103
240101	1.1570	0.9113	25.5355	25.6963	26.8849	26.0843
240103	***	*	22.7077	*	*	22.7077
240104	1.1350	1.0896	31.4306	31.6511	35.0736	32.8285
240106	1.6075	1.0896	29.3455	30.5927	32.8156	30.9392
240109	0.8676	*	16.5051	*	*	16.5051
240115	1.5330	1.0896	31.3869	32.0107	33.5288	32.3224
240117	1.1821	0.9640	23.6230	24.5750	27.6950	25.3203
240123	***	*	21.7500	*	*	21.7500
240128	***	*	21.5791	23.3334	*	22.4504

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
240132	1.2808	1.0896	31.7139	32.1233	34.6191	32.7811
240141	1.1219	1.0896	26.4016	31.4468	32.8689	30.5116
240143	0.8966	*	21.7416	*	*	21.7416
240152	***	*	29.6196	*	*	29.6196
240162	***	*	22.2722	*	*	22.2722
240166	1.1560	0.9113	25.7509	27.6987	26.5328	26.6686
240187	1.3285	1.0896	27.8811	27.8844	29.1582	28.3455
240196	0.8200	1.0896	30.7720	31.5965	34.3743	32.2603
240206	0.8831	1.4400	*	*	*	*
240207	1.1964	1.0896	31.7665	32.5589	34.6792	33.0557
240210	1.2901	1.0896	32.1564	32.7123	34.4184	33.1005
240211	0.9769	0.9925	18.8503	22.5430	17.4044	19.3517
240213	1.3936	1.0896	32.7532	33.8680	35.7818	34.1758
250001	1.9108	0.7950	22.7827	23.5222	23.7773	23.3786
250002	0.9543	0.7752	23.3844	23.4063	25.4201	24.0840
250004	1.9118	0.8963	24.1065	24.7907	25.8722	24.9584
250006	1.1133	0.8963	24.0191	24.4282	25.9199	24.8140
250007	1.2414	0.8607	25.8710	24.8929	27.7665	26.1862
250009	1.2438	0.8435	22.2323	23.0352	23.4866	22.9223
250010	0.9922	0.7752	19.4402	21.4322	21.8665	20.9164
250012	0.9498	0.9313	20.2922	21.5540	23.4837	21.7607
250015	1.1227	0.7752	20.7555	22.0067	22.2803	21.6585
250017	1.0264	0.7752	21.3950	22.7660	33.6840	25.4569
250018	0.8983	0.7752	16.6292	17.1276	17.9025	17.2152
250019	1.5215	0.8607	23.9741	25.7376	26.2199	25.3039
250020	0.9941	0.7752	21.4019	22.1851	23.7245	22.4970
250021	***	*	20.3564	*	*	20.3564
250023	0.8728	0.8216	16.2418	18.0108	18.5067	17.6056
250025	1.0996	0.7752	20.5258	22.5621	23.1738	22.1091
250027	0.9597	0.7752	17.3481	24.4937	26.9922	22.7357
250031	1.3166	0.7950	21.4326	24.8139	25.9189	23.7971
250034	1.5394	0.8963	24.3189	26.1887	26.7996	25.7643
250035	0.8596	0.7752	17.2046	20.1622	19.1038	18.8948
250036	1.0403	0.8539	19.1975	20.3625	19.7951	19.8104
250037	0.9020	*	17.4012	*	*	17.4012
250038	0.9406	0.7950	18.9050	22.2571	26.9621	22.1505
250039	0.9692	*	17.3155	*	*	17.3155
250040	1.4843	0.8216	23.2285	24.5962	27.3366	25.0602
250042	1.2097	0.8963	23.4135	25.6807	26.1190	25.0569
250043	1.0165	0.7752	19.8097	18.8979	20.8841	19.8723
250044	1.0512	0.7752	23.3862	24.0508	24.9199	24.1132
250045	0.8706	*	26.3831	*	*	26.3831
250048	1.6242	0.7950	22.9765	25.2092	24.7659	24.3112
250049	0.8734	0.7752	17.7005	19.1044	20.4775	19.2031
250050	1.1882	0.7752	19.1467	20.8084	21.1657	20.4032
250051	0.8083	0.7752	10.6095	14.3741	13.9532	12.9323
250057	1.1237	0.7752	20.1900	22.7601	24.3654	22.3993
250058	1.2419	0.7752	18.1704	19.2502	18.9970	18.8129
250059	0.9234	0.7752	19.2976	23.8997	26.7491	23.0906
250060	0.8007	0.7752	16.8247	28.1431	25.4779	22.9648
250061	0.9008	0.7752	12.8174	17.8267	18.7413	16.2215
250067	1.0773	0.7752	21.6911	23.1193	25.2189	23.3711
250069	1.4798	0.8162	22.8162	22.6353	22.4194	22.6160
250072	1.6974	0.7950	24.6587	25.8399	25.5337	25.3438
250077	0.9375	0.7752	14.7632	18.3735	19.0416	17.4307
250078	1.6957	0.8216	20.9354	22.1243	22.8430	21.9367
250079	0.8566	0.7950	38.0032	45.5166	43.0845	42.6371
250081	1.3341	0.8162	24.7031	23.9995	25.6808	24.7915
250082	1.4638	0.7955	19.6966	23.0287	23.5399	22.0713
250084	1.2087	0.7752	18.5775	19.6492	19.1604	19.1217
250085	0.9997	0.7752	19.7008	22.5513	24.2915	22.2573
250093	1.1868	0.7752	21.3237	23.0984	23.9128	22.7658
250094	1.7390	0.8216	22.7312	24.1422	24.7718	23.8835
250095	1.0356	0.7752	21.3511	21.7488	23.6140	22.2444
250096	1.1760	0.7950	22.6298	24.9187	26.3743	24.6259
250097	1.6155	0.8009	20.1687	21.8139	22.0211	21.3430
250099	1.2795	0.7950	19.5797	21.1269	21.5656	20.7220

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
250100	1.4728	0.8162	24.2209	25.6846	27.0286	25.6566
250101	***	*	19.3543	*	*	19.3543
250102	1.5957	0.7950	24.2868	24.6652	25.4050	24.7885
250104	1.4888	0.8162	22.6591	23.4303	24.4311	23.5422
250105	0.9250	*	18.1195	*	*	18.1195
250107	0.5882	*	17.8999	*	*	17.8999
250112	0.9893	0.7752	21.2824	24.3069	26.3357	23.9697
250117	1.1062	0.8216	23.3673	22.2450	23.7337	23.1049
250120	***	*	23.4277	24.6370	26.6522	24.9400
250122	1.1115	0.7752	24.5854	27.2795	27.4424	26.3827
250123	1.3323	0.8607	24.5115	26.6221	27.9058	26.3779
250124	0.8198	0.7950	17.2181	20.4394	20.5667	19.3927
250125	1.2242	0.8607	27.7077	27.5158	26.7687	27.3398
250126	0.9523	0.7752	21.7112	24.4126	25.0019	23.6618
250127	0.8846	1.4400	*	*	*	*
250128	0.9268	0.8198	17.6269	17.7624	21.7882	19.2637
250134	0.8858	0.7950	25.8369	22.2167	21.0211	22.9411
250136	1.0311	0.7950	23.0637	22.9468	25.2241	23.7171
250138	1.3296	0.7950	23.8861	24.3018	25.2642	24.4955
250141	1.5435	0.9313	27.6158	28.5922	30.5112	28.9880
250146	0.7934	*	18.6486	*	*	18.6486
250149	0.8337	0.7752	15.0641	16.8796	17.2268	16.4094
250151	0.4710	0.7752	17.2205	18.8846	22.8238	18.4860
250152	0.8555	0.7950	25.7837	26.9334	26.4559	26.3576
250153	***	*	29.0461	*	*	29.0461
250155	***	*	*	22.5728	*	22.5728
250156	***	*	*	*	16.8659	16.8659
250157	***	*	*	*	29.6398	29.6398
250160	2.3735	0.8198	*	*	*	*
250161	2.1565	0.7950	*	*	*	*
260001	1.6505	0.9211	25.9250	27.9230	29.5271	27.7489
260002	***	*	26.4879	*	*	26.4879
260004	0.9691	0.8153	16.9422	20.3217	21.3629	19.5753
260005	1.5536	0.8982	26.5773	27.7855	27.9477	27.4315
260006	1.4872	0.8153	26.7587	30.3440	27.3754	28.2413
260008	***	*	18.9522	*	*	18.9522
260009	1.1605	0.9318	22.1816	24.2360	25.7546	24.0697
260011	1.5003	0.8702	22.7062	25.6387	27.5762	25.2813
260012	***	*	20.3061	*	*	20.3061
260013	***	*	20.5007	*	*	20.5007
260015	1.0079	0.8503	22.5409	24.6139	25.0640	24.0564
260017	1.3285	0.8702	22.7022	23.5713	25.0461	23.8093
260018	1.0396	*	17.0434	*	*	17.0434
260020	1.7374	0.8982	26.0407	27.4730	29.3080	27.6649
260021	1.3986	0.8982	27.6329	29.3646	32.6735	29.7171
260022	1.4082	0.8476	22.8085	23.3393	24.8713	23.6527
260023	1.3554	0.8982	21.2077	24.3192	25.4314	23.5901
260024	1.1334	0.8153	18.4829	19.4952	19.2199	19.0583
260025	1.3603	0.8982	22.4645	22.2451	24.0358	22.9418
260027	1.6405	0.9318	25.3348	26.3590	29.3811	27.0039
260032	1.8518	0.8982	23.9478	25.6763	27.4857	25.6996
260034	0.9779	0.9318	24.1143	25.0573	27.1685	25.5196
260035	***	*	17.8741	*	*	17.8741
260036	***	*	22.1913	*	*	22.1913
260040	1.6616	0.8791	23.3566	24.3938	25.9074	24.5552
260047	1.4495	0.8702	24.4185	25.4978	26.6343	25.5319
260048	1.1748	0.9318	24.3906	27.6117	28.1515	26.7038
260050	1.1594	0.8826	23.6849	25.0506	26.2346	25.0319
260052	1.3105	0.8982	24.5165	26.0052	27.6360	26.0330
260053	1.0761	*	21.6607	*	*	21.6607
260057	1.0689	0.9318	19.3335	20.9639	21.5925	20.6154
260059	1.1569	0.8230	19.7243	22.6922	22.3885	21.6448
260061	1.1348	0.8153	21.5264	22.4766	22.8589	22.2793
260062	1.2554	0.9318	26.4539	28.1661	28.4975	27.7053
260064	1.3816	0.8537	19.0543	22.2395	23.3498	21.5194
260065	1.7758	0.8791	23.0015	27.1014	29.3564	26.5324
260067	0.9311	*	17.6256	*	*	17.6256

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
260068	1.7942	0.8537	24.9504	26.0295	27.3475	26.1217
260070	0.9560	0.8153	18.4779	24.6331	21.9701	21.9657
260073	***	*	21.6214	*	*	21.6214
260074	1.2370	0.8537	24.8655	25.6218	28.0468	26.1521
260077	1.6220	0.8982	25.5782	26.7466	27.6624	26.6607
260078	1.2824	0.8153	19.0802	20.1983	21.1539	20.1477
260080	0.9199	0.8153	14.7774	17.9107	18.6070	17.0074
260081	1.5693	0.8982	26.3969	28.1182	29.1890	27.9120
260085	1.5678	0.9318	25.6302	26.6718	28.0306	26.7545
260086	0.9570	*	19.1702	*	*	19.1702
260091	1.5284	0.8982	27.2407	28.0537	28.5473	27.9539
260094	1.7033	0.8619	23.2544	24.1473	23.8654	23.7602
260095	1.3886	0.9318	25.5668	24.2698	27.6196	25.7194
260096	1.5016	0.9318	27.5592	29.7312	30.7267	29.3752
260097	1.2010	0.8453	21.3957	25.0624	25.5634	24.1104
260102	0.9492	0.9318	24.2368	27.2145	26.7624	26.1065
260104	1.5666	0.8982	26.2867	28.6247	28.0235	27.6814
260105	1.8547	0.8982	28.8849	29.8848	29.4766	29.4216
260107	1.2949	0.9318	26.7781	25.8177	27.9710	26.8276
260108	1.8354	0.8982	24.9880	26.6374	27.0758	26.2658
260110	1.6385	0.8982	23.7978	24.7656	26.6030	25.1086
260113	1.1068	0.8345	20.9644	21.2072	21.8884	21.3627
260115	1.1422	0.8982	21.9858	23.1396	24.6389	23.3012
260116	1.0970	0.8240	18.5076	21.3503	20.7479	20.1811
260119	1.3301	0.8503	24.9937	27.9769	31.5490	28.0677
260122	***	*	20.8015	*	*	20.8015
260127	0.9486	*	21.8533	*	*	21.8533
260137	1.7241	0.9211	22.7431	24.3273	27.6592	24.9488
260138	1.9932	0.9318	28.5610	30.4410	30.6284	29.8958
260141	1.8464	0.8537	22.4886	24.1555	25.5663	24.0283
260142	1.0863	0.8153	20.3993	21.5923	21.7609	21.2699
260147	0.9227	0.8153	18.5153	21.4235	22.1928	20.7819
260159	***	*	23.7427	22.6276	23.9515	23.4460
260160	1.0727	0.8153	21.0544	23.8257	25.5096	23.4627
260162	1.3822	0.8982	25.1423	27.0236	28.4660	26.9323
260163	1.1447	0.8240	20.1949	21.6408	21.5566	21.0997
260164	1.3771	*	19.7068	*	*	19.7068
260166	1.2270	0.9318	27.0237	29.1225	28.5858	28.2382
260175	1.0781	0.9318	22.6171	25.1817	24.6064	24.1908
260176	1.7021	0.8982	27.4244	29.3034	31.1056	29.3206
260177	1.2063	0.9318	26.1178	27.0185	28.7942	27.3136
260178	1.8398	0.8537	22.2251	25.4782	27.1201	25.2036
260179	1.5496	0.8982	26.1419	26.6069	28.3234	27.0262
260180	1.5401	0.8982	26.7461	28.2931	29.3820	28.1562
260183	1.6674	0.8982	26.0418	27.5577	29.2684	27.6352
260186	1.5439	0.8702	25.3148	26.9797	28.8610	27.0998
260190	1.1950	0.9318	26.4505	27.9137	30.5343	28.3451
260191	1.3649	0.8982	23.3856	24.6973	26.3244	24.8437
260193	1.1902	0.9318	26.2979	26.8922	28.1060	27.0944
260195	1.2138	0.8153	22.3959	22.6870	24.0411	23.0824
260198	0.9613	0.8982	27.5996	28.0021	27.2555	27.6065
260200	1.2664	0.8982	24.8624	28.2453	27.4784	26.8903
260207	1.1544	0.8791	19.7294	22.6109	22.9579	22.0292
260209	1.1052	0.8702	23.2430	25.0098	25.0749	24.4649
260210	1.2687	0.8982	25.3781	26.8745	30.5975	27.6599
260211	1.5777	0.9318	33.9109	40.9821	35.9113	37.0332
260213	***	*	*	*	34.8953	34.8953
260214	1.2383	0.9318	*	*	*	*
260215	0.8925	*	*	*	*	*
260216	1.1892	0.9318	*	*	*	*
260217	1.9096	0.8153	*	*	*	*
270002	1.1596	0.8335	22.7322	24.0534	25.2907	24.0317
270003	1.3075	0.8761	26.4843	28.8700	29.1938	28.2090
270004	1.6785	0.8870	23.5454	26.1319	26.6779	25.4900
270011	1.0334	0.8335	22.1394	22.7061	24.4696	23.0853
270012	1.5540	0.8761	25.2873	25.2914	26.5854	25.7202
270014	1.9641	0.8738	26.2025	25.8231	27.4811	26.5073

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
270017	1.3197	0.8738	27.5483	26.5404	27.4150	27.1724
270021	***	*	21.7056	*	*	21.7056
270023	1.5487	0.8738	26.7576	25.5682	26.3076	26.1917
270032	1.0283	0.8335	19.6212	20.3469	20.4330	20.1359
270036	***	*	20.4241	*	*	20.4241
270049	1.7517	0.8870	26.3996	27.1634	28.6880	27.4297
270051	1.5580	0.8335	26.6619	26.5621	24.9371	25.9492
270057	1.2534	0.8335	24.2980	25.5811	27.1838	25.7301
270060	***	*	17.7564	*	*	17.7564
270074	0.9156	1.4400	*	*	*	*
270081	0.9750	0.8569	17.4862	19.5612	20.0438	18.9885
270086	1.0637	0.8761	*	21.0808	20.7976	20.9433
270087	1.2167	0.8335	*	25.9772	24.8022	25.3663
280003	1.7479	0.9872	29.3921	30.6124	30.1057	30.0354
280009	1.8630	0.9626	26.7678	27.0705	29.3634	27.7395
280013	1.7335	0.9473	26.1908	27.0250	27.9523	27.0727
280020	1.7374	0.9872	26.5068	27.3284	32.3896	28.7656
280021	1.1678	*	22.0489	*	*	22.0489
280023	1.3669	0.9626	22.3230	26.7980	29.5132	26.0305
280030	1.8904	0.9473	30.7481	29.5102	30.6991	30.3314
280032	1.2987	0.9626	23.6462	24.3995	24.7539	24.2697
280040	1.6380	0.9473	26.9827	28.7207	29.5276	28.4319
280054	1.1439	*	23.5665	*	*	23.5665
280057	0.8606	*	20.4830	*	*	20.4830
280060	1.6779	0.9473	26.2139	27.7496	30.3049	28.0748
280061	1.3957	0.9009	24.9482	26.0208	26.4824	25.8457
280065	1.2385	0.9744	26.0135	28.0581	28.0132	27.3416
280077	1.3374	0.8926	25.5624	27.0860	28.2206	26.9878
280081	1.7068	0.9473	26.0541	28.7464	31.1212	28.6426
280105	1.2617	0.9473	26.7555	27.8599	29.8488	28.1889
280108	1.0740	*	23.2503	*	*	23.2503
280111	1.1900	0.8846	23.4770	24.5617	27.4853	25.3180
280117	1.1038	*	24.1521	*	*	24.1521
280119	0.8357	1.4400	*	*	*	*
280123	0.9968	0.8969	*	15.4047	22.2185	17.7515
280125	1.5929	0.8846	21.7657	22.1345	23.2900	22.4202
280127	1.7915	0.9872	*	29.3684	25.6806	27.2615
280128	2.9055	0.9872	*	28.5422	28.8734	28.7213
280129	1.9024	0.9473	*	*	27.8793	27.8793
280130	1.3731	0.9473	*	*	29.8588	29.8588
290001	1.8514	1.1062	31.1981	36.3129	35.5113	34.2992
290002	0.9058	0.9701	18.3469	17.3876	23.9348	19.4284
290003	1.8286	1.1452	28.1625	30.3373	32.8182	30.4051
290005	1.4267	1.1452	27.6697	28.3366	31.7107	29.0818
290006	1.1835	1.0851	27.9501	31.7301	31.9838	30.5940
290007	1.6319	1.1452	37.5559	38.1938	39.7323	38.5049
290008	1.2061	0.9701	27.9714	27.3019	31.1116	28.8004
290009	1.7155	1.1062	29.8019	36.2724	32.3348	32.7010
290010	***	*	23.9655	*	*	23.9655
290012	1.3595	1.1452	31.0843	32.3966	35.7988	33.1284
290016	***	*	26.1925	*	*	26.1925
290019	1.4106	1.0851	28.6158	29.3650	30.5964	29.5670
290020	0.9879	0.9701	21.6993	23.2103	27.6277	23.8492
290021	1.7447	1.1452	33.2116	32.7894	36.7310	34.3050
290022	1.6617	1.1452	29.4422	29.9717	33.5330	30.9653
290027	0.8977	0.9701	15.1448	23.9959	23.9818	21.2171
290032	1.4261	1.1062	31.7105	31.6711	34.6589	32.6749
290039	1.5622	1.1452	31.2941	32.1423	34.9622	32.8643
290041	1.3799	1.1452	33.9877	34.2436	37.6077	35.4456
290042	***	*	*	*	22.4859	22.4859
290044	***	*	*	37.1662	*	37.1662
290045	1.5944	1.1452	30.9612	33.1512	34.4584	33.0001
290046	1.3262	1.1452	*	*	38.7966	38.7966
290047	1.4997	1.1452	*	*	33.4695	33.4695
290049	1.3649	0.9701	*	*	26.0725	26.0725
290051	1.6073	0.9701	*	*	*	*
290052	0.9497	0.9701	*	*	*	*

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
300001	1.5464	1.1259	27.5032	29.2260	29.8145	28.8796
300003	2.1048	1.1259	33.3560	34.7900	37.0886	35.1221
300005	1.4049	1.1259	25.6699	27.8000	27.8431	27.1342
300006	***	*	23.3200	*	*	23.3200
300010	***	*	27.5028	*	*	27.5028
300011	1.2835	1.1328	28.4044	30.9403	31.8928	30.4453
300012	1.3798	1.1328	30.5198	30.4972	31.2655	30.7729
300014	1.1573	1.1259	27.5151	29.7667	29.1847	28.8592
300017	1.3085	1.1259	29.6957	29.9560	31.6699	30.4413
300018	1.4139	1.1259	29.7209	29.4270	31.7891	30.3785
300019	1.2712	1.1259	25.9656	27.5672	28.2287	27.2950
300020	1.1611	1.1328	28.6723	30.8491	30.9783	30.1937
300023	1.3397	1.1259	28.6309	31.0040	31.2726	30.3861
300029	1.7558	1.1259	29.0806	29.8117	31.4429	30.1534
300034	1.9005	1.1328	29.7484	30.7676	31.6880	30.7463
310001	1.7835	1.3229	35.3612	41.7460	39.3391	38.8076
310002	1.8123	1.3001	37.3461	37.9183	37.8652	37.7010
310003	1.1430	1.3229	32.8935	36.2346	39.0785	36.1404
310005	1.3200	1.1673	29.0084	32.1319	33.6311	31.6195
310006	1.2207	1.3229	27.4545	28.4771	28.7321	28.2234
310008	1.3040	1.3229	31.2579	32.6788	33.3172	32.4236
310009	1.3170	1.3001	32.7384	33.6940	33.6165	33.3550
310010	1.2809	1.1616	28.5852	33.9552	33.7009	32.1235
310011	1.2513	1.1616	30.8612	31.2907	34.3497	32.1653
310012	1.6576	1.3229	34.6882	38.3590	39.8568	37.6617
310013	1.3567	1.3001	30.6248	31.0447	35.6260	32.2970
310014	1.9393	1.1616	29.7204	30.0793	32.9016	30.9529
310015	1.9968	1.3001	36.4776	36.8818	39.2928	37.5859
310016	1.3504	1.3229	33.9862	35.6155	38.2740	36.0399
310017	1.3322	1.3001	30.9233	32.2434	35.7308	32.9489
310018	1.1974	1.3001	30.3381	30.3234	32.9704	31.1743
310019	1.5532	1.3229	29.6592	30.3518	30.6369	30.2334
310020	1.5417	1.3229	30.6722	33.5516	37.3372	35.3958
310021	1.6673	1.1616	31.3410	32.1929	31.6562	31.7278
310022	1.2929	1.1616	28.2024	30.4043	31.1951	29.9534
310024	1.2735	1.1673	30.9171	33.3415	33.8622	32.7353
310025	1.3583	1.3229	31.1274	34.3687	32.2630	32.6293
310026	1.1811	1.3229	27.5171	29.1588	30.1392	28.9609
310027	1.3916	1.1673	28.8314	29.7793	31.5967	30.0516
310028	1.1683	1.1673	31.3849	32.2977	33.9911	32.5804
310029	1.9359	1.1616	30.7707	32.9246	33.6695	32.4534
310031	3.0047	1.1616	33.9685	37.0668	39.3783	36.7939
310032	1.3402	1.1616	27.5232	30.7865	33.0258	30.4634
310034	1.3881	1.1616	29.9162	31.7012	32.7523	31.4431
310037	1.3845	1.3229	35.0329	38.5415	38.2865	37.2934
310038	1.9967	1.3001	33.4822	35.9190	36.3344	35.3017
310039	1.2652	1.3001	28.8292	31.4278	33.2100	31.1031
310040	1.3306	1.3229	34.1113	33.8535	37.7945	35.2738
310041	1.3033	1.1616	32.8085	32.8390	33.9799	33.1814
310042	***	*	30.7357	34.4986	*	32.5359
310044	1.3437	1.1616	31.3205	31.9678	33.7614	32.3239
310045	1.6620	1.3229	34.1060	36.7862	38.4424	36.4052
310047	1.3103	1.2063	32.7880	34.1520	37.3695	34.8319
310048	1.3604	1.1616	30.2025	32.9681	33.9506	32.4220
310049	***	*	27.8565	*	*	27.8565
310050	1.2632	1.3001	27.3033	29.1732	32.3686	29.5226
310051	1.4210	1.1673	33.7168	35.0121	38.1174	35.6230
310052	1.3148	1.1616	30.8036	32.5778	33.5849	32.3047
310054	1.3491	1.3001	34.1860	34.4431	36.9095	35.1806
310057	1.3580	1.1616	29.5221	31.1268	31.8933	30.8472
310058	1.0998	1.3229	28.0815	27.1555	30.4080	28.5500
310060	1.2257	1.1616	25.1575	27.3415	27.8242	26.8643
310061	1.2040	1.1616	28.2129	31.6648	39.0538	32.6390
310063	1.3566	1.1673	31.4884	31.9247	33.8519	32.4001
310064	1.5564	1.2063	33.4440	35.7607	38.6310	36.0389
310069	1.2283	1.1616	28.1681	31.7642	34.4669	31.6153
310070	1.4393	1.3001	33.2310	34.3225	36.3279	34.6577

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
310073	1.9384	1.1616	32.0328	32.6733	34.2858	33.0132
310074	1.4076	1.3229	29.4834	40.3494	39.6196	36.4297
310075	1.3486	1.1616	31.6869	31.5226	32.5338	31.9060
310076	1.6948	1.3001	36.4280	38.0643	37.5163	37.3327
310077	***	*	32.6644	34.6085	*	33.6290
310078	***	*	29.8014	30.5761	*	30.1919
310081	1.2435	1.1616	26.6136	30.1561	31.0699	29.3013
310083	1.2967	1.3001	28.2392	30.3580	31.9151	30.1908
310084	1.2495	1.1616	32.9001	33.5941	32.6051	33.0233
310086	1.2196	1.1616	29.3058	29.5566	29.8794	29.5860
310088	1.1944	1.2063	26.4966	29.9929	30.3552	28.9197
310090	1.2491	1.1673	30.8941	32.8191	33.4615	32.3298
310091	1.1872	1.1616	27.7204	29.3969	31.9762	29.6739
310092	1.4211	1.1616	29.4998	29.7958	32.7054	30.6412
310093	1.2376	1.3001	28.0401	29.1288	30.2860	29.1452
310096	2.0682	1.3001	34.4275	34.1524	35.0707	34.5571
310105	1.2642	1.3229	31.9769	30.1069	32.5672	31.5194
310108	1.3920	1.3001	30.1002	33.0172	34.5866	32.5569
310110	1.3054	1.1616	31.2164	33.2246	33.4809	32.6996
310111	1.2374	1.1616	30.7475	31.8393	34.8284	32.5303
310112	1.3369	1.1616	30.4192	31.2372	32.2676	31.3091
310113	1.2469	1.1616	29.6079	31.0436	33.6771	31.5140
310115	1.3257	1.1616	29.6020	29.5320	31.9208	30.3993
310116	1.2613	1.3229	25.6976	29.2748	29.8144	28.1684
310118	1.2995	1.3229	28.8797	31.1803	31.2296	30.4800
310119	1.9452	1.3001	37.7876	43.1238	41.5702	40.9091
310120	1.1067	1.1673	31.4111	29.2535	33.3861	31.2922
310122	***	*	*	*	41.9029	41.9029
310123	***	*	*	*	37.1022	37.1022
310124	***	*	*	*	41.8827	41.8827
310125	***	*	*	*	36.2186	36.2186
310126	1.5770	1.1673	*	*	*	*
310127	2.1663	1.1616	*	*	*	*
320001	1.6904	0.9725	26.9434	29.6182	30.0077	28.9126
320002	1.4655	1.0682	30.5158	32.0477	33.1342	31.9538
320003	1.1309	1.0379	28.1402	27.6222	31.4473	29.2088
320004	1.3372	0.8965	24.9481	24.7803	26.2073	25.3027
320005	1.3986	0.9725	23.8264	24.7543	28.7893	25.7109
320006	1.3191	0.9725	24.2812	26.9080	28.0964	26.5135
320009	1.5653	0.9725	22.8293	32.0116	27.8084	27.0081
320011	1.1591	0.9407	24.2279	25.6693	27.9522	25.9810
320013	1.1095	1.0379	28.9276	22.8283	30.5865	26.9423
320014	1.0798	0.8965	24.5310	27.2806	28.7089	26.9267
320016	1.1809	0.8965	23.5040	25.0835	27.1492	25.3050
320017	1.1952	0.9725	25.0286	31.6357	33.3496	30.1544
320018	1.4708	0.8989	23.2360	26.5109	25.9248	25.0333
320019	1.5804	0.9725	31.5192	27.8067	35.0217	30.9860
320021	1.6072	0.9725	27.2357	26.9918	28.8504	27.7586
320022	1.1616	0.8965	23.7160	23.9595	25.3707	24.3634
320030	1.0991	0.8965	22.1971	21.0378	24.4497	22.6078
320033	1.1954	1.0379	27.6393	31.7114	30.1471	29.8084
320037	1.2522	0.9725	23.3999	24.9657	25.2876	24.5736
320038	1.2776	0.8965	20.1533	21.7022	32.7192	25.2889
320046	***	*	24.3534	*	*	24.3534
320057	0.8729	1.4400	*	*	*	*
320058	0.7716	1.4400	*	*	*	*
320059	0.8739	1.4400	*	*	*	*
320060	0.9509	1.4400	*	*	*	*
320061	0.8807	1.4400	*	*	*	*
320062	0.8932	1.4400	*	*	*	*
320063	1.3138	0.9522	24.4696	25.0031	26.0104	25.1846
320065	1.3090	0.9522	26.6603	27.3163	25.7945	26.5978
320067	0.8771	0.8965	23.7745	24.9865	24.7025	24.5152
320069	1.1009	0.8965	20.9167	22.4128	23.9863	22.4807
320070	0.9497	1.4400	*	*	*	*
320074	1.1777	0.9725	22.2175	31.1333	28.4396	27.5523
320079	1.0746	0.9725	25.2105	26.1188	27.6877	26.3861

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
320083	2.5829	0.9725	28.2114	26.6921	29.5483	28.1910
320084	0.9585	0.8965	17.2511	17.5788	22.7706	19.1172
320085	1.6988	0.8989	24.8752	27.9944	27.4100	26.8654
330001	***	*	33.4718	*	*	33.4718
330002	1.4701	1.3229	31.1924	30.9600	32.1956	31.4367
330003	1.3898	0.8667	22.9945	24.4326	25.2223	24.2261
330004	1.2772	1.0762	26.0445	28.0594	30.2236	28.0555
330005	1.5846	0.9588	29.0124	30.3200	31.5030	30.2924
330006	1.2549	1.3229	31.5370	33.6284	34.2001	33.1191
330008	1.1962	0.9588	21.8198	23.4429	25.2005	23.4731
330009	1.2209	1.3229	35.4986	36.2820	38.9166	36.8498
330010	0.9609	0.8470	19.6920	20.7476	19.7098	20.0039
330011	1.3861	0.9068	21.8008	25.1308	27.4747	24.7766
330013	1.8871	0.8667	24.5162	26.4578	26.8382	25.9719
330014	1.3021	1.3229	38.8123	42.1759	45.7619	42.1087
330016	***	*	28.4391	22.0493	23.0769	24.0047
330019	1.2350	1.3229	34.8266	38.5368	39.7429	37.6992
330023	1.5532	1.2341	31.6208	35.9428	36.4736	34.8790
330024	1.8568	1.3229	37.8398	42.7691	43.2342	41.1289
330025	1.0759	0.9588	20.2776	21.2565	23.2424	21.5975
330027	1.3410	1.3001	39.0717	42.8000	45.1920	42.3263
330028	1.4248	1.3229	34.2709	36.6498	36.2901	35.6915
330029	0.4658	0.9588	19.1589	23.2039	24.0679	21.4788
330030	1.2420	0.8918	22.9937	24.6175	25.3454	24.2688
330033	1.1925	0.8630	22.5680	24.5510	24.8022	23.9493
330036	1.1741	1.3229	28.9409	29.1884	30.3757	29.5029
330037	1.1940	0.8918	20.6904	22.3689	21.9246	21.6480
330041	1.3233	1.3229	36.0286	37.4883	36.9934	36.8228
330043	1.3835	1.2877	34.7480	39.1643	38.8060	37.6024
330044	1.3073	0.8416	24.1907	26.5669	28.2293	26.3415
330045	1.3333	1.2877	36.1893	38.1269	40.0326	38.1677
330046	1.3813	1.3229	44.8494	50.3152	47.4975	47.5047
330047	1.1878	0.8470	24.0678	24.3932	24.9934	24.5012
330049	1.5198	1.2341	29.2904	29.8350	34.8585	31.4556
330053	1.0489	0.8918	18.5289	20.6272	21.8383	20.3286
330055	1.5717	1.3229	38.4839	41.5934	42.2007	40.8306
330056	1.4406	1.3229	37.8444	36.0136	38.8910	37.5789
330057	1.7329	0.8667	24.4680	26.4989	27.7121	26.2563
330058	1.2624	0.8918	21.3727	22.2524	22.6852	22.1185
330059	1.5241	1.3229	39.7387	41.7343	44.9162	42.1521
330061	1.1882	1.3229	33.2848	36.0587	37.8828	35.7862
330062	2.5188	*	21.0464	*	*	21.0464
330064	1.1797	1.3229	36.4276	38.0437	38.2332	37.5276
330065	1.0343	0.9588	23.9128	25.3043	24.4004	24.5186
330066	1.2786	0.8667	24.7941	29.1780	25.8174	26.6320
330067	1.4312	1.2341	26.4243	27.8900	29.2571	27.8298
330072	1.3677	1.3229	36.4336	37.8505	39.6996	37.9172
330073	1.0856	0.8918	20.1490	22.5592	23.4020	22.0432
330074	1.2120	0.8918	21.4274	22.6629	23.4576	22.5315
330075	1.1282	0.9950	22.4188	23.1592	24.2552	23.2899
330078	1.4627	0.9588	23.3981	25.8073	27.2870	25.5271
330079	1.3912	0.9427	22.5237	24.6054	24.9941	24.0665
330080	1.1613	1.3229	39.1724	39.1417	38.9405	39.0850
330084	1.0884	0.8416	21.5455	22.5573	25.6880	23.2872
330085	1.1341	0.9602	23.9568	25.3285	26.6235	25.3048
330086	1.3276	1.3229	29.1784	32.7675	35.5269	32.6267
330088	1.0140	1.2877	31.3973	34.0789	35.3871	33.6067
330090	1.4711	0.8416	23.6174	25.5351	26.8730	25.3567
330091	1.3626	0.9588	23.8063	25.9378	27.0040	25.6221
330094	1.2531	0.9270	23.0001	25.7116	26.9148	25.1933
330095	***	*	31.9873	*	*	31.9873
330096	1.2247	0.8416	22.0337	22.7189	24.2422	22.9958
330097	1.0476	*	20.3189	*	*	20.3189
330100	1.0885	1.3229	34.4621	38.3333	39.6244	37.5351
330101	1.9277	1.3229	38.7503	40.1929	43.7944	40.9964
330102	1.3807	0.9588	24.8184	25.3879	26.6887	25.6620
330103	1.1464	0.8416	21.1452	22.8242	24.5585	22.8019

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
330104	1.3459	1.3229	32.8818	33.7537	35.1076	33.9518
330106	1.7219	1.3001	41.4561	43.8210	46.3657	43.9257
330107	1.2616	1.2877	31.3888	34.9047	35.7384	34.0853
330108	1.1667	0.8416	22.2607	23.2919	23.9368	23.1807
330111	1.0707	0.9588	20.9387	20.3473	40.4349	24.2740
330115	1.1806	0.9950	23.3043	25.2373	23.8235	24.1488
330119	1.7980	1.3229	39.1114	39.0528	42.2901	40.1403
330125	1.7884	0.8918	26.7119	27.2920	28.0584	27.3748
330126	1.3165	1.3001	31.6370	35.2257	36.5689	35.2864
330127	1.3535	1.3229	44.6103	45.3680	45.2993	45.0871
330128	1.2254	1.3229	37.7166	39.5197	41.7790	39.6524
330132	1.1447	0.8540	17.4946	21.0479	21.7648	20.0521
330133	1.3564	1.3229	36.6962	39.3837	38.5228	38.1376
330135	1.1403	1.1624	29.0837	27.9132	32.0525	29.6962
330136	1.5167	0.9602	24.2010	25.8531	26.6680	25.5995
330140	1.8311	0.9950	25.7573	27.6183	29.3461	27.5931
330141	1.3221	1.2877	34.8902	39.4701	39.3741	38.0047
330144	1.0380	0.8416	20.9935	22.9561	23.3874	22.4515
330151	1.1204	0.8416	19.1841	21.7665	19.7959	20.1957
330152	1.2991	1.3229	36.5136	37.6721	38.2079	37.4707
330153	1.7292	0.8667	24.5219	26.4386	28.4446	26.4931
330154	1.7046	*	*	*	*	*
330157	1.3499	0.9602	25.2312	26.5686	27.1432	26.3138
330158	1.5286	1.3229	32.2990	38.2033	41.7010	37.3746
330159	1.3642	0.9950	28.9094	28.2774	31.7835	29.5880
330160	1.5280	1.3229	34.1960	36.6208	37.1915	36.0563
330162	1.2882	1.3229	32.1783	34.9460	37.6226	34.8806
330163	1.1295	0.9588	24.0200	27.1933	28.3910	26.5660
330164	1.4564	0.8918	28.8481	27.7217	27.8746	28.1414
330166	1.0847	0.8416	19.4360	20.4680	20.7121	20.1917
330167	1.7096	1.3001	34.4748	36.7653	39.1251	36.7245
330169	1.3878	1.3229	39.3361	45.3774	46.4939	43.5632
330171	***	*	30.0122	30.4005	35.1577	31.6504
330175	1.1111	0.8665	22.2067	23.8509	24.1005	23.3987
330177	0.9871	0.8416	19.6100	20.6338	22.9834	21.0962
330180	1.2276	0.8667	22.1920	24.3761	25.4170	23.9998
330181	1.2695	1.3001	38.5351	41.4104	43.0977	41.0544
330182	2.3153	1.3001	39.6038	40.9014	41.3033	40.6150
330184	1.4028	1.3229	34.4044	35.8102	39.0437	36.4620
330185	1.2774	1.2877	32.3466	36.3155	38.4002	35.8311
330188	1.2399	0.9588	23.9210	25.1153	27.5988	25.5243
330189	1.3891	0.8667	21.6229	22.3484	22.4383	22.1391
330191	1.2688	0.8667	24.0232	25.5656	26.4328	25.3769
330193	1.3142	1.3229	37.1807	39.9327	39.8910	39.0190
330194	1.7350	1.3229	43.9910	45.5639	46.8880	45.5320
330195	1.7167	1.3229	40.0206	39.7802	41.7885	40.5432
330196	1.2488	1.3229	33.2171	36.7178	38.2525	36.0781
330197	1.0612	0.8416	23.4290	26.8921	25.9872	25.4383
330198	1.3652	1.3001	30.5485	33.4930	34.8985	33.0524
330199	1.1995	1.3229	35.0059	38.6407	40.3948	37.9488
330201	1.5865	1.3229	39.3682	37.2064	42.6707	39.7180
330202	1.2534	1.3229	38.0129	37.4150	37.4158	37.6076
330203	1.4666	0.9950	26.5882	32.1207	34.0499	30.8856
330204	1.3463	1.3229	37.6849	39.6393	41.9953	39.7978
330205	1.1752	1.1624	32.1618	31.9510	33.9418	32.7294
330208	1.1543	1.3229	29.6282	32.1256	33.5287	31.7776
330209	***	*	29.7988	30.2038	*	30.0002
330211	1.1591	0.8416	22.9966	24.4470	25.8752	24.4788
330212	***	*	27.2232	*	*	27.2232
330213	1.1103	0.8416	22.5191	24.4049	27.4890	24.8466
330214	1.9072	1.3229	37.8500	41.8719	42.1339	40.5132
330215	1.3051	0.8774	22.6744	23.7361	23.9583	23.4620
330218	1.0747	0.9950	24.1106	26.9638	26.9982	26.0474
330219	1.7282	0.9588	29.3644	29.8889	32.5658	30.5817
330221	1.3569	1.3229	36.5539	39.2080	40.0514	38.6296
330222	1.2879	0.8667	23.9746	25.8507	27.7198	25.9137
330223	1.0006	0.8416	19.4229	23.3669	26.1264	22.8482

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
330224	1.3195	1.0762	25.7850	27.9231	29.1738	27.6678
330225	1.2331	1.3001	29.2719	32.3585	35.7651	32.4734
330226	1.3402	0.8918	21.8977	24.5646	24.8471	23.8237
330229	1.1912	0.8416	20.6095	21.9356	23.0577	21.8545
330230	1.0056	1.3229	33.3175	37.1298	38.6569	36.3376
330231	1.0910	1.3229	36.9619	40.6697	44.9422	40.8973
330232	1.1619	0.8667	24.4531	26.3313	27.4639	26.1069
330233	1.4122	1.3229	45.5132	47.3497	52.7070	48.3785
330234	2.3951	1.3229	40.6314	48.2306	49.3219	45.8241
330235	1.1932	0.9602	23.3866	27.7031	29.4346	26.7570
330236	1.5608	1.3229	35.6347	40.2386	42.8981	39.6841
330238	1.2617	0.8918	20.8639	21.7435	21.8386	21.4871
330239	1.2553	0.8416	21.5397	22.3854	23.1885	22.3782
330240	1.2125	1.3229	39.9450	43.5753	40.5001	41.3038
330241	1.8062	0.9950	29.0882	30.2304	32.7683	30.7645
330242	1.3309	1.3229	33.6926	37.4870	36.9015	35.9785
330245	1.8746	0.8774	22.8003	26.1811	27.4326	25.5154
330246	1.3355	1.2877	34.6329	37.1611	35.7416	35.8265
330247	0.8998	1.3229	32.2300	35.4980	39.0219	35.4575
330249	1.3506	0.9950	22.9834	25.3246	24.6091	24.2993
330250	1.3317	0.9584	25.1664	27.1606	29.0080	27.1471
330259	1.4233	1.3001	31.9152	35.1514	36.4788	34.5426
330261	1.2665	1.3229	30.7942	33.7834	40.2579	34.7049
330263	1.0274	0.8416	22.4675	23.8738	24.1333	23.5408
330264	1.2911	1.1624	30.0139	30.4701	31.0557	30.7362
330265	1.1847	0.8918	20.4635	21.6477	23.9081	21.9775
330267	1.3602	1.3229	31.5478	32.8541	34.9885	33.1377
330268	0.9185	0.8416	20.9720	25.3567	23.8793	23.3606
330270	2.0320	1.3229	42.2111	57.3596	55.2136	51.3968
330273	1.4013	1.3229	30.4720	37.0157	35.9298	34.5428
330276	1.1000	0.8445	22.2353	24.3300	26.0935	24.2204
330277	1.1770	0.9709	25.3582	26.4535	30.9053	27.3708
330279	1.5223	0.9588	25.2130	27.4539	29.6385	27.5185
330285	2.0056	0.8918	27.9018	30.1928	31.1235	29.7578
330286	1.3671	1.2877	33.3552	35.5895	37.6040	35.5541
330290	1.7307	1.3229	36.9981	39.4690	40.6933	39.0180
330304	1.3100	1.3229	34.5761	36.2845	37.3537	36.1514
330306	1.4163	1.3229	35.6640	36.3552	38.7713	36.9913
330307	1.3298	0.9709	27.5699	29.2529	29.5885	28.8558
330314	***	*	25.5597	26.2719	28.1788	26.6141
330316	1.2422	1.3229	34.8623	34.8567	37.1766	35.6163
330331	1.2558	1.3001	36.1630	39.8402	41.2694	39.1625
330332	1.2696	1.3001	33.3050	35.1646	37.0111	35.2121
330333	***	*	26.1917	*	*	26.1917
330338	***	*	31.3761	37.7497	*	34.6182
330339	0.7538	0.8667	22.6569	23.5786	24.3066	23.5064
330340	1.2556	1.2877	33.9358	37.9000	37.4161	36.3862
330350	1.4785	1.3229	36.6250	41.1339	44.4617	40.7608
330353	1.2406	1.3229	37.6549	45.9692	45.0977	43.0087
330354	2.1152	*	*	*	*	*
330357	1.2623	1.3229	35.5975	38.2286	40.3850	37.9060
330372	1.2748	1.3001	32.6721	36.1840	35.1297	34.7443
330385	1.1071	1.3229	46.3221	48.6175	49.0859	47.9732
330386	1.2175	1.1570	27.9943	29.9366	33.3216	30.4750
330389	1.7369	1.3229	34.7669	37.1862	39.6871	37.2049
330390	1.2347	1.3229	36.0573	36.3842	35.5562	35.9780
330393	1.7487	1.2877	34.8095	38.0619	39.2186	37.4063
330394	1.6374	0.9068	25.2229	27.3388	28.4597	27.0157
330395	1.4395	1.3229	37.3096	36.3921	37.5791	37.0864
330396	1.5369	1.3229	35.0297	37.4998	39.4904	37.3259
330397	1.4390	1.3229	38.4741	37.5682	41.4448	39.1440
330399	1.0823	1.3229	32.3688	34.7394	36.7626	34.6081
330401	1.3638	1.2877	40.6249	37.8559	40.4485	39.6496
330403	0.9812	0.8918	23.1886	25.5163	25.2937	24.6332
330404	0.8616	1.3229	*	*	*	*
330405	0.8688	1.3229	*	*	*	*
330406	0.8696	0.8667	*	*	*	*

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
340001	1.5135	0.9505	25.0041	28.3988	29.5709	27.7170
340002	1.8226	0.9201	27.3349	28.4860	29.6622	28.5097
340003	1.1864	0.8603	23.3066	24.1602	26.0888	24.5124
340004	1.4204	0.9078	25.4474	26.6404	27.5283	26.5365
340005	0.9877	*	22.3814	*	*	22.3814
340008	1.1890	0.9342	26.6314	26.7443	27.7206	27.0545
340010	1.3717	0.9474	24.5666	27.2105	28.7544	26.8571
340011	1.1392	0.8603	19.9484	19.7441	22.0047	20.5590
340012	1.2501	0.8603	22.7189	23.2288	24.7576	23.5973
340013	1.2482	0.9342	23.0261	23.9492	26.3607	24.4161
340014	1.5499	0.9078	25.1872	27.4888	27.8384	26.8919
340015	1.3635	0.9342	26.2276	28.0585	28.3928	27.5641
340016	1.2882	0.8603	23.0359	25.6454	27.2365	25.3118
340017	1.3185	0.9201	23.8229	25.7780	27.5672	25.7234
340018	***	*	23.7243	*	*	23.7243
340020	1.2026	0.8759	23.7995	26.4465	27.5473	25.9059
340021	1.3011	0.9342	26.0995	29.4864	29.3835	28.3680
340023	1.3623	0.9403	24.4896	26.4225	26.2716	25.7465
340024	1.1034	0.8780	22.2522	23.6638	26.4001	24.1341
340025	1.3306	0.9201	21.2276	23.5881	24.0101	22.9999
340027	1.1603	0.9267	23.6326	25.5973	26.3840	25.2711
340028	1.5229	0.9917	26.3298	28.0323	30.7591	28.3770
340030	2.0915	0.9738	29.0122	29.6630	30.4591	29.7351
340032	1.4483	0.9505	26.7475	26.5958	28.7636	27.4150
340035	1.0908	0.8603	23.5476	23.9669	24.6262	24.0395
340036	1.3746	0.9663	25.2077	27.2691	27.3860	26.6516
340037	1.1084	0.8765	21.6411	25.6262	29.0618	25.6372
340038	1.2390	0.8856	14.0713	22.4829	24.2111	19.1097
340039	1.2793	0.9342	27.1275	27.4457	27.8228	27.4762
340040	1.9853	0.9267	26.3325	27.6626	28.7434	27.6121
340041	1.1974	0.8972	23.6600	24.3595	26.8314	25.0117
340042	1.2701	0.8603	23.0236	25.0110	25.6349	24.5586
340045	***	*	23.1918	*	*	23.1918
340047	1.8409	0.9078	25.0605	27.4022	28.4968	27.0295
340049	1.8539	0.9738	30.4827	30.6791	29.6826	30.2360
340050	1.1118	0.9593	24.2533	26.0365	27.5274	25.9407
340051	1.2249	0.8814	23.4091	23.9612	24.4561	23.9489
340053	1.4951	0.9505	27.7261	27.8577	28.9355	28.1746
340055	1.2468	0.8972	24.1057	26.0647	26.5752	25.5723
340060	1.1417	0.9106	22.8657	22.9097	25.1791	23.6619
340061	1.8143	0.9738	27.5594	27.0089	29.8574	28.1792
340064	1.0718	0.8603	22.9143	23.4233	23.9701	23.4394
340068	1.2500	0.9156	21.8830	22.6814	23.6757	22.7411
340069	1.8788	0.9738	27.4473	29.3439	31.4951	29.4988
340070	1.2881	0.9106	24.9033	25.3226	26.6546	25.6458
340071	1.0900	0.9474	25.4537	26.3921	27.9748	26.6157
340072	1.2076	0.8603	23.1163	25.2493	24.1350	24.1644
340073	1.5996	0.9738	30.2061	30.9849	31.6803	30.9681
340075	1.2344	0.8972	26.0226	25.1551	25.1438	25.4402
340084	1.1981	0.9505	21.2580	21.1363	23.1300	21.8526
340085	1.1465	0.9106	23.9793	26.5164	27.9572	26.0805
340087	1.2855	0.8603	22.0070	22.4287	25.4730	23.2835
340090	1.3673	0.9663	23.4541	26.4031	26.7428	25.6227
340091	1.5783	0.9078	25.8266	27.1285	28.8044	27.3003
340096	1.2025	0.9106	25.2169	24.9036	26.5438	25.5729
340097	1.2782	0.8603	24.2127	26.2228	29.8005	26.6208
340098	1.4555	0.9505	27.3308	28.2493	29.7180	28.4477
340099	1.3045	0.8603	20.3683	21.8564	23.9702	22.0907
340104	0.9032	0.8765	15.7521	16.1204	17.0165	16.3439
340106	1.1098	0.8603	22.4894	26.0892	26.1340	24.8429
340107	1.2251	0.9007	22.9698	24.1762	26.5626	24.5944
340109	1.2621	0.8777	23.4419	25.4464	26.6383	25.1802
340113	1.9376	0.9505	28.2568	28.5587	30.3841	29.0850
340114	1.5717	0.9738	26.6813	28.3222	28.1311	27.7304
340115	1.6237	0.9738	25.0212	26.7592	27.2781	26.3719
340116	1.7673	0.8972	25.3213	27.5881	29.3698	27.4192
340119	1.3174	0.9505	24.2287	25.6226	29.4470	26.4336

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
340120	1.0111	0.8603	23.0915	25.9134	25.5399	24.8578
340121	1.1158	0.9325	21.7576	23.1343	23.8854	22.9469
340123	1.3425	0.9106	26.1083	26.0637	28.5669	26.9166
340124	1.0382	0.9474	20.8018	22.2988	23.5480	22.2128
340126	1.2869	0.9474	25.0189	26.9866	28.2247	26.7666
340127	1.1535	0.9738	25.7831	26.4746	28.2161	26.8349
340129	1.2620	0.9342	25.4902	25.7976	26.7606	26.0415
340130	1.3501	0.9505	25.2941	26.1717	28.1594	26.5940
340131	1.5008	0.9267	27.9358	27.4750	28.8542	28.1014
340132	1.1997	0.8603	21.3521	23.5856	24.6162	23.2107
340133	1.0172	0.8911	22.5558	23.4678	24.8579	23.5985
340137	***	*	21.0642	22.1741	28.9672	23.0834
340138	0.8513	0.9738	21.3670	*	*	21.3670
340141	1.6608	0.9325	27.3355	29.3878	29.3171	28.6965
340142	1.1641	0.8603	22.9907	26.6886	27.7555	25.9008
340143	1.5125	0.8972	25.3633	28.0082	27.9777	27.1349
340144	1.2444	0.9342	27.2686	26.1865	27.0150	26.8087
340145	1.1836	0.9342	23.7131	25.8459	26.7482	25.4578
340147	1.2997	0.9474	25.4534	26.9162	28.2626	26.9073
340148	1.4008	0.9078	23.5880	25.3660	25.8325	24.9278
340151	1.1655	0.8655	22.0052	22.7736	23.2158	22.6707
340153	1.8783	0.9505	26.4896	27.6509	28.5979	27.6012
340155	1.4288	0.9738	30.4940	30.3443	30.9501	30.6075
340156	0.8520	1.4400	*	*	*	*
340158	1.1142	0.9325	26.4849	27.7816	27.6526	27.2851
340159	1.2295	0.9738	23.2991	24.2588	25.3108	24.3176
340160	1.3379	0.8603	20.7525	21.7923	23.4631	22.0123
340166	1.2893	0.9505	26.0558	27.1132	28.5395	27.2674
340168	0.3793	0.9325	17.3249	*	*	17.3249
340171	1.1727	0.9505	28.2734	27.8539	27.4701	27.8495
340173	1.2942	0.9738	27.5072	28.3502	30.2815	28.7937
340177	1.0970	*	24.7471	26.7155	*	25.7127
340178	***	*	28.7218	*	*	28.7218
340179	***	*	*	34.1895	*	34.1895
340182	***	*	*	27.8071	*	27.8071
340183	1.0758	0.9505	*	*	*	*
350002	1.8100	0.7311	22.0283	22.4307	23.5869	22.7218
350003	1.1839	0.7311	21.8061	23.9639	24.9975	23.6038
350006	1.5595	0.7311	19.4985	21.2726	22.4626	21.0496
350009	1.1330	0.7943	23.0873	23.8681	24.5737	23.8529
350010	0.9689	0.7309	19.1964	20.1290	20.4198	19.9342
350011	1.9811	0.7943	23.1947	23.8400	24.1135	23.7260
350014	0.9073	0.7309	17.7565	19.1684	17.5837	18.1607
350015	1.6836	0.7311	20.1161	20.9046	21.3342	20.8695
350017	1.2734	0.7309	21.0243	22.4359	21.6187	21.6699
350019	1.6836	0.8048	22.1960	23.2018	24.9615	23.5379
350030	0.9632	0.7309	18.9978	20.2722	22.5976	20.6218
350061	1.4521	*	22.0515	*	*	22.0515
350063	0.8917	1.4400	*	*	*	*
350070	1.8140	0.7943	25.2836	25.2365	26.2454	25.5903
360001	1.4384	0.9661	23.9101	25.8669	28.8623	26.1633
360002	1.2621	0.8838	24.5789	24.5155	25.4859	24.8654
360003	1.7764	0.9661	27.5029	28.9672	30.7812	29.0939
360006	1.8868	1.0024	28.1698	30.1363	30.9806	29.7940
360008	1.3246	0.8724	24.5714	26.2632	27.5683	26.1309
360009	1.6060	0.9307	23.1012	25.0007	27.0618	25.0993
360010	1.2245	0.8806	23.1178	23.7825	24.7352	23.9121
360011	1.2621	0.9820	25.5340	27.6036	31.5587	28.1839
360012	1.3982	1.0024	27.5470	30.1416	31.0526	29.6656
360013	1.0958	0.9307	26.8130	27.0893	29.8412	27.9268
360014	1.1327	0.9820	25.3861	27.1017	27.0743	26.5482
360016	1.4372	0.9661	26.1283	27.8031	29.6298	27.8544
360017	1.7047	1.0024	27.2910	29.8525	31.7081	29.6406
360019	1.3006	0.9215	25.5926	26.9178	27.2997	26.6163
360020	1.6208	0.9215	24.4343	23.6400	25.6328	24.5734
360024	***	*	23.5793	*	*	23.5793
360025	1.4534	0.9268	25.5633	27.4533	27.1546	26.7668

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
360026	1.3232	0.9278	23.5898	25.5379	25.2945	24.8038
360027	1.6134	0.9215	25.4894	27.4454	28.2923	27.0621
360029	1.0868	0.9268	22.7785	24.3216	26.4208	24.5306
360032	1.2095	0.8696	23.2638	25.0034	25.9916	24.7563
360035	1.7331	1.0024	27.5220	30.0172	31.3181	29.6743
360036	1.2087	0.9215	27.6094	27.8343	29.3514	28.2918
360037	1.4271	0.9345	24.3982	29.0046	30.0446	27.6736
360038	1.5417	0.9661	22.8009	25.4274	31.0611	26.3008
360039	1.4955	0.9820	24.0218	23.9783	24.7873	24.2790
360040	1.1430	0.9083	24.0942	24.8569	25.5337	24.8329
360041	1.4959	0.9345	24.1080	26.1522	26.6755	25.6870
360044	1.1369	0.8823	21.8411	21.5619	24.3840	22.5769
360046	1.2023	0.9661	25.0775	25.4673	26.2417	25.5994
360047	1.0860	*	21.7248	*	*	21.7248
360048	1.7561	0.9268	28.8107	29.3415	29.4378	29.2064
360049	***	*	25.8367	26.2222	*	26.0185
360051	1.7003	0.9278	25.7556	26.8501	28.1167	26.9164
360052	1.6091	0.9278	24.5405	26.2066	26.8806	25.8864
360054	1.3924	0.8724	23.0376	22.9359	24.8248	23.5845
360055	1.4142	0.8991	26.3112	27.3941	30.0143	27.8971
360056	1.6185	0.9661	23.1024	26.5318	30.3677	26.6371
360058	1.0590	0.8696	23.4429	23.8119	24.5003	23.9275
360059	1.5014	0.9345	25.3516	29.3624	30.6173	28.4902
360062	1.4838	1.0024	28.6518	31.7422	32.8893	31.2563
360064	1.5933	0.8991	22.2393	25.2336	27.7795	24.9763
360065	1.2190	0.9268	26.3036	28.0405	29.7155	28.0324
360066	1.5166	0.9307	27.3362	27.1436	29.7605	28.0751
360068	1.8866	0.9268	25.8414	26.2065	26.6933	26.2583
360069	1.2464	*	24.2444	*	*	24.2444
360070	1.6587	0.8917	24.8863	27.2389	27.8891	26.6577
360071	1.1157	0.8731	22.0786	23.4619	26.4081	23.9600
360072	1.5232	1.0024	24.4332	25.9589	27.2286	25.9259
360074	1.3002	0.9268	24.9055	25.8959	27.5328	26.1112
360075	1.1472	0.9345	26.8453	26.8925	26.1657	26.5905
360076	1.4890	0.9661	25.9369	28.1013	29.0148	27.7077
360077	1.5236	0.9345	25.6505	28.4449	28.0133	27.3825
360078	1.2784	0.9215	26.1313	25.7885	27.4689	26.4454
360079	1.7865	0.9661	26.0935	27.2437	30.1230	27.8340
360080	1.1302	0.8696	20.8309	21.4526	22.7020	21.7298
360081	1.3518	0.9268	27.5695	29.8366	29.5312	28.9628
360082	1.3503	0.9345	27.1197	29.2561	28.7925	28.4298
360084	1.6077	0.8917	25.8415	27.3917	28.5402	27.2566
360085	2.0267	1.0024	29.0081	31.5800	32.8502	31.2560
360086	1.6601	0.9278	22.1859	25.4218	27.3124	24.9575
360087	1.2859	0.9345	25.4040	29.6579	28.4185	27.8522
360089	1.1454	0.8696	22.7951	25.3465	25.5608	24.5874
360090	1.5834	0.9268	26.7717	29.0199	30.7530	28.8616
360091	1.3288	0.9345	27.5067	25.8657	27.6809	27.0164
360092	1.2652	1.0024	25.6618	25.4954	25.4055	25.5165
360094	***	*	26.6348	*	*	26.6348
360095	1.4011	0.9268	26.1275	26.4635	29.3787	27.2944
360096	1.0887	0.8697	24.6317	25.9275	26.8653	25.8210
360098	1.3625	0.9345	24.8447	25.5973	26.6382	25.7210
360100	1.1996	0.8917	23.0561	25.4523	23.6167	24.0350
360101	1.3614	0.9345	26.6209	27.6030	29.7817	28.0282
360106	***	*	24.1588	*	*	24.1588
360107	1.1208	0.9268	25.9697	24.6095	26.0534	25.5448
360109	1.0704	0.8696	25.4184	26.3131	30.1382	27.2363
360112	1.9950	0.9268	28.6784	30.5715	31.1356	30.1179
360113	1.3132	0.9661	25.6493	26.6556	30.2871	27.4975
360115	1.2830	0.9345	24.0052	25.9841	26.1821	25.4599
360116	1.1956	0.9661	18.0655	25.1717	26.4968	23.3911
360118	1.5295	0.9209	27.7289	27.3884	28.5643	27.8933
360121	1.3608	0.9268	24.5593	27.4442	28.3835	26.7824
360123	1.4120	0.9345	22.6523	27.1920	28.0334	25.8336
360125	1.1989	0.8696	22.1096	24.1388	25.9067	23.9904
360128	***	*	21.0067	*	*	21.0067

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
360130	1.4726	0.9345	22.9762	25.6570	26.3986	25.2275
360131	1.3046	0.8917	24.0496	25.3719	26.6635	25.3529
360132	1.3628	0.9661	25.9453	27.7724	29.4070	27.6756
360133	1.6044	0.9278	24.6208	29.8684	31.7521	28.7271
360134	1.7956	0.9661	29.2974	27.7339	28.5141	28.4865
360137	1.7456	0.9345	26.9522	26.1250	27.6894	26.9256
360141	1.6591	0.8991	27.7085	29.7937	31.1778	29.5401
360142	1.0665	*	22.1610	*	*	22.1610
360143	1.2889	0.9345	24.6306	28.3057	26.9394	26.6732
360144	1.3635	0.9345	25.7079	28.2473	28.9177	27.6781
360145	1.6717	0.9345	25.8268	27.1908	28.1835	27.1041
360147	1.2487	0.8696	24.1953	25.5854	27.5548	25.7876
360148	1.0887	0.8696	26.1947	26.0837	26.3399	26.2104
360150	1.2305	0.9215	24.7667	25.1217	28.2561	26.0004
360151	1.6215	0.8917	24.8629	25.3780	26.5636	25.6137
360152	1.5002	1.0024	27.9147	29.9425	31.5377	29.7875
360153	0.9761	0.8696	19.0226	19.8499	20.2147	19.7391
360155	1.4482	0.9345	25.3909	26.9127	28.9521	27.1128
360156	1.1513	0.8815	24.0509	24.3281	25.0833	24.5012
360159	1.2600	0.9820	33.1613	29.1529	28.6174	30.0448
360161	1.3687	0.8991	24.3792	25.4433	27.0875	25.6058
360163	1.9109	0.9661	26.9728	28.9742	30.0724	28.6652
360170	1.3064	1.0024	24.3620	28.5474	29.5954	27.6590
360172	1.3789	0.9345	26.3501	27.5669	28.8283	27.5900
360174	1.2823	0.9278	24.9990	26.8586	28.3143	26.7384
360175	1.2416	0.9820	26.5949	28.1531	28.3054	27.6959
360177	1.1565	*	24.4712	*	*	24.4712
360179	1.5935	0.9661	28.8645	30.0311	29.8299	29.5974
360180	2.2518	0.9345	26.1514	29.6633	31.4342	29.1126
360185	1.1985	0.8697	23.7173	25.6800	26.1080	25.1949
360187	1.5390	0.9278	24.8173	24.9353	25.7600	25.1883
360189	1.1090	1.0024	24.2136	26.3756	27.5097	26.0254
360192	1.2911	0.9345	26.7577	26.4616	27.5991	26.9459
360195	1.0872	0.9345	26.1281	25.0922	27.6155	26.2467
360197	1.1402	0.9820	27.0896	28.7580	28.9207	28.2672
360203	1.2426	0.8696	22.1414	24.4433	25.3692	24.0014
360210	1.1670	1.0024	27.8415	28.2976	29.6476	28.6031
360211	1.5603	0.8696	22.5449	25.7053	26.5459	24.7616
360212	1.3242	0.9345	25.2756	25.6080	26.6976	25.8756
360218	1.1993	1.0024	27.4288	29.8662	30.0101	29.0792
360230	1.5553	0.9345	27.0223	28.8018	30.0661	28.6838
360234	1.3345	0.9661	24.3625	25.9360	31.0656	27.0903
360236	1.2595	0.9661	35.8143	25.6728	29.5321	29.3317
360239	1.3150	0.9278	25.2474	27.2939	30.7728	27.7368
360241	***	*	24.7001	23.0662	25.7290	24.4912
360242	1.8984	*	*	*	*	*
360245	0.5514	0.9215	19.1884	20.6504	20.3426	20.0855
360247	0.3793	1.0024	19.8891	19.3677	*	19.6148
360253	2.4475	0.9661	30.4276	33.2371	34.3347	32.7151
360259	1.2997	0.9268	25.1338	25.9878	27.2902	26.1980
360260	***	*	27.3903	*	*	27.3903
360261	1.3966	0.8878	22.5431	22.3614	25.6332	23.5172
360262	1.3198	0.9268	27.1680	28.6995	30.1559	28.7640
360263	1.8173	0.9307	20.8884	25.1652	25.4864	23.9919
360264	***	*	*	36.0754	*	36.0754
360265	***	*	*	36.6265	*	36.6265
360266	2.1283	1.0024	*	*	31.7565	31.7565
360267	***	*	*	*	34.0936	34.0936
360268	***	*	*	*	34.0526	34.0526
360269	1.7379	0.9661	*	*	24.8552	24.8552
360270	1.1031	0.8696	*	*	*	*
360271	1.4810	0.9661	*	*	*	*
360273	1.6114	0.8696	*	*	*	*
370001	1.6338	0.8498	27.7245	26.0194	26.8884	26.8557
370002	1.2199	0.7701	20.1479	22.0476	23.6886	21.9874
370004	1.1264	0.8966	25.3919	26.7434	26.8521	26.3099
370006	1.2636	0.8498	20.1063	22.4802	23.9935	22.1050

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
370007	1.0754	0.7701	17.6547	19.4036	20.3706	19.1471
370008	1.4650	0.8754	24.2978	25.3352	26.6563	25.4723
370011	0.9793	0.8754	19.7821	21.9649	22.3391	21.3305
370013	1.5642	0.8754	24.9294	26.5364	27.2667	26.2291
370014	1.0076	0.8530	25.3576	25.9393	26.4488	25.9310
370015	1.0126	0.8498	23.6694	24.7547	25.5815	24.6941
370016	1.6363	0.8754	25.4062	26.7938	29.8284	27.2551
370018	1.5056	0.8498	23.5336	25.3573	24.6868	24.5173
370019	1.2501	0.7701	21.4474	22.0221	25.2814	22.9584
370020	1.3498	0.7701	18.5046	20.8723	22.7566	20.7450
370022	1.2123	0.8070	19.6495	24.6099	22.2289	22.0698
370023	1.3515	0.7791	21.5762	23.5170	24.0376	23.0619
370025	1.2921	0.8498	23.5659	23.9873	24.5547	24.0384
370026	1.4287	0.8754	23.0848	25.8428	25.5172	24.8223
370028	1.8823	0.8754	26.6153	27.8621	28.5619	27.6912
370029	1.1357	0.7701	23.9956	26.8508	28.5309	26.4597
370030	1.0197	0.7701	23.3037	24.1483	25.8212	24.4359
370032	1.4561	0.8754	23.4843	24.8626	26.2642	24.8567
370034	1.2239	0.7701	18.2341	19.5099	20.4106	19.4059
370036	1.1140	0.7701	17.7575	19.2318	19.8162	18.9477
370037	1.6244	0.8754	23.9685	24.9553	25.2350	24.7549
370039	1.0453	0.8498	21.8220	23.0254	23.5745	22.8102
370040	0.9665	0.8052	22.4048	22.8356	26.7395	23.9163
370041	0.8802	0.8498	22.3496	22.6731	22.9834	22.6703
370047	1.3852	0.8754	20.4657	24.1991	24.4766	23.0667
370048	1.0400	0.7701	19.2464	21.4543	22.0627	20.9190
370049	1.3123	0.8754	23.2171	23.8844	22.8755	23.3164
370051	1.0605	0.7701	17.2618	19.8329	19.3222	18.8243
370054	1.2315	0.7701	21.5044	22.4652	25.2142	22.9829
370056	1.8623	0.8405	22.0312	24.3986	25.5453	23.9751
370057	0.9775	0.8498	19.7284	19.8683	22.1337	20.5343
370060	0.9969	0.8498	18.7592	19.9025	23.3858	20.5027
370064	0.8912	*	14.2053	*	*	14.2053
370065	1.0064	0.7797	20.0227	21.2343	23.5815	21.6452
370072	0.8046	0.7959	9.9615	11.7942	13.0963	11.6675
370078	1.5643	0.8498	25.4068	27.8611	26.6972	26.6522
370080	0.8711	0.7701	18.0665	19.9595	22.4113	20.0969
370083	0.8983	0.7752	16.8836	19.2568	20.9878	18.9428
370084	1.0004	0.7701	16.6513	19.6230	20.7326	19.1537
370089	1.3096	0.7701	20.4699	20.6153	22.1523	21.0638
370091	1.5772	0.8498	23.3357	24.1438	25.8697	24.4379
370093	1.6183	0.8754	26.9774	26.0459	27.5356	26.8504
370094	1.4254	0.8754	23.1191	24.5555	26.5265	24.7232
370097	1.3201	0.8405	22.3267	26.3168	26.8138	25.2293
370099	1.0702	0.7701	20.5075	24.9971	26.7206	23.9187
370100	0.9272	0.7801	14.7711	17.9732	19.4002	17.4574
370103	1.0057	0.7701	17.8018	18.8933	19.4273	18.7246
370105	1.9411	0.8754	23.8978	26.7973	26.6399	25.9002
370106	1.4001	0.8754	26.5867	27.8979	28.5957	27.7400
370112	0.9493	0.8052	15.4471	16.0592	16.7888	16.1378
370113	1.1439	0.8714	25.3565	26.9720	26.4608	26.2282
370114	1.5812	0.8498	21.7880	23.0006	25.9841	23.5722
370123	***	*	25.4733	*	*	25.4733
370125	***	*	17.1361	*	*	17.1361
370138	1.0409	0.7701	18.3113	20.2528	22.1675	20.1246
370139	0.9462	0.7701	18.5226	19.4287	20.5156	19.5063
370148	1.5466	0.8754	25.2348	27.0904	28.1933	26.9006
370149	1.2410	0.8754	22.3537	23.3493	23.3423	23.0330
370153	1.1460	0.7701	19.8349	23.2778	24.1667	22.4460
370156	1.0006	0.7822	19.4743	25.2562	23.0104	22.5304
370158	0.9453	0.8754	18.5578	20.7641	21.5228	20.2578
370166	0.8431	0.8498	23.1682	25.1107	24.7251	24.3434
370169	0.8651	0.7864	15.8002	16.8252	16.6752	16.4258
370170	0.9138	1.4400	*	*	*	*
370171	0.8794	1.4400	*	*	*	*
370172	0.8574	1.4658	*	*	*	*
370173	0.9221	1.4400	*	*	*	*

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
370174	0.7942	1.4400	*	*	*	*
370176	1.2163	0.8498	25.0509	24.7655	24.9650	24.9272
370177	***	*	14.7193	*	*	14.7193
370178	0.8848	0.7701	14.6070	16.0179	16.0747	15.5714
370179	0.8038	*	23.5794	*	*	23.5794
370180	1.0048	1.4400	*	*	*	*
370183	0.9349	0.8498	21.8147	24.7103	23.8419	23.4256
370190	1.4244	0.8498	33.1137	29.1568	34.6942	32.5212
370192	1.9787	0.8754	31.4930	27.6367	19.0638	24.5971
370196	***	*	22.6824	22.3498	20.8296	21.9384
370199	0.7713	0.8754	26.0450	23.3989	23.7412	24.3357
370200	1.0462	0.7701	17.6317	20.5175	21.7153	19.8071
370201	1.6809	0.8754	23.3550	23.8090	24.2364	23.7986
370202	1.4316	0.8498	25.1181	26.1132	25.7966	25.6803
370203	2.0618	0.8754	23.5190	22.8869	25.7770	24.0068
370206	1.5795	0.8754	26.0912	26.0353	27.5752	26.5860
370210	2.1527	0.8498	21.2682	23.3786	27.2111	23.9630
370211	1.0812	0.8754	26.5345	27.8737	28.6537	27.7381
370212	1.7251	0.8754	21.0758	19.1720	20.3495	20.1565
370213	***	*	29.3777	*	*	29.3777
370214	0.9301	0.7822	*	20.6217	21.0732	20.8619
370215	2.4407	0.8754	32.3589	31.5652	32.4087	32.1115
370216	2.0115	0.8498	*	27.2429	25.8260	26.4854
370217	***	*	*	26.8677	*	26.8677
370218	2.3278	0.8498	*	*	30.3445	30.3445
370220	1.9660	0.8754	*	*	*	*
370222	1.8271	0.8754	*	*	*	*
370223	0.8903	0.8754	*	*	*	*
370224	1.0183	0.8754	*	*	*	*
370225	1.6928	0.8754	*	*	*	*
380001	1.3077	1.1226	30.0103	29.5842	32.0770	30.5857
380002	1.2470	0.9957	27.1861	30.3385	31.5246	29.7051
380004	1.7238	1.1226	30.5172	32.6901	34.5432	32.6120
380005	1.4137	1.0297	30.2210	30.9087	33.2849	31.5054
380007	2.0505	1.1226	33.9969	33.9601	35.1697	34.3879
380008	***	*	25.8356	*	*	25.8356
380009	2.0476	1.1226	31.7042	32.4016	34.5635	32.8913
380010	***	*	30.2957	34.4208	*	32.1520
380014	1.9251	1.0701	29.9648	33.6078	33.1928	32.2201
380017	1.8286	1.1226	32.2447	34.2605	35.3734	33.9502
380018	1.9115	1.0297	28.0701	30.9923	31.8181	30.3581
380020	1.4164	1.1002	28.3563	29.6053	34.6183	30.5329
380021	1.4801	1.1226	29.3295	29.2164	32.6142	30.3295
380022	1.3408	1.0315	29.2642	30.1742	29.6224	29.6961
380023	1.1613	*	26.5439	*	*	26.5439
380025	1.2143	1.1226	33.2105	35.5084	36.4910	35.1206
380027	1.2897	1.0707	25.5161	26.4982	28.0247	26.6752
380029	1.2690	1.0472	26.9967	28.7994	29.4461	28.4964
380033	1.7458	1.1002	30.8767	33.4828	34.0094	32.8334
380037	1.3197	1.1226	30.5818	32.4033	32.7922	31.9693
380038	1.3171	1.1226	34.2303	34.5971	35.1105	34.6431
380039	***	*	32.3959	38.0989	*	34.9720
380040	1.4156	0.9957	32.0103	31.2286	32.9081	32.0782
380047	1.8756	1.0586	29.8627	31.0584	32.8188	31.2891
380050	1.4599	1.0146	25.6190	27.1814	29.7329	27.5476
380051	1.6409	1.0472	29.7219	30.8891	32.8545	31.1841
380052	1.2947	0.9957	24.9476	25.6085	28.6119	26.2866
380056	1.1310	1.0472	25.1475	27.7253	29.1686	27.4847
380060	1.4620	1.1226	30.7041	32.0101	33.8863	32.2260
380061	1.6742	1.1226	29.8217	32.3699	34.5230	32.2744
380071	1.3152	1.1226	30.2304	31.7761	31.0901	31.0382
380075	1.3436	1.0297	29.0368	33.8962	31.6884	31.4882
380081	0.6765	*	21.8850	26.8149	*	24.3121
380082	1.2709	1.1226	32.3002	35.6708	35.7821	34.6175
380089	1.3136	1.1226	33.4214	34.6015	35.4850	34.5152
380090	1.3036	1.0707	34.4536	33.0990	35.5535	34.3715
380091	1.3645	1.1226	33.8950	39.9703	40.5066	38.1384

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
380100	1.6492	1.1226	*	*	*	*
390001	1.5887	0.8357	22.5309	23.6075	24.3251	23.4964
390002	1.2797	0.8390	22.4388	24.7867	25.0860	24.1310
390003	1.1981	0.8357	21.6477	23.3672	24.5099	23.1723
390004	1.5748	0.9230	24.3249	24.4068	25.2424	24.6844
390006	1.9216	0.9115	25.1216	26.8581	28.6926	26.9694
390008	1.1363	0.8413	22.2680	22.8042	22.6297	22.5689
390009	1.8142	0.8503	25.5482	26.7462	26.7234	26.3594
390010	1.1864	0.8390	23.5390	24.5785	24.8196	24.2873
390011	***	*	21.9279	21.4856	20.2291	21.2244
390012	1.2256	1.0892	28.5076	30.7542	32.4856	30.5696
390013	1.3344	0.9115	24.0044	25.0037	26.2323	25.0976
390016	1.2396	0.8697	21.9549	23.2095	24.3488	23.2187
390019	1.1020	1.0003	23.4636	24.0538	25.7515	24.3571
390022	***	*	29.0710	30.3565	29.6308	29.6956
390023	1.2512	1.0892	31.7149	35.4452	34.7787	34.0489
390024	1.0192	1.0892	35.3960	33.5186	38.8750	35.7342
390025	0.4708	1.0892	17.2977	19.1362	20.3878	18.9809
390026	1.2143	1.0892	29.5157	31.8512	31.8309	31.0660
390027	1.7300	1.0892	35.8381	35.5692	39.2158	36.9328
390028	1.6327	0.8390	25.7246	27.1869	27.1451	26.6794
390030	1.1561	1.0003	22.1581	23.6063	24.6343	23.4873
390031	1.2251	0.9413	22.6828	26.2654	27.2033	25.3410
390032	1.2846	0.8390	22.7205	23.9466	24.5243	23.7229
390035	1.1521	1.0892	26.2647	28.4564	29.5417	28.1290
390036	1.4349	0.8390	24.6032	21.6358	24.4917	23.5130
390037	1.4058	0.8390	24.7820	25.4290	25.2296	25.1464
390039	1.1400	0.8357	20.3787	22.0208	23.2300	21.8622
390041	1.2825	0.8390	21.5925	22.9814	24.2257	22.9573
390042	1.3541	0.8390	25.6328	28.3633	28.0996	27.3605
390043	1.2010	0.8357	22.2549	23.2378	24.2087	23.2256
390044	1.6735	1.0765	27.1505	28.7758	29.4057	28.4751
390045	1.5824	0.8357	23.0712	23.9343	24.6495	23.8980
390046	1.6539	0.9650	27.2630	29.6574	30.5115	29.1858
390048	1.0779	0.9115	24.9759	28.5342	28.3152	27.3378
390049	1.5927	1.0003	27.1366	29.6121	30.7431	29.2428
390050	2.0709	0.8390	26.6931	27.2599	27.3481	27.1028
390052	1.1795	0.8401	23.3474	24.9510	25.1462	24.4784
390054	***	*	22.8087	24.4435	27.4805	24.7389
390055	***	*	25.6945	*	*	25.6945
390056	1.0637	0.8357	19.5537	23.5077	23.5821	22.1218
390057	1.3198	1.0892	27.9583	29.7982	30.9198	29.6016
390058	1.3192	0.9230	27.4799	26.9546	27.7296	27.3846
390061	1.4184	0.9650	28.4538	29.1318	30.0597	29.1859
390062	1.1289	0.8357	21.4051	21.2999	21.0713	21.2584
390063	1.8024	0.8503	24.7614	26.4998	26.8381	26.0655
390065	1.2588	1.0030	25.2188	27.6249	29.5654	27.4345
390066	1.4275	0.9115	24.2087	25.9645	25.4407	25.2125
390067	1.8076	0.9230	26.3287	29.7234	30.6128	28.8546
390068	1.3348	0.9650	25.8291	26.7358	29.0962	27.1397
390070	1.4189	1.0892	30.9500	33.3185	34.4935	32.9335
390071	1.0314	0.8357	21.8367	24.6462	24.8467	23.7238
390072	1.0757	0.8357	24.9389	25.3029	26.2568	25.5026
390073	1.7402	0.8357	26.3698	25.7822	26.4083	26.2016
390074	***	*	22.8545	23.6500	25.4098	23.9494
390075	***	*	24.6359	*	*	24.6359
390076	1.3948	1.0892	27.9004	31.8500	32.7671	30.8676
390079	1.8369	0.8775	23.3053	22.5607	24.4452	23.4348
390080	1.3297	1.0892	27.2616	28.7063	29.2645	28.4490
390081	1.2608	1.0892	30.3840	31.7569	33.6247	31.9442
390084	1.0972	0.8357	19.8606	23.2039	24.3372	22.4576
390086	1.6555	0.8357	22.5317	23.5141	25.0992	23.7478
390090	1.9867	0.8390	25.2014	27.3528	27.0122	26.5229
390091	1.1445	0.8697	21.5586	21.7010	23.3562	22.1985
390093	1.1573	0.8390	21.4401	22.6082	22.6023	22.2276
390095	1.1958	0.8357	23.6240	22.6150	24.6290	23.6292
390096	1.5985	1.0765	27.0763	28.8258	28.6055	28.1718

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
390097	1.2460	1.0892	25.6660	26.1741	27.9858	26.5902
390100	1.7084	0.9650	27.7208	30.0132	30.0234	29.3208
390101	1.2968	0.9425	21.9418	23.1497	24.8377	23.3533
390102	1.4439	0.8390	24.8898	24.8369	24.4589	24.7141
390103	0.8439	0.8390	20.6775	20.5741	20.4446	20.5656
390104	1.0867	0.8357	19.6428	19.2326	19.6630	19.5084
390107	1.5235	0.8390	24.1386	24.1159	24.6565	24.3172
390108	1.2286	1.0892	27.2661	27.8171	28.5928	27.9029
390109	1.1558	*	19.9156	*	*	19.9156
390110	1.6017	0.8390	23.9808	27.7311	25.3407	25.6183
390111	2.1688	1.0892	32.6510	34.2990	34.8756	33.9665
390112	1.2270	0.8357	19.2126	20.2380	21.5439	20.3238
390113	1.2914	0.8697	22.2591	23.3686	24.2593	23.3085
390114	1.5658	0.8390	24.0473	26.9620	27.9184	26.3018
390115	1.4567	1.0892	27.7333	29.6905	30.8063	29.4311
390116	1.2415	1.0892	30.2722	32.2513	33.2562	31.9776
390117	1.1678	0.8357	20.3946	20.7821	21.5038	20.9016
390118	1.1721	0.8357	21.5001	20.5614	21.8917	21.3378
390119	1.3034	0.8357	22.2746	23.0928	24.3245	23.2322
390121	***	*	23.1408	25.4826	*	24.2748
390122	1.0755	0.8407	22.5786	23.1866	23.3220	23.0325
390123	1.1927	1.0892	28.6269	32.4528	34.0062	31.6506
390125	1.2633	0.8357	20.9456	22.4033	22.8816	22.0906
390127	1.3311	1.0892	30.9374	31.9091	33.6557	32.1824
390128	1.2534	0.8390	23.1539	24.1628	24.1390	23.8230
390130	1.2885	0.8357	24.0685	23.0592	23.2504	23.4713
390131	1.3317	0.8390	22.6306	23.0577	23.5783	23.1078
390132	1.4484	1.0892	27.7250	29.6396	31.1168	29.5034
390133	1.7272	1.0765	28.7162	31.1083	32.9812	31.0147
390135	***	*	24.4738	*	*	24.4738
390136	***	*	22.1415	23.9813	*	23.0891
390137	1.4885	0.8357	23.4877	24.2878	26.1457	24.6489
390138	1.1933	0.9115	24.2769	25.3410	27.4231	25.7128
390139	1.3716	1.0892	30.4246	34.1447	34.0836	32.9187
390142	1.5243	1.0892	32.5786	33.8224	34.5773	33.7222
390145	1.5357	0.8390	23.8041	24.6672	25.6980	24.7299
390146	1.2173	0.8377	25.2460	22.6752	25.1805	24.3872
390147	1.3581	0.8390	25.0971	26.8522	28.6606	26.8148
390150	1.1275	0.8379	24.1855	22.8228	22.7668	23.2856
390151	1.3563	1.1016	27.1539	29.9254	31.4067	29.5927
390153	1.3460	1.0892	30.0585	32.8234	33.2427	32.1641
390154	1.2246	0.8357	20.6982	22.8391	23.3559	22.2880
390156	1.3798	1.0892	31.2571	32.2688	32.8999	32.1222
390157	1.2696	0.8390	22.7493	21.5923	22.1112	22.1491
390160	1.2522	0.8390	21.4877	24.0208	22.9696	22.8166
390162	1.4950	1.1570	30.0900	35.5057	34.5809	33.2587
390163	1.2334	0.8390	22.1741	23.2055	22.8341	22.7283
390164	2.1784	0.8390	26.4971	26.3087	27.1950	26.6937
390166	1.1701	0.8390	24.9810	20.9272	23.3255	23.1378
390168	1.5193	0.8390	24.5820	26.1365	26.9816	25.9249
390169	1.4279	0.8357	27.2242	26.5514	26.2643	26.6875
390173	1.1827	0.8357	22.8220	23.9927	25.6455	24.1670
390174	1.7008	1.0892	32.6265	34.2069	34.8999	33.9342
390176	1.0494	0.8390	*	23.9779	24.1247	24.0545
390178	1.3615	0.8991	20.7270	22.6006	23.1452	22.1438
390179	1.4427	1.0892	27.2222	28.0688	30.1219	28.5194
390180	1.4067	1.0892	32.4375	34.9832	35.5291	34.3065
390181	1.1036	0.8641	24.4573	25.9871	26.6021	25.6300
390183	1.1415	0.8357	25.6554	27.0122	27.8358	26.8139
390184	1.1037	0.8390	22.5519	22.7451	23.9736	23.0652
390185	1.2675	0.8357	23.0202	25.4256	27.1119	25.2267
390189	1.1565	0.8357	22.3722	22.6796	23.6215	22.9388
390191	1.1480	*	20.8761	*	*	20.8761
390192	0.9882	0.8357	21.2619	20.5459	23.6171	21.8230
390193	***	*	20.1024	*	*	20.1024
390194	1.1194	1.0003	25.4235	27.5890	26.3152	26.4435
390195	1.6293	1.0892	31.0019	34.2980	34.5594	33.3475

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
390196	1.6590	*	*	*	*	*
390197	1.3808	1.0003	25.7739	26.8270	27.2455	26.6103
390198	1.0933	0.8503	18.7222	20.5979	20.4350	19.9087
390199	1.1701	0.8357	21.3157	22.3224	23.0046	22.2038
390200	***	*	23.7471	*	*	23.7471
390201	1.3003	0.8357	26.3658	27.0054	27.3542	26.9245
390203	1.6204	1.0892	28.9054	29.4930	29.1370	29.1781
390204	1.3007	1.0892	28.6829	29.5251	30.7346	29.6944
390211	1.2565	0.8991	23.1450	25.1689	26.5052	24.9533
390215	***	*	28.0403	*	*	28.0403
390217	1.2433	0.8390	24.3610	23.5879	24.1886	24.0513
390219	1.3175	0.8390	25.1705	25.4886	26.1196	25.5763
390220	1.1218	1.0892	41.6138	28.9128	30.7435	32.7176
390222	1.2954	1.0892	28.7488	30.9464	31.7361	30.5072
390223	2.0325	1.0892	27.6407	30.2523	34.3280	30.7325
390224	***	*	18.7624	*	*	18.7624
390225	1.2242	0.9650	24.9391	27.5803	27.2555	26.6147
390226	1.7798	1.0892	28.5890	32.6658	32.6508	31.2960
390228	1.3965	0.8390	23.3078	23.9845	24.2242	23.8474
390231	1.4031	1.0892	29.2653	30.9339	32.8353	30.9985
390233	1.3802	0.9425	24.8690	25.6904	27.2597	25.9607
390236	0.9660	0.8364	21.9169	22.1144	23.1290	22.3771
390237	1.6164	0.8357	26.9533	27.4944	28.4337	27.5819
390246	1.1272	0.8357	20.1581	25.1956	26.0179	23.4882
390256	1.9087	0.9230	26.3619	28.0617	28.8970	27.8209
390258	1.5082	1.0892	29.4626	30.4142	31.7164	30.6076
390263	1.5401	1.0003	26.0170	28.5864	29.9850	28.3002
390265	1.5075	0.8390	23.4836	24.0675	25.0166	24.2007
390266	1.1586	0.8991	20.3918	20.8789	22.2228	21.1792
390267	1.2789	0.8390	23.1051	24.2428	24.8309	24.0577
390268	1.3894	0.8619	25.0021	25.6643	26.7342	25.8430
390270	1.6238	0.8357	24.1496	24.9510	26.5010	25.2638
390272	0.5343	1.0892	*	*	*	*
390278	0.5326	1.0892	23.6843	26.6664	28.6323	26.3012
390279	***	*	17.0012	*	*	17.0012
390285	1.4953	1.0892	35.0426	36.7163	37.6669	36.3991
390286	1.1875	1.0892	28.1761	29.5281	31.3393	29.6278
390287	***	*	37.6569	39.3176	42.2401	39.3146
390288	***	*	29.7287	30.9701	*	30.3388
390289	***	*	28.8826	30.7583	*	29.8023
390290	1.8423	1.0892	37.9040	38.3776	41.1426	39.1287
390301	***	*	30.9836	*	*	30.9836
390302	2.0384	1.0892	*	*	*	*
390303	***	*	*	27.5580	*	27.5580
390304	1.2278	1.0892	*	30.4832	32.1633	31.3748
390305	***	*	*	*	29.3217	29.3217
390306	***	*	*	*	40.3789	40.3789
390307	1.9734	0.8991	*	*	24.5393	24.5393
390308	***	*	*	*	36.1737	36.1737
390309	***	*	*	*	37.8924	37.8924
390310	***	*	*	*	44.3991	44.3991
390311	2.0736	1.0892	*	*	*	*
390312	1.1657	1.0892	*	*	*	*
390313	1.1458	0.9413	*	*	*	*
400001	1.2874	0.4526	13.1847	13.9386	14.9151	14.0372
400002	1.8558	0.4262	16.7582	15.3833	12.9440	14.8789
400003	1.3831	0.4262	12.8329	13.9258	15.7906	14.1890
400004	1.2271	0.4526	14.3108	12.0923	12.5928	12.8941
400005	1.1236	0.4526	10.7207	10.3505	11.1152	10.7266
400006	1.1844	0.4526	9.2265	8.1841	8.1381	8.5089
400007	1.2015	0.4526	9.2463	11.8203	12.0743	11.0862
400009	1.0128	0.2944	9.3116	9.3834	9.5114	9.4053
400010	0.9325	0.3345	10.0962	9.8132	10.7993	10.2160
400011	1.0606	0.4526	8.5534	9.6641	8.5503	8.9391
400012	1.4705	0.4526	8.3802	12.3362	10.1156	10.1141
400013	1.2469	0.4526	10.3347	11.1414	11.4222	10.9912
400014	1.3700	0.3657	12.2169	10.5286	9.9395	10.8301

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
400015	1.3221	0.4526	15.6349	13.7043	22.2017	17.0466
400016	1.3958	0.4526	14.7607	16.6472	16.1931	15.8694
400017	0.9861	0.4526	10.2734	10.3123	9.9185	10.1744
400018	1.1688	0.4526	11.6165	11.9184	12.3942	11.9804
400019	1.4371	0.4526	12.8029	12.8380	14.7133	13.3474
400021	1.4337	0.4603	14.1534	14.4549	13.9217	14.1634
400022	1.4167	0.4262	15.9246	14.9089	15.3625	15.3797
400024	0.8912	0.3657	12.4648	10.8439	12.6226	11.9953
400026	1.0823	0.2944	5.8200	9.9262	7.1179	7.2042
400028	1.0970	0.4262	10.9808	11.3260	10.6711	10.9928
400032	1.1389	0.4526	10.2652	10.3736	10.7141	10.4546
400044	1.2868	0.4262	13.7509	14.6420	11.3551	13.0226
400048	1.1723	0.4526	10.4266	9.6416	9.6860	9.9022
400061	1.9960	0.4526	18.9123	18.1303	18.0093	18.3233
400079	1.2424	0.3345	12.7825	9.5296	10.4599	10.7211
400087	1.2021	0.4526	10.6849	11.0377	11.4162	11.0323
400098	1.3680	0.4526	12.8230	13.8034	13.7878	13.3737
400102	1.3126	0.4526	10.2677	10.5879	12.1761	10.9324
400103	1.7531	0.3657	9.3859	10.6971	11.7488	10.5156
400104	1.1987	0.4526	9.3854	11.4322	12.8404	11.2161
400105	1.1555	0.4526	14.0219	15.6626	16.9029	15.5351
400106	1.1103	0.4526	11.4507	13.4097	12.9272	12.5586
400109	1.4443	0.4526	14.2111	14.4386	14.8208	14.4938
400110	1.2255	0.3200	12.3449	11.1812	9.9278	11.1280
400111	1.1556	0.3345	14.5029	14.1718	10.2141	12.6681
400112	1.2246	0.4526	19.3945	10.1512	13.5177	13.3103
400113	1.2963	0.4262	9.6778	10.5305	10.9503	10.3752
400114	1.1415	0.4526	11.5478	10.1379	10.8913	10.8234
400115	1.0288	0.4526	13.7392	12.0713	9.6200	11.5296
400117	1.1103	0.4526	12.7600	9.5929	11.6258	11.1092
400118	1.2476	0.4526	12.5743	12.8692	12.7861	12.7465
400120	1.3549	0.4526	12.7955	13.4069	14.0817	13.4544
400121	1.0490	0.4526	8.2197	9.7427	9.1826	9.0004
400122	1.9051	0.4526	11.2324	8.9478	9.5814	10.3491
400123	1.2168	0.3657	12.3041	12.8317	12.5609	12.5625
400124	2.7715	0.4526	16.1812	17.2139	17.9140	17.1104
400125	1.2089	0.4365	11.6386	11.9787	13.5394	12.3736
400126	1.2018	0.4603	9.8008	14.1062	16.5726	12.5522
400127	1.7702	0.4526	*	17.8303	20.7775	19.5304
400128	1.0772	0.4526	*	*	12.3520	12.3520
410001	1.3001	1.1303	28.0816	29.0877	30.0315	29.0712
410004	1.2507	1.1303	27.4209	29.4953	31.3023	29.3085
410005	1.2514	1.1303	30.1606	28.1141	31.4387	29.8829
410006	1.3446	1.0532	29.4395	30.1855	32.8456	30.8320
410007	1.6590	1.1303	31.8548	33.2896	32.0730	32.4076
410008	1.2339	1.0532	29.6092	30.9505	32.5889	31.0411
410009	1.2457	1.0532	29.4094	31.7300	32.8422	31.3631
410010	1.1816	1.1303	32.8599	32.0704	32.7379	32.5467
410011	1.3898	1.1303	30.3787	33.8781	30.1941	31.4075
410012	1.6846	1.1303	32.6009	33.6072	37.0299	34.4554
410013	1.2109	1.1732	35.4624	35.8075	41.0010	37.4278
420002	1.5892	0.9505	28.2848	29.5592	30.5111	29.4596
420004	1.9968	0.9101	27.2620	28.1455	28.9250	28.1335
420005	1.1298	0.8707	23.1943	25.0420	24.6968	24.3261
420006	1.1030	0.9101	24.0811	26.3293	27.7764	26.0571
420007	1.6204	0.9403	25.2650	26.8165	29.0901	27.0758
420009	1.3844	0.9403	25.5079	27.0147	29.9378	27.4921
420010	1.1454	0.8707	23.4562	25.1452	25.5710	24.7565
420011	1.1700	0.9636	21.4029	22.1787	25.5130	23.0432
420015	1.3564	0.9636	26.2154	24.1685	26.3499	25.5708
420016	0.9729	0.8707	17.1229	21.6266	22.5681	20.3115
420018	1.8351	0.8829	24.8024	25.6687	27.5563	26.0448
420019	1.0975	0.8865	22.5312	22.5489	25.4954	23.3967
420020	1.2783	0.9101	25.8883	28.4344	27.5000	27.2263
420023	1.6931	0.9636	26.7263	27.4589	28.9321	27.7092
420026	1.8832	0.8829	27.4814	27.8986	28.0647	27.8209
420027	1.5863	0.9403	25.1692	26.4472	28.5621	26.7375

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
420030	1.2459	0.9101	26.0079	27.8435	28.4433	27.4518
420033	1.1206	0.9636	31.8759	30.4162	31.1608	31.1288
420036	1.2393	0.9342	22.8294	23.8742	24.6505	23.7918
420037	1.2991	0.9636	29.4156	29.8321	30.9556	30.0757
420038	1.2506	0.9636	24.2259	24.6642	26.6435	25.1658
420039	1.1502	0.9395	25.1148	28.2220	26.5582	26.6294
420043	1.1014	0.8864	23.0555	24.0971	25.7951	24.3487
420048	1.2704	0.8829	24.1923	25.9610	26.9625	25.7393
420049	1.2503	0.8707	23.9722	26.0953	25.7060	25.2650
420051	1.6618	0.8707	24.8026	25.9056	26.4710	25.7419
420053	1.1266	0.8742	22.2825	23.2246	24.4793	23.3671
420054	1.1343	0.8707	24.8931	25.6779	25.6444	25.3992
420055	1.0788	0.8707	21.9764	24.0965	25.1738	23.7710
420056	1.3331	0.8707	21.6963	27.7250	28.4512	26.0628
420057	1.1850	0.8707	23.4312	24.9313	26.2489	24.8975
420062	1.0478	0.9342	25.9526	26.7467	25.9569	26.2263
420064	1.1878	0.8707	23.3610	24.3540	24.6507	24.1129
420065	1.4423	0.9101	24.5715	25.5483	26.8118	25.6580
420066	1.0102	0.8707	23.9049	25.1062	25.0932	24.7340
420067	1.3642	0.8890	25.0345	25.8561	26.5658	25.8410
420068	1.3736	0.9598	23.4248	25.6857	27.7315	25.6542
420069	1.1727	0.8707	20.5546	22.3445	23.7494	22.2412
420070	1.3002	0.8898	23.4355	24.7899	27.5988	25.3447
420071	1.4324	0.9403	24.9418	25.2862	27.6371	25.9946
420072	1.0648	0.8707	18.6742	17.8019	21.6587	19.2819
420073	1.3853	0.8829	24.5813	25.5204	26.1120	25.4570
420078	1.9234	0.9636	28.9112	29.5135	30.9001	29.7803
420079	1.4833	0.9101	25.4935	27.5439	28.6374	27.2418
420080	1.4399	0.8890	28.4735	28.6060	31.5670	29.4700
420082	1.5176	0.9598	29.8528	31.2671	33.9874	31.6537
420083	1.4753	0.9403	27.1322	26.4932	28.9007	27.5465
420085	1.5552	0.9156	26.8692	27.8386	29.1127	27.9342
420086	1.4543	0.8829	25.8869	28.0485	27.9523	27.3375
420087	1.8316	0.9101	24.3609	25.4697	26.8409	25.5481
420089	1.3966	0.9101	26.0074	28.1855	29.5862	27.9480
420091	1.4220	0.8707	26.9214	26.0592	27.2520	26.7465
420093	***	*	27.4767	28.0765	33.0474	29.2458
420098	1.1886	0.8707	*	30.7532	27.1939	28.6282
420099	***	*	*	*	30.3089	30.3089
420101	1.1325	0.8707	*	*	*	*
430005	1.2980	0.8343	22.3272	22.4111	23.8694	22.8728
430008	1.1437	0.8878	23.3790	24.4277	26.0873	24.5250
430012	1.3084	0.9373	24.0850	24.0326	25.2030	24.4262
430013	1.1850	0.9373	25.1378	25.9828	27.0427	26.0549
430014	1.4182	0.8343	26.4964	26.8752	27.9288	27.1027
430015	1.2660	0.8343	22.7947	23.6296	26.5787	24.3442
430016	1.6461	0.9553	27.8453	28.9376	32.8765	29.8590
430027	1.7908	0.9553	26.2139	26.6044	27.5759	26.8179
430031	***	*	16.0346	*	*	16.0346
430047	1.0090	*	18.8982	*	*	18.8982
430048	1.2826	0.8472	23.0782	24.1969	25.1715	24.1632
430060	0.8255	0.8343	*	13.2618	*	13.2618
430064	1.0352	0.8343	17.5376	18.3125	16.4916	17.3487
430077	1.8125	0.8685	25.1763	25.8572	27.2116	26.0778
430081	0.8813	1.4400	*	*	*	*
430082	0.8159	1.4400	*	*	*	*
430083	0.8773	1.4400	*	*	*	*
430084	0.9191	1.4400	*	*	*	*
430085	0.8887	1.4400	*	*	*	*
430089	1.8643	0.9083	22.5625	22.3335	23.2467	22.7178
430090	1.4823	0.9553	25.8460	26.4862	29.0197	27.2002
430091	2.1535	0.8685	24.3021	25.1105	24.7274	24.7230
430092	1.8619	0.8343	20.9486	21.6478	21.9197	21.5136
430093	0.8376	0.8685	29.5244	27.5326	26.0232	27.6512
430094	1.6473	0.8472	18.9099	22.9091	23.2894	21.6362
430095	2.4536	0.9553	28.1749	31.3409	32.2326	30.5986
430096	1.8925	0.8343	21.6997	21.6713	24.6041	22.6698

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
440001	1.1429	0.7917	19.3100	21.2398	21.5755	20.7297
440002	1.7517	0.8963	24.6664	25.7434	26.3802	25.6181
440003	1.3286	0.9618	25.9209	28.4862	28.3557	27.6397
440006	1.5104	0.9618	28.5951	29.7146	31.5533	29.9429
440007	1.0213	0.8136	25.8236	19.9754	18.8273	20.7872
440008	1.0650	0.8435	23.4301	23.2126	27.3732	24.8411
440009	1.2235	0.7917	21.5970	23.9279	23.8148	23.1556
440010	0.9454	0.7917	17.1803	19.3669	19.6231	18.7390
440011	1.3468	0.8012	22.5068	23.6154	23.6698	23.2734
440012	1.5824	0.7917	22.3029	24.0169	23.7871	23.3709
440015	1.8744	0.8012	23.7422	25.0430	26.0601	24.9723
440016	1.0058	0.8061	22.1645	23.0350	24.5812	23.2195
440017	1.8259	0.7917	22.9364	25.0588	24.6707	24.2298
440018	1.1293	0.7917	23.3445	23.2107	25.0780	23.9426
440019	1.7495	0.8012	25.2553	25.3592	25.2230	25.2804
440020	1.0946	0.8629	23.9475	24.0995	24.7785	24.2807
440024	1.2188	0.8962	23.2717	23.9745	24.7705	24.0299
440025	1.1297	0.8603	20.6798	22.5407	22.6571	21.9869
440026	0.6838	0.9618	26.8986	28.0349	26.8153	27.2470
440029	1.3911	0.9618	28.0779	30.1204	31.2310	29.8864
440030	1.3252	0.7973	22.1217	23.7670	22.2607	22.7230
440031	1.1881	0.7936	19.6684	20.8964	22.6790	21.0762
440032	1.2202	0.7917	18.5277	19.7150	21.0380	19.7424
440033	1.0340	0.7944	20.7917	21.1087	22.7991	21.5097
440034	1.6264	0.8012	23.5403	24.6994	25.5061	24.6085
440035	1.4163	0.9364	24.3752	25.9613	26.2451	25.5505
440039	2.1878	0.9618	28.4678	29.8611	30.1790	29.5489
440040	0.9037	0.7917	17.8509	20.8637	20.8817	19.8822
440041	0.9131	*	17.9409	*	*	17.9409
440046	1.2541	0.9618	26.1341	27.9539	29.7377	27.9640
440047	0.9019	0.8255	21.4280	21.7892	22.8323	22.0491
440048	1.8393	0.9313	27.7560	29.4789	29.3187	28.8706
440049	1.6394	0.9313	25.3043	26.4772	28.8742	26.9261
440050	1.3557	0.7917	23.1363	24.4616	24.9694	24.2238
440051	0.9547	0.7999	21.9108	23.9253	23.4866	23.1295
440052	0.9967	0.7917	21.1133	22.8016	22.6128	22.1807
440053	1.2686	0.9618	25.4345	27.1197	27.8180	26.7576
440054	1.1313	0.7917	21.4400	23.5137	23.7931	22.9260
440056	1.1627	0.8012	22.1067	22.7820	23.2313	22.7147
440057	1.0901	0.7938	16.4451	16.6346	17.2176	16.7762
440058	1.1779	0.7917	22.9263	24.3522	26.0706	24.4599
440059	1.4606	0.7917	26.3551	28.3565	27.9467	27.5547
440060	1.1376	0.8435	23.3014	24.1024	25.0795	24.2308
440061	1.1227	0.7917	21.8274	23.9678	23.7360	23.1109
440063	1.5877	0.7917	22.3256	24.2566	23.9644	23.5409
440064	1.0095	0.8962	22.0955	23.7176	26.1246	23.9669
440065	1.2649	0.9618	22.3247	24.6169	25.8536	24.2955
440067	1.1060	0.7973	23.1089	24.4772	24.6553	24.0987
440068	1.1561	0.8962	24.5972	24.8146	26.1071	25.1514
440070	0.9795	0.8026	19.4372	20.0938	21.9166	20.5440
440072	1.1052	0.8963	27.1442	23.9563	25.7089	25.4880
440073	1.4690	0.9364	23.9198	26.3570	27.6154	25.9562
440081	1.1988	0.7969	19.7878	20.7125	20.7688	20.4356
440082	2.1154	0.9618	27.9724	30.6115	32.2479	30.2297
440083	0.9665	0.7917	17.3329	25.6099	23.6356	22.2415
440084	1.1850	0.7942	16.3738	18.6043	18.8699	17.9500
440091	1.7521	0.8962	25.6797	26.5687	28.1989	26.8422
440102	1.1443	0.7917	17.5261	20.7363	21.6762	19.9759
440104	1.7681	0.8962	25.3739	26.5741	27.9756	26.6322
440105	0.8903	0.7917	22.3438	22.9372	22.7962	22.6994
440109	0.9688	0.7987	18.6720	20.8924	21.4629	20.4136
440110	1.1516	0.8012	21.3287	20.9179	22.5929	21.6231
440111	1.2941	0.9618	28.5705	29.0975	28.8453	28.8380
440114	***	*	24.0146	*	*	24.0146
440115	1.0084	0.8255	21.7830	23.1409	23.7107	22.8901
440120	1.5807	0.8012	25.5961	25.7161	24.7572	25.3531
440125	1.6030	0.8012	22.4196	22.8097	23.6328	22.9331

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
440130	1.1080	0.7917	23.4517	23.9955	25.1262	24.1968
440131	1.2044	0.9313	24.9599	25.6666	26.9649	25.8560
440132	1.2396	0.7917	21.5085	23.9410	24.0708	23.2170
440133	1.7123	0.9618	26.2422	29.2829	29.6093	28.3398
440135	0.9966	0.7917	26.6615	28.1925	27.7037	27.5222
440137	1.0789	0.8655	20.6663	22.2538	22.9547	21.8990
440141	0.9681	0.7917	21.3314	24.2406	24.9917	23.5753
440144	1.3047	0.9364	23.3828	23.9241	25.2293	24.2131
440145	1.0761	*	20.7875	*	*	20.7875
440147	***	*	31.4012	33.1756	34.8199	33.1562
440148	1.1125	0.9364	24.6412	23.9810	22.6188	23.6904
440149	***	*	20.4563	*	*	20.4563
440150	1.3915	0.9618	26.8308	28.1012	29.4381	28.1244
440151	1.1731	0.9364	23.9808	27.1729	28.2203	26.4238
440152	1.9330	0.9313	26.5513	27.1877	28.4612	27.4397
440153	1.0815	0.7924	22.2846	23.6473	24.9388	23.5617
440156	1.6487	0.8962	26.9689	27.7309	28.5645	27.7809
440159	1.5112	0.9313	22.8645	26.9098	25.8289	25.2934
440161	1.8713	0.9618	28.6971	28.7074	29.9894	29.1537
440162	***	*	21.1418	27.6837	24.8705	24.4635
440166	***	*	31.0779	35.3064	*	32.7296
440168	0.9656	0.9313	22.8768	28.1215	29.4028	26.9618
440173	1.4384	0.8012	22.8846	23.1167	24.0621	23.3817
440174	0.8948	0.8229	22.0974	25.4829	26.2087	24.7287
440175	1.0346	0.9364	22.7299	24.4848	24.7869	23.9712
440176	1.2755	0.7917	23.6659	22.9631	23.7695	23.4768
440180	1.2910	0.7944	23.3808	24.9841	22.3070	23.4474
440181	0.9194	0.8282	22.7151	24.8857	25.9450	24.5707
440182	0.9950	0.8061	22.3612	24.3302	25.0111	23.9834
440183	1.5965	0.9313	27.1515	29.1982	30.6599	28.9846
440184	0.9643	0.7917	22.3475	24.5786	23.3970	23.4193
440185	1.1494	0.8962	23.9052	25.3817	26.7473	25.4020
440186	0.9670	0.9618	25.7445	27.3733	28.9124	27.3831
440187	1.0855	0.7917	21.3252	24.0723	25.8238	23.7554
440189	1.3573	0.8591	27.5435	28.2621	28.8974	28.1769
440192	1.0837	0.9364	25.7495	27.3917	29.6272	27.6374
440193	1.3504	0.9618	24.4299	24.3622	25.2124	24.6713
440194	1.3046	0.9618	26.6527	29.4706	30.8593	29.1025
440197	1.3634	0.9618	27.1534	29.4275	30.1184	28.8521
440200	0.9727	0.9618	17.7491	21.1860	23.8654	20.9536
440203	***	*	19.3864	23.7451	17.9041	20.1684
440217	1.3218	0.9313	28.5968	28.8641	29.8888	29.1071
440218	2.2001	0.9618	24.6465	23.7257	18.7275	22.2604
440222	1.0526	0.9313	29.7292	28.4664	29.0062	29.0425
440224	0.8974	0.9618	*	*	*	*
440225	0.7954	0.8012	*	24.8328	27.8860	26.2410
440226	1.5468	0.8012	*	26.5831	27.1348	26.8601
440227	1.3258	0.9618	*	*	30.7785	30.7785
440228	1.4404	0.9313	*	*	28.3687	28.3687
450002	1.4187	0.9140	25.7171	28.0936	28.8521	27.4831
450005	1.0716	0.8615	23.5576	24.4933	24.5405	24.1601
450007	1.3075	0.8895	20.7321	23.0026	23.9490	22.5725
450008	1.2921	0.8303	22.9669	24.4701	24.5965	24.0253
450010	1.6531	0.8203	23.7529	25.5503	25.5582	24.9684
450011	1.6887	0.9171	24.8831	26.7418	28.5329	26.6975
450015	1.5297	0.9785	27.4012	29.9193	29.4919	28.9240
450018	1.5190	0.9996	26.7999	30.2383	30.7852	29.2611
450020	0.9712	*	18.3047	*	*	18.3047
450021	1.8798	0.9785	29.1350	29.5658	31.3107	29.9776
450023	1.4773	0.8198	22.0558	25.4450	25.5346	24.3069
450024	1.6700	0.9140	24.4195	26.9113	28.2047	26.6001
450028	1.6124	0.9192	26.8250	29.1438	29.5792	28.4741
450029	1.6184	0.8501	23.2995	25.0602	26.9361	25.0112
450031	1.4011	0.9785	27.9626	29.0824	30.3542	29.1129
450032	1.2887	0.8551	27.0748	21.5084	25.5785	24.5163
450033	1.6328	0.9192	28.4781	29.2468	27.8680	28.5092
450034	1.5781	0.8615	24.1589	26.5313	27.6929	26.1022

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
450035	1.4958	0.9996	26.2838	28.0668	28.8049	27.6978
450037	1.6448	0.8871	24.2684	26.6207	28.3403	26.4155
450039	1.4616	0.9681	24.7347	26.7503	28.2081	26.5799
450040	1.8081	0.8641	24.9590	25.4734	26.8412	25.7399
450042	1.7918	0.8593	24.1181	26.6382	26.5429	25.7899
450044	1.7622	0.9785	29.4308	31.0381	29.4293	29.9718
450046	1.6190	0.8456	23.4907	24.8947	25.5903	24.6759
450047	0.8457	0.9192	19.8221	21.8824	23.8457	21.9037
450050	0.8661	*	23.3044	*	*	23.3044
450051	1.9254	0.9785	28.0411	28.8829	29.9038	28.9708
450052	0.9462	0.8198	19.7774	22.6448	23.0007	21.3928
450053	0.9303	*	21.9082	*	*	21.9082
450054	1.7997	0.8303	24.2782	27.5399	26.5599	26.0525
450055	1.0493	0.8198	22.1979	22.9245	23.6382	22.9302
450056	1.7631	0.9501	27.0530	28.3092	31.4971	28.7483
450058	1.5935	0.8895	25.9653	26.6926	26.9918	26.5548
450059	1.3109	0.9501	26.6535	26.8325	27.3856	26.9630
450064	1.4732	0.9681	23.8748	26.8355	28.2786	26.2939
450068	2.1593	0.9996	27.9633	29.5876	30.5001	29.3709
450072	1.2067	0.9996	24.0166	25.8619	27.1081	25.6939
450073	0.8859	0.8198	21.7337	26.9446	26.1567	24.8300
450076	1.6741	*	*	*	*	*
450078	0.9153	0.8198	15.8968	21.4716	20.0758	18.9517
450079	1.6341	0.9785	28.1096	30.2420	30.5968	29.6101
450080	1.2456	0.8871	22.9836	27.9191	26.2439	25.6047
450082	1.1501	0.8198	22.0442	23.9025	24.2018	23.3904
450083	1.8310	0.9181	25.8214	27.4955	32.6462	28.5964
450085	1.0612	0.8198	22.0840	24.3637	25.6440	24.0616
450087	1.4142	0.9681	29.1587	30.0095	31.2668	30.1454
450090	1.2348	0.8847	19.4245	21.3837	21.8839	20.8851
450092	1.1900	0.8198	23.2071	24.9917	26.2781	24.8586
450094	***	*	25.2434	*	*	25.2434
450096	***	*	24.1618	26.5103	28.1902	26.1065
450097	1.4813	0.9996	26.4965	29.0142	29.8734	28.4576
450098	0.9764	*	22.6626	*	*	22.6626
450099	1.2849	0.9151	26.6796	31.3495	31.7829	29.8766
450101	1.6850	0.8593	23.6905	25.4409	26.7457	25.2723
450102	1.7581	0.9181	24.5503	25.6318	26.4161	25.5272
450104	1.1910	0.8895	23.8469	24.6169	28.8063	25.7441
450107	1.5650	0.9140	25.9326	27.6064	27.8177	27.1285
450108	1.2022	0.8895	19.4935	21.6557	19.3245	20.1295
450113	***	*	54.6663	*	*	54.6663
450119	1.3059	0.9135	25.7008	27.8027	31.1026	28.0194
450121	***	*	25.7051	29.1296	27.7472	27.5367
450123	1.2261	0.8615	21.2154	24.9674	26.2469	24.0865
450124	1.8807	0.9501	27.4198	28.2571	30.9140	28.8720
450126	1.3811	0.9996	28.3032	29.3768	30.5540	29.4686
450128	1.2606	0.9135	23.3633	25.1122	26.3296	24.9399
450130	1.1622	0.8895	21.5226	24.3295	24.3842	23.4132
450131	***	*	23.7098	25.9494	*	24.6979
450132	1.5736	0.9954	28.6954	30.1620	31.9981	30.2616
450133	1.5644	0.9711	26.8344	28.4647	30.0648	28.4860
450135	1.7036	0.9681	26.0755	27.8983	30.1385	28.0791
450137	1.7309	0.9681	30.4254	31.4950	31.9644	31.3195
450143	0.9924	0.9501	21.8705	23.4592	23.6834	23.0250
450144	1.0795	0.8757	21.3289	26.2881	29.2987	25.2285
450147	1.5055	0.8198	23.9771	24.3562	24.7221	24.3818
450148	1.2593	0.9681	25.3498	27.0894	29.6777	27.2884
450151	***	*	22.2915	23.9558	26.2011	24.2451
450152	1.2222	0.8303	22.7463	23.3428	23.1056	23.0676
450154	1.3964	0.8198	21.2021	21.7237	22.9357	21.9527
450155	1.1128	0.8198	18.0588	21.7604	24.8052	21.2762
450162	1.3166	0.8641	30.9903	33.3285	32.9317	32.4581
450163	1.0669	0.8252	23.1400	24.1267	24.7857	24.0374
450165	1.1663	0.8895	24.3242	28.6490	29.1839	27.3457
450176	1.3545	0.9135	20.9297	23.1284	24.4338	22.7670
450177	1.1706	0.8198	21.3322	23.7624	24.4064	23.1608

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
450178	0.9841	0.9522	24.7301	27.8405	27.1184	26.5678
450184	1.5607	0.9996	26.7821	28.5399	29.5940	28.3021
450187	1.1820	0.9996	25.6787	28.3243	27.7374	27.2569
450188	0.9375	0.8198	20.4070	23.0595	23.2280	22.2802
450191	1.1684	0.9501	26.0298	26.5863	28.3937	27.0037
450192	1.1362	0.8469	22.5880	24.1186	26.4722	24.4203
450193	2.0940	0.9996	32.2964	34.4545	36.4793	34.4413
450194	1.3690	0.8411	24.8972	22.9605	24.3531	24.0550
450196	1.4362	0.9681	24.7557	24.0161	23.4577	24.1010
450200	1.5854	0.8198	23.5344	23.5012	25.6413	24.1114
450201	0.9698	0.8198	20.9810	23.2510	23.2800	22.5466
450203	1.1783	0.9636	24.1675	26.5237	27.8795	26.2148
450209	1.9545	0.9151	26.0958	27.5668	30.6146	28.0394
450210	0.9541	0.8348	19.9832	21.8722	22.5736	21.5263
450211	1.3225	0.8871	23.8230	28.4581	28.3770	26.9047
450213	1.9145	0.8895	23.9676	25.9169	26.8566	25.6079
450214	1.2450	0.9996	25.9598	27.4357	27.9913	27.1357
450219	0.9693	0.8198	21.7934	21.9207	23.9636	22.5469
450221	1.1310	0.8198	20.3186	19.3793	21.3721	20.3738
450222	1.6699	0.9996	27.4426	30.0314	30.3801	29.2831
450224	1.3681	0.9181	24.1956	26.8302	28.4382	26.4258
450229	1.6509	0.8240	21.4459	24.4450	25.1370	23.6500
450231	1.6694	0.9151	25.2852	27.1674	26.9783	26.4822
450234	1.0257	0.8198	18.4451	20.6889	20.4659	19.9283
450235	1.0130	0.8198	21.5138	23.5212	21.8967	22.3104
450236	1.0587	0.8586	22.0788	23.5426	22.9622	22.8816
450237	1.6285	0.8895	24.8901	25.7939	30.5885	26.8889
450239	0.9810	0.8303	21.1945	21.2586	19.1359	20.4359
450241	1.0079	0.8198	18.7958	20.8732	21.3641	20.3133
450243	0.9797	0.8198	15.4636	15.4510	17.2966	16.0870
450253	0.9237	0.9996	20.6124	24.2435	24.1056	23.0166
450270	1.1787	0.8469	14.4325	15.2190	19.8180	16.4159
450271	1.2139	0.9636	21.7719	22.7035	24.1269	22.9111
450272	1.2109	0.9501	25.7392	26.2576	27.0521	26.3732
450276	***	*	16.6319	*	*	16.6319
450280	1.4744	0.9785	28.7233	29.9730	31.6575	30.1311
450283	1.0394	0.9681	20.9679	22.7938	24.1754	22.6250
450289	1.4188	0.9996	28.5665	32.2645	32.6533	31.2446
450292	1.2700	0.9785	25.0411	26.3242	26.8110	26.0607
450293	0.8636	0.8198	21.3135	23.6413	24.0827	22.9699
450296	1.1003	0.9996	27.9690	30.4324	31.5596	30.0340
450299	1.6637	0.9171	26.4933	27.5797	28.4171	27.4989
450306	0.9541	0.8240	15.9855	21.4558	22.9486	19.7058
450315	1.8055	0.9785	*	37.1721	*	37.1721
450324	1.5710	0.9681	24.9128	25.1633	26.6093	25.5442
450330	1.2146	0.9996	25.5820	26.0771	27.1100	26.2641
450340	1.3762	0.8658	24.0637	25.0344	25.6791	24.9276
450346	1.4301	0.8615	22.2468	23.6072	23.8720	23.2813
450347	1.1980	0.9996	27.2203	28.7667	30.7825	28.9056
450348	1.0403	0.8198	18.7675	21.6787	21.0484	20.5437
450351	1.2634	0.9636	25.6859	26.5388	29.2560	27.1710
450352	1.1039	0.9785	24.8012	26.2281	27.2983	26.1099
450353	***	*	24.4454	27.0248	27.9576	26.5065
450358	1.9690	0.9996	30.4280	31.4926	32.5922	31.5508
450362	***	*	25.4372	*	*	25.4372
450369	1.0321	0.8198	18.4848	19.9148	22.8525	20.4182
450370	1.1955	0.8433	20.0832	25.5834	26.3235	23.8014
450372	1.3699	0.9785	28.3359	30.8886	29.5022	29.5636
450373	0.8644	0.8198	22.2213	24.8286	27.0726	24.8206
450374	0.9938	*	23.2283	*	*	23.2283
450378	1.4691	0.9996	30.7684	30.3883	32.2278	31.1287
450379	1.3331	0.9785	30.6071	33.7521	35.3807	33.1822
450381	0.9328	*	22.0482	*	*	22.0482
450388	1.6610	0.8895	25.8674	27.4328	27.8155	27.0481
450389	1.1531	0.9681	23.8764	25.6732	26.9638	25.5406
450393	0.5363	0.9681	18.4551	21.9347	*	19.7864
450395	1.0563	0.9996	24.8656	27.5189	26.7743	26.5003

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
450399	0.8946	0.8198	18.2074	20.3528	22.1731	20.1552
450400	1.0785	0.8198	23.1739	23.6358	26.2871	24.2928
450403	1.3135	0.9785	29.3063	29.0359	29.8643	29.4107
450411	1.0100	0.8198	19.6086	20.9372	21.5746	20.7294
450417	0.8612	*	20.0351	*	*	20.0351
450418	***	*	26.8434	28.4362	*	27.5264
450419	1.2724	0.9681	31.0405	31.9966	34.2427	32.4903
450422	1.2225	0.9785	30.6659	34.4331	31.3454	32.1021
450424	1.3422	0.9996	28.3149	28.2463	30.7228	29.0903
450431	1.5882	0.9501	25.2477	26.3263	27.3926	26.3387
450438	1.1315	0.9996	21.9350	27.8659	26.5223	25.2196
450446	0.6348	0.9996	14.3132	17.0691	17.2871	16.0880
450447	1.2608	0.9681	23.5047	25.4200	26.5238	25.1015
450451	1.1286	0.8733	23.3043	24.6201	26.5477	24.8404
450460	0.9645	0.8251	20.5811	22.4227	24.9870	22.7352
450462	1.7180	0.9785	27.8923	29.6069	30.1466	29.2312
450465	1.1121	0.9996	22.4183	26.2759	27.0835	25.3182
450469	1.4937	0.9681	28.7890	26.3262	26.3445	27.1807
450475	1.0922	0.8871	23.5596	23.0942	24.5176	23.7054
450484	1.3677	0.8871	25.3527	26.7242	28.3913	26.8380
450488	1.1516	0.8871	23.9144	22.3981	23.7985	23.3820
450489	0.9930	0.8198	21.4771	23.4806	25.2680	23.4878
450497	1.0142	0.8573	18.8344	22.0918	23.1860	21.3700
450498	0.9453	0.8198	17.7822	18.6563	20.2475	18.8938
450508	1.5958	0.8871	23.9572	28.4471	27.2850	26.5800
450514	***	*	22.6552	26.3704	27.3043	25.5172
450518	1.4357	0.8615	24.1194	28.1755	29.1322	27.1788
450530	1.2777	0.9996	28.7451	29.1349	29.9720	29.2964
450537	1.4003	0.9785	27.5856	27.7757	28.7448	28.0481
450539	1.1985	0.8265	21.0442	23.1829	24.2151	22.7465
450547	0.9648	0.8393	21.6542	23.7820	34.3349	25.8923
450558	1.8257	0.8240	26.1551	26.9407	28.0655	27.0633
450563	1.5242	0.9681	28.7289	30.8332	32.0507	30.6111
450565	1.2522	0.8684	23.8846	26.7942	28.1741	26.2662
450571	1.6028	0.8658	22.7703	25.2108	27.4605	25.0812
450573	1.1240	0.8323	20.1479	22.0797	22.1492	21.5110
450578	0.9614	0.8198	20.2696	22.5167	25.0498	22.6273
450580	1.0846	0.8198	21.1574	22.3886	23.9004	22.4744
450584	1.1124	0.8198	21.0808	20.5257	22.5204	21.3633
450586	0.9374	0.8198	16.1003	18.9107	20.6699	18.6573
450587	1.2013	0.8198	20.4512	23.1202	25.0174	22.8390
450591	1.2595	0.9996	23.9992	25.7031	27.1744	25.6141
450596	1.2190	0.9636	25.3317	27.4011	29.8462	27.4275
450597	0.9772	0.8198	23.1711	24.7853	24.2586	24.0731
450604	1.3501	0.8198	20.9514	24.4743	25.9133	23.8497
450605	0.9405	0.8456	22.2205	20.9276	23.9332	22.2910
450610	1.5912	0.9996	26.8710	27.7317	28.3713	27.6825
450615	0.9878	0.8198	20.3028	21.8442	24.1902	22.0858
450617	1.5092	0.9996	26.5026	28.0225	28.8323	27.8240
450620	1.0024	0.8198	17.7138	18.6183	20.3723	18.9192
450623	1.1755	*	28.3552	*	*	28.3552
450626	***	*	26.8374	*	*	26.8374
450630	1.5459	0.9996	29.6796	29.1462	29.8431	29.5562
450634	1.7069	0.9785	28.1705	28.7312	30.3274	29.0806
450638	1.6735	0.9996	29.6184	30.6572	32.4911	30.8650
450639	1.4449	0.9681	29.2669	30.4019	32.6255	30.7775
450641	1.0336	0.8573	17.5845	19.4389	20.2483	19.0723
450643	1.3305	0.8501	21.1205	22.7355	24.4999	22.7584
450644	1.5887	0.9996	29.0186	29.7918	30.7815	29.8996
450646	1.4232	0.9140	23.8908	25.6313	26.8060	25.4375
450647	1.8334	0.9785	30.7334	30.6924	32.4236	31.2797
450651	1.4793	0.9785	32.4822	30.4484	31.9261	31.6022
450653	1.1659	0.8198	23.2603	25.2144	26.1756	24.8558
450654	0.9024	0.8198	19.9992	21.5002	22.5447	21.4234
450656	1.4165	0.8871	23.8280	25.5050	28.1493	25.7182
450658	0.9853	0.8198	20.5398	22.2293	24.7856	22.5185
450659	1.4621	0.9996	30.1727	31.5024	34.2380	31.8910

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
450661	1.1887	0.9954	23.2989	30.2610	30.0751	27.8684
450662	1.5730	0.9192	28.0913	29.0535	29.0532	28.7293
450665	***	*	18.6054	*	*	18.6054
450668	1.5287	0.9140	26.2375	28.8635	30.6114	28.5378
450669	1.2128	0.9785	27.4507	27.9796	30.2374	28.6058
450670	1.4050	0.9996	25.1575	25.9638	26.4266	25.8773
450672	1.8204	0.9681	27.6359	30.1191	31.8420	29.9422
450674	1.0697	0.9996	28.4416	28.7101	29.8971	29.0121
450675	1.3861	0.9681	28.7765	28.9005	30.9562	29.5682
450677	1.2694	0.9681	27.3728	25.9555	27.2760	26.8379
450678	1.5046	0.9785	30.1500	31.1563	33.3386	31.5036
450683	1.1583	0.9785	24.6609	27.4925	21.1737	24.2967
450684	1.2913	0.9996	27.6789	29.3025	30.2139	29.1278
450686	1.5950	0.8641	23.2367	24.2331	25.8530	24.4614
450688	1.1957	0.9785	27.9057	26.8599	26.9897	27.2212
450690	1.3100	0.9181	28.2531	26.5528	26.1743	27.0377
450694	1.1609	0.8198	23.5789	23.9961	24.0031	23.8670
450697	1.4201	0.8895	23.7155	24.8667	26.4132	25.0106
450698	0.8999	0.8325	18.6494	20.0955	21.5742	20.0867
450702	1.7113	0.8871	25.6147	26.8384	26.3696	26.2787
450709	1.3573	0.9996	25.4855	26.8146	27.1077	26.4651
450711	1.4817	0.9135	28.0104	26.7472	27.5622	27.4437
450713	1.5782	0.9501	27.2801	28.8285	29.4980	28.5539
450715	1.2406	0.9785	28.0365	17.3991	17.0235	19.5811
450716	1.3502	0.9996	30.8440	32.3960	33.7096	32.3143
450718	1.3791	0.9501	27.3408	27.3215	28.1560	27.6253
450723	1.4671	0.9785	28.0812	28.5103	30.1704	28.9694
450730	1.3698	0.9785	29.9430	31.3324	32.7293	31.3334
450733	***	*	26.4977	*	*	26.4977
450742	1.1911	0.9785	26.1189	27.2023	30.0583	27.8913
450743	1.4606	0.9785	27.3213	28.3362	28.4736	28.0743
450746	0.9233	0.8198	12.4748	20.6343	22.7873	18.2509
450747	1.2814	0.9181	22.2870	23.8314	25.8175	23.8627
450749	0.9915	0.8198	17.8227	20.0487	22.1562	19.9062
450751	***	*	19.3267	18.7456	21.4223	19.9014
450754	0.9275	0.8198	20.8968	22.1819	24.7797	22.6402
450755	0.9393	0.8474	18.0092	19.8988	22.2006	20.0136
450758	***	*	25.6547	28.7342	28.2803	27.5631
450760	1.0564	0.9140	24.6349	24.7489	25.1637	24.8390
450761	0.8818	*	15.7483	*	*	15.7483
450763	1.0706	*	22.4905	*	*	22.4905
450766	1.9348	0.9785	30.0441	30.8004	30.2341	30.3517
450770	1.2421	0.9501	20.3656	24.1647	24.3244	23.0091
450771	1.6716	0.9785	31.3924	30.7105	32.0500	31.3870
450774	1.6363	0.9996	24.9683	27.2080	25.7436	25.9776
450775	1.2932	0.9996	24.4006	28.1428	29.8230	27.3216
450779	1.2689	0.9681	26.9908	29.9674	31.8403	29.6444
450780	2.0442	0.8895	23.9516	26.7611	27.0084	25.8985
450788	1.5555	0.8456	25.4172	26.2840	28.3759	26.7019
450795	1.1878	0.9996	23.7510	25.2007	32.9803	27.3787
450796	1.7336	0.9151	27.9734	36.4073	37.6274	33.9632
450797	1.9643	0.9996	20.5379	24.8950	24.8598	23.1191
450801	1.5000	0.8198	23.0373	24.6328	23.6072	23.7609
450803	1.1830	0.9996	30.6093	28.9235	29.0106	29.5055
450804	1.9178	0.9996	26.0981	27.8775	29.1282	27.7201
450808	1.3367	0.9501	23.8067	21.9793	23.0312	22.9181
450809	1.5667	0.9501	26.3659	26.4223	27.3080	26.7166
450811	1.8166	0.9135	25.8491	27.2584	31.2208	27.9853
450813	1.1710	0.8895	25.5949	20.1710	22.9289	22.7727
450820	1.3250	0.9996	30.5288	31.4666	33.9030	32.1410
450822	1.2857	0.9785	31.1430	32.2968	32.2145	31.9067
450824	2.4889	0.9501	26.7803	31.2375	33.3653	30.5418
450825	1.3904	0.9135	20.2959	20.6457	25.1521	21.9878
450827	1.3878	0.8203	20.9704	23.7554	24.1984	23.0409
450828	1.3241	0.8198	22.3667	24.4740	24.8236	24.1300
450829	***	*	19.5014	20.6016	19.5842	19.9030
450830	1.0196	0.9522	28.1617	28.5902	27.8005	28.1885

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
450831	1.4011	0.9996	22.7885	23.3880	23.9467	23.3309
450832	1.2704	0.9996	26.6628	26.5229	27.3290	26.8494
450833	1.3222	0.9785	26.0044	27.0133	27.9649	27.0364
450834	1.5971	0.9171	21.2204	20.9607	27.4844	22.7772
450838	1.1492	0.8323	15.8026	19.5754	18.9620	18.1919
450839	0.9901	0.8551	22.9711	25.8222	27.2199	25.2487
450840	1.2906	0.9785	31.1914	30.1743	32.2538	31.2218
450841	1.9165	0.9192	18.9468	20.9410	20.9424	20.3779
450844	1.3117	0.9996	28.7296	30.7887	33.7978	31.3327
450845	1.8432	0.9140	27.7461	29.4933	29.9265	29.0937
450847	1.2710	0.9996	27.6854	28.5548	29.7356	28.6780
450848	1.3004	0.9996	27.8100	29.5355	30.5546	29.3303
450850	1.1195	0.9711	22.1335	21.9266	31.9606	24.7549
450851	2.5542	0.9785	30.1213	32.6950	35.1102	32.6767
450852	***	*	30.0191	*	*	30.0191
450853	1.9480	0.9785	*	36.1169	37.1043	36.6729
450854	***	*	*	27.1868	*	27.1868
450855	1.5587	0.9192	*	30.8855	32.6916	31.8350
450856	1.9053	0.8895	*	39.0865	37.7362	38.3791
450857	***	*	*	30.4632	*	30.4632
450860	1.9631	0.9996	*	24.0171	29.1075	26.9551
450861	***	*	*	34.9290	*	34.9290
450862	1.4560	0.9996	*	31.2224	31.8095	31.4630
450863	***	*	*	24.8825	*	24.8825
450864	2.0615	0.9181	*	23.3765	24.5049	24.0210
450865	1.0642	0.9501	*	29.1763	29.9559	29.5867
450866	***	*	*	15.2959	*	15.2959
450867	1.1905	0.9501	*	28.2289	29.5879	28.9055
450868	1.8308	0.9954	*	27.9579	25.3486	26.8246
450869	2.0516	0.9135	*	22.6253	26.1616	24.9911
450870	***	*	*	37.4364	*	37.4364
450871	1.8016	0.9501	*	*	28.9150	28.9150
450872	1.3873	0.9681	*	*	27.2833	27.2833
450873	***	*	*	*	14.8821	14.8821
450874	1.5449	0.9785	*	*	34.6083	34.6083
450875	1.6419	0.9151	*	*	23.2763	23.2763
450876	2.0787	0.8641	*	*	28.4343	28.4343
450877	1.5503	0.9140	*	*	26.1867	26.1867
450878	2.5573	0.8895	*	*	31.6750	31.6750
450879	1.2943	0.8501	*	*	35.5672	35.5672
450880	1.6570	0.9681	*	*	35.9572	35.9572
450881	***	*	*	*	24.5464	24.5464
450882	***	*	*	*	26.6910	26.6910
450883	2.5235	0.9785	*	*	35.2646	35.2646
450884	0.9920	0.8920	*	*	27.8213	27.8213
450885	1.4958	0.9785	*	*	34.1148	34.1148
450886	1.9602	0.9660	*	*	*	*
450888	1.4699	0.9660	*	*	*	*
450889	1.5257	0.9785	*	*	*	*
450890	2.0976	0.9785	*	*	*	*
450891	1.3643	0.9785	*	*	*	*
450893	1.2413	0.9785	*	*	*	*
450894	1.6453	0.9785	*	*	*	*
450895	***	*	*	*	18.4142	18.4142
460001	1.8844	0.9480	27.0757	28.7150	30.0040	28.5953
460003	1.5188	0.9473	26.1372	31.4135	32.3427	29.8772
460004	1.7340	0.9473	26.4498	28.2040	29.6342	28.1012
460005	1.4367	0.9473	23.5633	25.0239	26.0731	24.8800
460006	1.3712	0.9473	25.4787	27.1392	28.3678	27.0132
460007	1.3738	0.9535	25.6686	27.1308	28.0035	26.9931
460008	1.4051	0.9473	26.5672	29.5907	31.5485	29.1771
460009	1.9306	0.9473	26.2833	27.2885	28.3836	27.3958
460010	2.0966	0.9473	27.4648	29.0063	30.4606	29.0099
460011	1.3219	0.9380	23.4023	24.4402	24.9677	24.2736
460013	1.4123	0.9480	25.2448	27.7381	29.2731	27.3708
460014	1.1347	0.9473	24.1412	28.2647	29.5963	27.3277
460015	1.3642	0.9214	25.6576	27.2506	29.1318	27.3614

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
460017	1.3017	0.8598	23.0388	24.3030	26.1589	24.4636
460018	0.9383	0.8214	20.3756	22.0517	22.8028	21.8351
460019	1.1628	0.8214	19.9901	24.3756	23.2202	22.4677
460020	1.0138	*	19.5669	18.5159	*	19.0929
460021	1.6953	1.1222	26.3420	28.0291	29.5761	28.1943
460023	1.1931	0.9480	25.3094	26.9512	28.5884	26.9777
460026	1.0465	0.9380	24.1547	26.9295	27.9487	26.3213
460030	1.1801	0.8214	23.4679	23.5942	24.4218	23.8301
460033	0.9138	0.8214	22.0249	25.3422	26.6606	24.7048
460035	0.9489	0.8214	17.5723	20.6322	21.9115	20.1175
460036	1.4454	*	27.2866	*	*	27.2866
460037	0.8447	*	21.1035	*	*	21.1035
460039	1.0867	0.9214	28.5657	29.5651	30.4912	29.5982
460041	1.3585	0.9473	25.2744	26.4640	26.3807	26.0600
460042	1.3922	0.9473	22.9949	24.9454	26.8389	24.8871
460043	1.2796	0.9480	28.2089	28.2008	28.6668	28.3615
460044	1.3080	0.9473	26.6795	27.4928	28.7023	27.6434
460047	1.6733	0.9473	25.7920	28.2336	29.9990	27.9779
460049	1.9973	0.9473	24.5165	26.6702	28.4884	26.6038
460051	1.2366	0.9473	25.5881	27.0160	27.8841	26.8633
460052	1.6315	0.9480	25.3163	26.1629	27.1995	26.2810
460054	1.5951	0.9214	25.8668	24.9926	25.7870	25.5264
470001	1.2942	1.0532	27.7329	28.3017	29.7540	28.6009
470003	1.9037	1.0387	26.4919	28.1137	30.1973	28.2590
470005	1.3059	1.0387	29.8255	30.7872	33.1981	31.2960
470006	1.2524	*	26.9651	*	*	26.9651
470010	***	*	26.1273	*	*	26.1273
470011	1.1763	1.0387	28.3911	28.1330	29.6269	28.7242
470012	1.1997	1.0387	24.3425	26.0225	27.0751	25.8314
470018	1.1137	*	28.3419	*	*	28.3419
470024	1.2029	1.0387	25.2427	27.0394	26.6351	26.3235
490001	1.0895	0.8073	21.9953	23.2174	24.0368	23.1150
490002	1.0523	0.8073	19.5613	20.8609	21.7092	20.6693
490003	***	*	27.3456	*	*	27.3456
490004	1.3086	0.9160	25.4597	27.1676	27.5890	26.7640
490005	1.6441	1.0675	28.5744	29.8215	30.5349	29.6413
490007	2.1955	0.8777	26.2481	27.6572	29.3098	27.7576
490009	2.0115	0.9160	29.0740	30.4722	28.4642	29.2905
490011	1.5273	0.8777	24.5687	26.4766	27.4764	26.2051
490012	1.0133	0.8073	19.2276	21.0605	22.9922	21.0354
490013	1.3388	0.8605	22.4771	24.7521	25.5560	24.2699
490017	1.5006	0.8777	24.6845	25.8216	27.5902	26.0271
490018	1.3285	0.9160	24.5196	26.2510	27.2644	26.0551
490019	1.1901	1.0675	25.9761	25.9885	25.8264	25.9276
490020	1.2418	0.9232	24.8001	27.3142	29.3468	27.1254
490021	1.4767	0.8605	24.6440	25.7938	27.0641	25.8484
490022	1.4239	1.0675	28.0749	32.2676	30.1203	30.1142
490023	1.3029	1.0675	29.7774	30.3416	30.9920	30.3866
490024	1.7769	0.8888	23.0982	26.1125	27.9689	25.6684
490027	1.0539	0.8073	18.9409	24.0288	23.0017	21.9123
490031	***	*	22.0579	*	*	22.0579
490032	1.9605	0.9232	25.1381	25.2654	28.5897	26.3877
490033	1.1087	1.0675	30.0909	31.2922	31.8282	31.1180
490037	1.2021	0.8073	21.3035	24.7711	25.2859	23.7337
490038	1.2579	0.8073	22.3976	21.8509	22.6504	22.2973
490040	1.4791	1.0675	32.8738	32.6564	34.1841	33.2338
490041	1.5154	0.8777	24.5738	26.0897	27.1613	25.9093
490042	1.2791	0.8746	21.8749	24.4650	25.7333	24.0571
490043	1.2495	1.0675	30.8871	33.7096	35.8872	33.5694
490044	1.4481	0.8777	20.8352	23.3527	23.3793	22.5144
490045	1.2631	1.0675	28.8279	32.0937	30.3772	30.3677
490046	1.5195	0.8777	25.6328	26.6517	27.9604	26.7676
490047	1.2301	*	22.5423	*	*	22.5423
490048	1.4179	0.8888	25.0097	26.2828	27.0620	26.1566
490050	1.4893	1.0675	30.5037	31.3885	32.2993	31.4066
490052	1.6975	0.8777	22.8889	23.5973	25.0046	23.8195
490053	1.2133	0.8073	21.8432	23.3315	23.8004	22.9792

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
490057	1.6174	0.8777	26.1128	26.6898	27.4918	26.7709
490059	1.6486	0.9232	28.7276	27.3611	30.8669	28.9526
490060	1.0549	0.8073	22.4201	23.6113	24.3192	23.4567
490063	1.8511	1.0675	30.3632	31.3619	31.6069	31.1276
490066	1.3599	0.8777	24.7146	27.8250	29.5917	27.4514
490067	1.2606	0.9232	22.9188	24.9021	25.9497	24.5486
490069	1.6019	0.9232	26.8791	27.3181	29.1527	27.7952
490071	1.3192	0.9232	28.4381	29.7186	31.7061	29.9452
490073	2.0908	1.0675	31.7743	33.1829	34.5774	33.0517
490075	1.4337	0.8296	23.8191	25.2022	25.7323	24.9373
490077	1.4152	0.9160	26.0800	26.6806	28.1506	26.9963
490079	1.2496	0.9078	23.4728	25.3103	25.2340	24.6377
490084	1.1764	0.8260	24.5965	24.9007	25.7657	25.0948
490088	1.0999	0.8605	22.4186	24.1471	25.0619	23.8698
490089	1.1022	0.8888	22.6461	24.9438	25.9902	24.5386
490090	1.1083	0.8073	22.2907	25.1157	25.5418	24.2403
490092	1.0916	0.9232	23.8655	23.3439	25.7405	24.2726
490093	1.4715	0.8777	25.0751	25.6531	26.7886	25.8819
490094	0.9845	0.9232	26.5726	28.2165	28.9155	27.8970
490097	1.0621	0.9232	23.8005	26.5322	27.1470	25.8282
490098	1.2546	0.8073	21.7231	23.2782	25.1625	23.3960
490101	1.4004	1.0675	30.4285	31.2377	32.3695	31.3631
490104	0.7733	0.9232	17.3295	*	17.0548	17.1728
490105	0.7209	0.8073	24.7922	25.5329	26.3827	25.5156
490106	0.9111	0.9160	23.0199	23.8334	25.7352	23.7423
490107	1.3334	1.0675	29.7000	32.2672	33.5430	31.8922
490108	1.0741	0.8605	22.4345	22.9076	23.3204	22.8878
490109	0.8787	0.9232	21.9877	22.7854	24.2296	22.9554
490110	1.3515	0.8313	22.5974	24.2887	24.9861	24.0085
490111	1.1948	0.8073	22.0199	22.1476	22.7336	22.3108
490112	1.7163	0.9232	26.6453	27.1932	29.0816	27.6672
490113	1.3106	1.0675	29.5698	31.8177	32.4547	31.3270
490114	1.1470	0.8073	20.9116	22.5255	22.1387	21.8658
490115	1.1538	0.8073	21.4666	22.4058	23.5718	22.4670
490116	1.1780	0.8129	22.9017	24.2258	24.3853	23.8567
490117	1.1514	0.8073	18.0277	19.6398	18.1138	18.6020
490118	1.6635	0.9232	27.4050	27.6749	29.0569	28.0591
490119	1.3033	0.8777	25.2549	26.5756	27.8866	26.6080
490120	1.3991	0.8777	24.4434	25.8795	25.9610	25.4137
490122	1.5535	1.0675	31.0449	32.0743	33.3719	32.1673
490123	1.1537	0.8073	23.9233	24.3490	24.2254	24.1638
490126	1.1649	0.8073	22.2859	23.6690	24.0908	23.3598
490127	1.1300	0.8073	20.4289	21.3735	23.5161	21.6359
490130	1.2701	0.8777	22.8512	23.9982	25.3352	24.0816
490133	***	*	26.5684	*	*	26.5684
490134	0.7623	0.8073	*	*	33.2405	33.2405
490135	0.7016	0.8888	*	*	25.9998	25.9998
490136	1.4665	0.9232	*	*	*	*
490137	1.2895	0.8777	*	*	*	*
500001	1.6372	1.1362	29.3707	31.1605	33.0901	31.2057
500002	1.4288	1.0558	25.3347	27.6400	29.1448	27.3388
500003	1.3314	1.1208	29.6341	30.6939	32.1262	30.7330
500005	1.7738	1.1362	32.0972	33.5117	35.0997	33.5662
500007	1.3436	1.1208	28.0476	29.2869	30.5263	29.3452
500008	1.8910	1.1362	31.8837	32.6052	33.5666	32.7102
500011	1.3636	1.1362	30.6508	31.4514	32.6223	31.5869
500012	1.7458	1.0558	30.6856	30.0509	33.8101	31.3853
500014	1.6966	1.1362	33.7536	36.1380	36.5833	35.5228
500015	1.4680	1.1362	32.0592	34.5877	37.5724	34.7448
500016	1.6470	1.1208	31.4222	31.4905	32.9177	31.9513
500019	1.2785	1.0689	28.6669	30.5594	31.6242	30.2721
500021	1.2943	1.1208	30.1690	30.7927	32.4702	31.1942
500024	1.7699	1.1419	30.7917	32.6171	36.1647	33.1801
500025	1.8291	1.1362	34.7252	37.7952	40.6369	37.5370
500026	1.3958	1.1362	33.2937	32.8369	34.5881	33.5880
500027	1.5127	1.1362	34.2175	34.6164	39.2906	36.0226
500030	1.6952	1.1257	32.7446	32.4426	34.9174	33.4028

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
500031	1.2765	1.1287	31.2186	32.8833	33.2391	32.4932
500033	1.3169	1.0558	29.4627	30.6292	31.8891	30.6527
500036	1.3457	1.0558	27.0072	28.7096	30.5938	28.8242
500037	1.0254	1.0558	26.9969	28.1056	31.2654	28.7446
500039	1.4957	1.1208	29.8808	32.2245	33.5606	31.9348
500041	1.4361	1.1226	26.7829	30.3627	34.2017	30.2993
500044	1.9624	1.0558	30.3164	29.0214	31.0936	30.1182
500049	1.3501	1.0558	27.1819	27.7170	29.8189	28.3097
500050	1.4998	1.1226	29.9791	32.6751	33.7713	32.1383
500051	1.7960	1.1362	31.9406	32.5764	34.7610	33.0994
500052	1.4523	1.1362	*	*	*	*
500053	1.2886	1.0558	28.4130	28.2901	30.2811	28.9866
500054	1.9948	1.0558	30.8067	31.6595	32.5105	31.6694
500058	1.6540	1.0558	30.4699	30.7487	30.7034	30.6484
500060	1.3720	1.1362	34.1523	37.4869	38.7682	36.8223
500064	1.7342	1.1362	31.5371	31.6112	32.3581	31.8431
500072	1.2307	1.0820	33.4863	31.2000	32.5269	32.3949
500077	1.4558	1.0558	29.4199	31.6153	33.2223	31.3945
500079	1.3764	1.1208	29.6623	31.3280	32.5809	31.1946
500084	1.3889	1.1362	29.3484	30.2411	32.7883	30.8053
500088	1.3945	1.1362	33.4302	35.3770	36.7953	35.2133
500108	1.6416	1.1208	29.4244	31.8483	34.3872	31.9459
500119	1.3904	1.0558	30.9999	29.7028	31.2233	30.6358
500122	1.3566	*	30.1396	*	*	30.1396
500124	1.4292	1.1362	31.5438	32.3505	34.4790	32.8210
500129	1.5749	1.1208	30.7536	32.1102	34.4447	32.4986
500134	0.4899	1.1362	26.8607	27.2428	28.1374	27.5278
500138	0.8272	*	*	*	*	*
500139	1.5206	1.1419	31.6591	33.9739	34.6412	33.4188
500141	1.3171	1.1362	30.5456	31.3308	33.7532	31.9223
500143	0.4729	1.1419	22.1419	23.6766	25.3099	23.6848
500147	0.8772	*	24.5744	*	*	24.5744
500148	1.1803	1.0558	22.2161	26.4206	37.7830	30.2231
500150	1.2180	1.1226	*	*	*	*
510001	1.9238	0.8390	23.4477	25.2973	25.8693	24.9197
510002	1.2871	0.8746	25.9597	23.8921	23.7270	24.4604
510006	1.3370	0.8255	23.5727	24.9627	24.8777	24.4769
510007	1.7232	0.8878	25.2835	24.7264	27.1149	25.7084
510008	1.3059	0.9255	24.6959	26.3554	27.5241	26.2154
510012	0.9599	0.7692	18.2845	18.8984	20.8455	19.3188
510013	1.1244	0.7568	20.8782	22.7882	22.8779	22.1601
510018	1.0596	0.8393	20.5556	22.4597	23.1043	22.0364
510022	1.8444	0.8393	24.2125	26.9511	26.8328	25.9941
510023	1.2839	0.7889	20.4908	20.6435	21.0940	20.7445
510024	1.8414	0.8407	24.0444	25.5634	26.6621	25.4529
510026	0.9983	0.7568	16.6192	17.9908	19.2025	17.9223
510028	***	*	21.7135	*	*	21.7135
510029	1.3235	0.8393	22.4556	22.7104	24.0872	23.0837
510030	1.0973	0.8255	21.5583	24.3936	24.2007	23.3949
510031	1.4315	0.8393	21.7637	23.2624	24.0237	22.9923
510033	1.7281	0.8258	23.0305	22.6189	24.0796	23.2701
510038	1.0543	0.7568	17.2832	20.6565	20.9180	19.6284
510039	1.2501	0.7568	19.5468	19.8751	20.4719	19.9555
510046	1.3467	0.7732	21.2540	22.1712	22.2935	21.8981
510047	1.1486	0.8390	24.0954	27.1214	27.6859	26.2421
510048	1.1751	0.7568	17.5096	18.8576	22.7930	19.5221
510050	1.6035	0.7568	19.9766	21.0772	21.9009	20.9839
510053	1.1071	0.7568	20.8608	22.3318	21.5338	21.5798
510055	1.5346	0.8878	30.7868	28.4615	29.4111	29.5182
510058	1.3452	0.8258	22.6976	23.9015	25.3248	23.9858
510059	0.7138	0.8393	21.9551	22.1435	20.8847	21.6752
510062	1.1628	0.8393	23.3216	26.2296	26.7066	25.4037
510067	1.1068	0.7568	21.2099	25.0437	25.2130	23.8479
510068	1.1378	*	23.1011	*	*	23.1011
510070	1.2272	0.8393	23.2382	23.5639	23.9742	23.5991
510071	1.3165	0.7732	23.1685	23.4508	23.2954	23.3056
510072	1.1600	0.7568	20.1997	20.5146	19.4370	20.0241

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
510077	1.0539	0.8724	23.6584	24.5010	25.9515	24.6973
510082	1.1084	0.7568	19.1878	19.9081	20.3279	19.7905
510085	1.2934	0.8393	23.7174	26.3877	26.2617	25.5462
510086	1.1745	0.7568	17.5933	19.8735	19.2606	18.9127
510089	***	*	27.7061	*	*	27.7061
510090	1.8498	0.8878	*	*	*	*
520002	1.3394	1.0004	24.9950	27.7705	29.0501	27.3208
520004	1.3931	0.9698	25.4639	27.6530	28.9857	27.3816
520008	1.5349	1.0295	29.8353	30.7553	33.8057	31.4985
520009	1.7224	0.9684	26.1503	27.4044	28.8591	27.4837
520011	1.3035	0.9684	25.2747	26.6268	28.0224	26.6546
520013	1.4584	0.9684	26.6225	29.0018	30.1834	28.6561
520017	1.1205	0.9684	24.6677	28.4699	29.3278	27.4748
520019	1.3604	0.9684	26.7433	28.6971	29.8640	28.5157
520021	1.3020	1.0471	26.6935	28.4182	29.1129	28.1504
520027	1.3702	1.0295	27.6771	31.4284	32.4137	30.5716
520028	1.3503	1.0996	25.4164	26.7260	28.0813	26.7500
520030	1.7226	1.0004	27.0184	29.4678	30.5724	29.0613
520033	1.2658	0.9684	25.0853	28.0662	29.0236	27.5164
520034	1.2321	0.9684	23.9850	26.1094	26.8886	25.6368
520035	1.3581	0.9760	24.7767	27.3276	28.1048	26.7464
520037	1.8188	1.0004	29.7234	30.1799	32.2144	30.7303
520038	1.2391	1.0295	26.6470	29.3134	29.6339	28.5933
520040	1.2143	1.0295	27.2325	29.1262	31.2038	29.0319
520041	1.0701	1.1176	22.7595	23.5495	25.3764	23.9562
520044	1.3515	0.9760	26.0191	27.3685	28.2382	27.2573
520045	1.6629	0.9684	26.0030	27.3336	29.2556	27.5277
520048	1.5668	0.9684	25.1724	26.8080	29.1870	26.9823
520049	2.1335	0.9684	25.9256	26.9851	28.0936	26.9958
520051	1.5562	1.0295	28.4880	31.9949	31.5974	30.7556
520057	1.1727	0.9877	25.3745	27.7528	29.1158	27.4376
520059	1.3044	1.0583	28.0907	29.5801	30.4491	29.3858
520060	1.3697	*	23.8817	24.8638	*	24.3767
520062	1.2465	1.0295	28.2215	28.8510	32.8584	30.1184
520063	1.1373	1.0295	27.4100	29.0993	30.3391	28.9452
520064	1.5987	1.0295	28.6101	30.3225	31.5723	30.0470
520066	1.4379	0.9852	27.1657	29.2088	31.0644	29.1283
520068	***	*	24.8184	*	*	24.8184
520070	1.7752	0.9684	24.8935	27.6771	28.2059	26.9824
520071	1.1683	1.0295	27.6202	30.0262	30.6930	29.4715
520075	1.5645	0.9684	27.1699	29.2920	30.1582	28.8342
520076	1.2406	1.0996	26.1697	27.3335	27.4423	26.9220
520078	1.5171	1.0295	27.5989	29.9837	31.6606	29.7283
520083	1.7370	1.1176	28.8407	30.8826	32.7728	30.8985
520087	1.7712	0.9698	27.3374	28.5810	30.5659	28.8732
520088	1.4096	0.9887	26.9936	30.7450	30.6657	29.5653
520089	1.5712	1.1176	30.0448	33.8793	33.4098	32.4835
520091	1.2971	0.9684	24.6320	25.4593	27.3442	25.8210
520094	***	*	25.7567	*	*	25.7567
520095	1.2937	1.0996	26.7863	30.4216	32.0381	29.8120
520096	1.3783	0.9879	24.5758	27.8896	29.5985	27.4540
520097	1.3976	0.9684	26.3321	29.1479	29.9998	28.4877
520098	2.0355	1.1176	30.6150	32.5785	36.5776	33.3175
520100	1.2798	0.9852	26.2161	29.3243	29.9458	28.5050
520102	1.1728	1.0295	26.8234	29.1680	30.7990	28.9928
520103	1.5495	1.0295	27.9147	30.3165	32.6269	30.3612
520107	1.2792	0.9715	28.3431	28.9878	29.4178	28.9355
520109	1.0392	0.9684	23.3271	24.7228	25.0697	24.3762
520113	1.3272	0.9684	27.4135	31.4708	33.3475	30.7254
520116	1.2669	1.0295	26.9902	27.9688	30.2156	28.3945
520132	***	*	23.1941	25.0006	27.3431	25.0308
520136	1.7249	1.0295	27.7703	30.6522	32.1479	30.1365
520138	1.8879	1.0295	28.4394	30.8016	31.6581	30.2963
520139	1.2893	1.0295	26.5110	28.8870	30.4903	28.6153
520140	0.3793	*	28.4433	31.0043	31.1315	30.2285
520152	1.0907	*	24.9392	29.7308	*	27.4042
520160	1.8662	0.9684	25.7588	27.9548	29.5582	27.7551

TABLE 2.—HOSPITAL CASE-MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 2006; HOSPITAL WAGE INDEXES FOR FEDERAL FISCAL YEAR 2008; HOSPITAL AVERAGE HOURLY WAGES FOR FEDERAL FISCAL YEARS 2006 (2002 WAGE DATA), 2007 (2003 WAGE DATA), AND 2008 (2004 WAGE DATA); AND 3-YEAR AVERAGE OF HOSPITAL AVERAGE HOURLY WAGES—Continued

Provider No.	Case-mix Index	FY 2008 Wage Index	Average Hourly Wage FY 2006	Average Hourly Wage FY 2007	Average Hourly Wage FY 2008	Average Hourly Wage ** (3 years)
520170	1.4782	1.0295	27.2221	30.4309	31.4710	29.7190
520173	1.0829	0.9684	28.0995	29.2429	31.0599	29.4647
520177	1.6194	1.0295	30.7317	31.4555	32.5714	31.6050
520178	1.0240	*	20.2666	*	*	20.2666
520189	1.2042	1.0471	28.4720	28.0014	29.0295	28.4999
520193	1.7002	0.9684	26.0885	27.8113	29.2007	27.7865
520194	1.7148	1.0295	24.9408	30.1668	31.4379	28.8968
520195	0.3556	1.0295	36.6973	36.3116	36.2900	36.4369
520196	1.6798	0.9684	35.1043	36.9266	31.1175	34.0254
520197	***	*	*	*	30.1917	30.1917
520198	1.4193	0.9684	*	*	28.5975	28.5975
520199	2.2776	1.0295	*	*	36.5699	36.5699
520200	0.9180	*	*	*	*	*
520201	0.6866	*	*	*	*	*
520202	1.4495	1.0004	*	*	*	*
530002	1.1272	0.9163	26.8356	28.3063	29.2069	28.1167
530006	1.1827	0.9163	24.9318	27.2421	29.2104	27.0638
530007	***	*	20.4391	*	*	20.4391
530008	1.1673	0.9163	23.8589	24.0090	26.5180	24.7926
530009	0.9202	0.9163	26.8316	24.6719	26.0490	25.8222
530010	1.3058	0.9163	25.8482	25.9852	27.4121	26.4402
530011	1.1124	0.9163	24.8245	27.8772	27.8613	26.9109
530012	1.7060	0.9270	25.2526	26.9582	28.7524	26.9862
530014	1.5520	0.9204	24.5947	26.7156	28.5469	26.6902
530015	1.1541	0.9272	27.6876	29.8310	29.8306	29.0860
530017	1.1052	0.9163	25.3362	29.8503	31.1105	28.7232
530023	***	*	21.3813	*	*	21.3813
530025	1.2402	0.9163	28.6938	24.4392	29.4346	27.4317
530032	1.0159	0.9163	25.7728	23.9004	24.6580	24.7334

[1] Based on salaries adjusted for occupational mix, according to the calculation in section II.D.6 to this final rule.
[2] The case-mix index is based on the billed DRGs in the FY 2006 MedPAR file. It is not transfer adjusted.
[*] Denotes wage data not available for the provider for that year.
[**] Based on the sum of the salaries and hours computed for Federal FYs 2006, 2007, and 2008.
[***] Denotes MedPAR data not available for the provider for FY 2006.
[3] This provider, 140B10, is part of a multi-campus provider, 140010, that is comprised of campuses that are located in two different CBSAs. For the FY 2008 wage index, a new provider record was created, designated with a ''B'' in the 4th position of the provider number, to distinguish between the portion of the wages and hours of the multi-campus facility that is being allocated between the two different CBSAs. Please refer to the FY 2008 final rule, section III.H.I.7 ''Geographic Reclassification for Multi-campus Hospitals,'' for more details on this provision.
[4] This provider, 220B74, is part of a multi-campus provider, 220074, that is comprised of campuses that are located in two different CBSAs. For the FY 2008 wage index, a new provider record was created, designated with a ''B'' in the 4th position of the provider number, to distinguish between the portion of the wages and hours of the multi-campus facility that is being allocated between the two different CBSAs. Please refer to the FY 2008 final rule, section III.H.I.7 ''Geographic Reclassification for Multi-campus Hospitals,'' for more details on this provision.

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
10180	Abilene, TX	25.5587	24.1347
10380	Aguadilla-Isabela-San Sebastián, PR	10.3758	11.4939
10420	Akron, OH	26.9806	25.8600
10500	Albany, GA	26.5094	25.8668
10580	Albany-Schenectady-Troy, NY	26.8819	25.7665
10740	Albuquerque, NM	30.1667	28.6303
10780	Alexandria, LA	24.6476	23.5446
10900	Allentown-Bethlehem-Easton, PA-NJ	31.0279	29.5473
11020	Altoona, PA	25.8973	25.4013
11100	Amarillo, TX	28.3855	27.1503
11180	Ames, IA	30.9415	28.8521
11260	Anchorage, AK	36.4638	35.0346
11300	Anderson, IN	27.8045	26.0246
11340	Anderson, SC	28.5621	26.7375
11460	Ann Arbor, MI	32.5609	31.5918
11500	Anniston-Oxford, AL	24.7360	23.2901
11540	Appleton, WI	29.2835	27.6497

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
11700	Asheville, NC	28.5382	27.3722
12020	Athens-Clarke County, GA	31.0062	28.5975
12060	Atlanta-Sandy Springs-Marietta, GA	30.4332	28.9628
12100	Atlantic City, NJ	37.4144	34.9286
12220	Auburn-Opelika, AL	25.0468	23.9133
12260	Augusta-Richmond County, GA-SC	29.7703	28.5720
12420	Austin-Round Rock, TX	29.4701	27.8668
12540	Bakersfield, CA	34.6222	32.1857
12580	Baltimore-Towson, MD	31.1116	29.4296
12620	Bangor, ME	30.6488	29.0740
12700	Barnstable Town, MA	39.1145	37.3027
12940	Baton Rouge, LA	24.8413	24.3034
12980	Battle Creek, MI	31.1795	28.7485
13020	Bay City, MI	27.9569	27.3833
13140	Beaumont-Port Arthur, TX	26.7226	25.3526
13380	Bellingham, WA	34.9174	33.4028
13460	Bend, OR	32.8326	31.4061
13644	Bethesda-Gaithersburg-Frederick, MD	32.4274	32.2308
13740	Billings, MT	27.5114	26.3017
13780	Binghamton, NY	28.1250	26.2437
13820	Birmingham-Hoover, AL	27.4679	26.3101
13900	Bismarck, ND	22.4781	21.8382
13980	Blacksburg-Christiansburg-Radford, VA	25.2131	23.9984
14020	Bloomington, IN	28.9157	26.4848
14060	Bloomington-Normal, IL	29.4154	27.2850
14260	Boise City-Nampa, ID	29.4544	27.5816
14484	Boston-Quincy, MA	36.7350	34.6366
14500	Boulder, CO	31.3555	29.5771
14540	Bowling Green, KY	25.0769	24.0241
14740	Bremerton-Silverdale, WA	33.5606	31.9348
14860	Bridgeport-Stamford-Norwalk, CT	39.6328	37.6098
15180	Brownsville-Harlingen, TX	28.5123	28.3113
15260	Brunswick, GA	30.2845	29.1378
15380	Buffalo-Niagara Falls, NY	29.7374	28.1521
15500	Burlington, NC	26.6546	25.6458
15540	Burlington-South Burlington, VT	29.7251	28.0158
15764	Cambridge-Newton-Framingham, MA	34.7914	32.9021
15804	Camden, NJ	32.6688	31.0922
15940	Canton-Massillon, OH	27.6581	26.5075
15980	Cape Coral-Fort Myers, FL	29.4194	27.9207
16180	Carson City, NV	29.0454	29.0240
16220	Casper, WY	28.7524	26.9862
16300	Cedar Rapids, IA	26.9348	25.8164
16580	Champaign-Urbana, IL	28.8930	28.0728
16620	Charleston, WV	26.0325	25.1463
16700	Charleston-North Charleston, SC	28.2298	27.1032
16740	Charlotte-Gastonia-Concord, NC-SC	29.4814	28.2160
16820	Charlottesville, VA	28.4122	28.8815
16860	Chattanooga, TN-GA	27.7980	26.6068
16940	Cheyenne, WY	28.5469	26.6902
16974	Chicago-Naperville-Joliet, IL	32.8395	31.5713
17020	Chico, CA	34.8369	32.3535
17140	Cincinnati-Middletown, OH-KY-IN	29.9631	28.3817
17300	Clarksville, TN-KY	25.4903	24.5654
17420	Cleveland, TN	25.3412	24.1819
17460	Cleveland-Elyria-Mentor, OH	28.9854	27.5689
17660	Coeur d'Alene, ID	29.0166	27.8500
17780	College Station-Bryan, TX	28.4470	26.5699
17820	Colorado Springs, CO	29.3604	27.9538
17860	Columbia, MO	26.4800	24.9722
17900	Columbia, SC	27.3857	26.4658
17980	Columbus, GA-AL	27.9721	25.7758
18020	Columbus, IN	29.8540	28.2570
18140	Columbus, OH	31.0923	29.5809
18580	Corpus Christi, TX	26.2254	25.0632
18700	Corvallis, OR	33.1928	32.2201
19060	Cumberland, MD-WV	24.6976	24.8725
19124	Dallas-Plano-Irving, TX	30.3505	29.5230
19140	Dalton, GA	26.6185	26.1940

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
19180	Danville, IL	28.6709	27.3188
19260	Danville, VA	25.7323	24.9373
19340	Davenport-Moline-Rock Island, IA-IL	27.2974	25.9231
19380	Dayton, OH	28.7765	27.1445
19460	Decatur, AL	24.0785	23.9057
19500	Decatur, IL	25.1658	24.0544
19660	Deltona-Daytona Beach-Ormond Beach, FL	27.7377	27.0495
19740	Denver-Aurora, CO	32.4261	31.4090
19780	Des Moines-West Des Moines, IA	28.4016	27.5535
19804	Detroit-Livonia-Dearborn, MI	31.1865	30.3895
20020	Dothan, AL	22.9406	22.3216
20100	Dover, DE	32.2443	30.0060
20220	Dubuque, IA	27.5285	26.4860
20260	Duluth, MN-WI	31.2690	30.0353
20500	Durham, NC	30.2065	29.1866
20740	Eau Claire, WI	29.1817	27.8615
20764	Edison, NJ	34.3515	32.9651
20940	El Centro, CA	28.4246	26.8343
21060	Elizabethtown, KY	26.7279	25.6690
21140	Elkhart-Goshen, IN	29.5912	28.1606
21300	Elmira, NY	25.8453	24.6049
21340	El Paso, TX	28.3494	26.9992
21500	Erie, PA	26.3723	25.6875
21660	Eugene-Springfield, OR	34.1240	32.3054
21780	Evansville, IN-KY	26.2546	25.6722
21820	Fairbanks, AK	33.9375	32.8391
21940	Fajardo, PR	13.5395	12.3736
22020	Fargo, ND-MN	24.6382	24.1984
22140	Farmington, NM	28.7893	25.7109
22180	Fayetteville, NC	30.7591	28.3790
22220	Fayetteville-Springdale-Rogers, AR-MO	27.5174	26.2042
22380	Flagstaff, AZ	35.8287	34.6826
22420	Flint, MI	34.1572	31.9911
22500	Florence, SC	26.5044	25.8220
22520	Florence-Muscle Shoals, AL	23.6943	23.4052
22540	Fond du Lac, WI	30.6657	29.5653
22660	Fort Collins-Loveland, CO	29.6511	28.4243
22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	31.2029	30.0377
22900	Fort Smith, AR-OK	24.9751	23.7479
23020	Fort Walton Beach-Crestview-Destin, FL	26.8731	25.7329
23060	Fort Wayne, IN	28.0404	27.6657
23104	Fort Worth-Arlington, TX	29.8878	28.3058
23420	Fresno, CA	34.2409	32.2447
23460	Gadsden, AL	25.2583	23.7861
23540	Gainesville, FL	28.8468	27.7119
23580	Gainesville, GA	29.2134	27.2823
23844	Gary, IN	28.6630	27.6151
24020	Glens Falls, NY	26.4328	25.3769
24140	Goldsboro, NC	28.7544	26.8571
24220	Grand Forks, ND-MN	24.9615	23.5379
24300	Grand Junction, CO	30.0988	28.4999
24340	Grand Rapids-Wyoming, MI	29.0742	27.9446
24500	Great Falls, MT	26.4422	25.6386
24540	Greeley, CO	31.0018	29.1634
24580	Green Bay, WI	29.4031	28.1019
24660	Greensboro-High Point, NC	28.2442	26.8380
24780	Greenville, NC	28.7434	27.6121
24860	Greenville-Mauldin-Easley, SC	29.8863	28.7666
25020	Guayama, PR	09.1328	09.2034
25060	Gulfport-Biloxi, MS	26.6981	25.8275
25180	Hagerstown-Martinsburg, MD-WV	28.7052	27.6861
25260	Hanford-Corcoran, CA	33.0818	30.9616
25420	Harrisburg-Carlisle, PA	28.6281	27.5253
25500	Harrisonburg, VA	27.5890	26.7640
25540	Hartford-West Hartford-East Hartford, CT	34.1958	32.5387
25620	Hattiesburg, MS	23.3688	22.3933
25860	Hickory-Lenoir-Morganton, NC	27.8279	26.5091
25980	[1] Hinesville-Fort Stewart, GA	.....	.....
26100	Holland-Grand Haven, MI	28.1106	26.9710

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
26180	Honolulu, HI	35.0637	32.9282
26300	Hot Springs, AR	28.2416	26.5594
26380	Houma-Bayou Cane-Thibodaux, LA	24.7360	23.6339
26420	Houston-Sugar Land-Baytown, TX	31.0073	29.6665
26580	Huntington-Ashland, WV-KY-OH	27.5367	26.7655
26620	Huntsville, AL	27.9664	26.7281
26820	Idaho Falls, ID	28.6730	27.2931
26900	Indianapolis-Carmel, IN	30.1393	28.9659
26980	Iowa City, IA	29.2283	28.3310
27060	Ithaca, NY	29.5885	28.8558
27100	Jackson, MI	29.3442	28.0566
27140	Jackson, MS	24.6588	24.0939
27180	Jackson, TN	26.6460	25.9444
27260	Jacksonville, FL	28.1891	27.2668
27340	Jacksonville, NC	25.6349	24.5586
27500	Janesville, WI	30.5583	28.8479
27620	Jefferson City, MO	26.9896	25.3379
27740	Johnson City, TN	23.8863	23.3983
27780	Johnstown, PA	23.6956	24.1225
27860	Jonesboro, AR	24.5432	23.3834
27900	Joplin, MO	28.5715	26.1411
28020	Kalamazoo-Portage, MI	32.5665	31.2119
28100	Kankakee-Bradley, IL	31.4634	30.4290
28140	Kansas City, MO-KS	28.9006	27.7100
28420	Kennewick-Richland-Pasco, WA	30.5718	30.0867
28660	Killeen-Temple-Fort Hood, TX	25.7531	25.4186
28700	Kingsport-Bristol-Bristol, TN-VA	24.0579	23.5616
28740	Kingston, NY	29.7092	27.8745
28940	Knoxville, TN	24.8497	24.3151
29020	Kokomo, IN	29.3517	28.2551
29100	La Crosse, WI-MN	30.0819	28.4074
29140	Lafayette, IN	26.9111	25.7888
29180	Lafayette, LA	25.7422	24.7411
29340	Lake Charles, LA	24.1388	23.1811
29404	Lake County-Kenosha County, IL-WI	32.8246	31.3422
29420	[2] Lake Havasu City- Kingman, AZ	28.9483	27.6199
29460	Lakeland, FL	27.4022	26.4654
29540	Lancaster, PA	29.5629	28.7355
29620	Lansing-East Lansing, MI	31.1650	29.4203
29700	Laredo, TX	26.3647	24.4147
29740	Las Cruces, NM	26.4515	25.6132
29820	Las Vegas-Paradise, NV	35.5188	33.5865
29940	Lawrence, KS	25.3394	24.6697
30020	Lawton, OK	26.0678	24.4730
30140	Lebanon, PA	25.4407	25.2125
30300	Lewiston, ID-WA	28.6136	28.2894
30340	Lewiston-Auburn, ME	28.8124	27.4899
30460	Lexington-Fayette, KY	27.9203	26.6486
30620	Lima, OH	28.7203	26.9713
30700	Lincoln, NE	30.6210	29.5883
30780	Little Rock-North Little Rock-Conway, AR	27.7910	27.0607
30860	Logan, UT-ID	28.4789	27.0287
30980	Longview, TX	27.2767	26.0021
31020	Longview, WA	34.2017	30.2993
31084	Los Angeles-Long Beach-Glendale, CA	36.1216	34.6333
31140	Louisville-Jefferson County, KY-IN	28.0031	27.0434
31180	Lubbock, TX	26.8019	25.5836
31340	Lynchburg, VA	26.6920	25.5281
31420	Macon, GA	30.2376	28.6721
31460	Madera, CA	26.0908	25.2915
31540	Madison, WI	34.6626	32.2711
31700	Manchester-Nashua, NH	31.4185	30.1339
31900	Mansfield, OH	28.5643	27.8933
32420	Mayagez, PR	11.3432	11.2956
32580	McAllen-Edinburg-Mission, TX	28.3352	26.4921
32780	Medford, OR	31.9397	30.8471
32820	Memphis, TN-MS-AR	28.8850	27.6299
32900	Merced, CA	37.1577	33.9319
33124	Miami-Miami Beach-Kendall, FL	31.0417	29.1773

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
33140	Michigan City-La Porte, IN	27.2502	26.8087
33260	Midland, TX	30.1228	28.3740
33340	Milwaukee-Waukesha-West Allis, WI	31.9336	30.3294
33460	Minneapolis-St. Paul-Bloomington, MN-WI	33.7989	32.2480
33540	Missoula, MT	27.0081	26.3798
33660	Mobile, AL	24.6508	23.3350
33700	Modesto, CA	36.9816	35.0810
33740	Monroe, LA	24.4048	23.5973
33780	Monroe, MI	29.3721	28.3183
33860	Montgomery, AL	25.1560	24.3045
34060	Morgantown, WV	26.0767	25.0610
34100	Morristown, TN	22.9838	22.9921
34580	Mount Vernon-Anacortes, WA	31.5882	30.3305
34620	Muncie, IN	24.8045	24.8596
34740	Muskegon-Norton Shores, MI	30.9174	29.4013
34820	Myrtle Beach-Conway-North Myrtle Beach, SC	26.8308	26.0534
34900	Napa, CA	43.2961	38.9739
34940	Naples-Marco Island, FL	29.8301	29.4006
34980	Nashville-Davidson-Murfreesboro-Franklin, TN	29.8314	28.7944
35004	Nassau-Suffolk, NY	39.9385	38.0505
35084	Newark-Union, NJ-PA	36.2043	34.7660
35300	New Haven-Milford, CT	37.0135	35.4050
35380	New Orleans-Metairie-Kenner, LA	27.0196	25.9463
35644	New York-White Plains-Wayne, NY-NJ	41.0297	39.1741
35660	Niles-Benton Harbor, MI	28.3275	26.5614
35980	Norwich-New London, CT	35.5892	34.4004
36084	Oakland-Fremont-Hayward, CA	47.4312	45.4607
36100	Ocala, FL	26.6198	25.7580
36140	Ocean City, NJ	34.3497	32.1653
36220	Odessa, TX	30.8727	29.4951
36260	Ogden-Clearfield, UT	28.0771	26.7568
36420	Oklahoma City, OK	27.1496	26.2035
36500	Olympia, WA	35.4177	32.8236
36540	Omaha-Council Bluffs, NE-IA	29.3831	28.0303
36740	Orlando-Kissimmee, FL	28.7946	27.9149
36780	Oshkosh-Neenah, WI	29.0738	27.4065
36980	Owensboro, KY	26.9752	25.9113
37100	Oxnard-Thousand Oaks-Ventura, CA	35.3324	33.6460
37340	Palm Bay-Melbourne-Titusville, FL	29.0918	28.3346
37380	[2] Palm Coast, FL	27.0981	27.5188
37460	Panama City-Lynn Haven, FL	26.1809	24.3132
37620	Parkersburg-Marietta-Vienna, WV-OH	25.6137	24.3192
37700	Pascagoula, MS	26.4851	24.5084
37764	Peabody, MA (Formerly, Essex County, MA)	32.8768	31.1949
37860	Pensacola-Ferry Pass-Brent, FL	25.1928	23.7366
37900	Peoria, IL	29.1064	26.9822
37964	Philadelphia, PA	33.7819	32.4433
38060	Phoenix-Mesa-Scottsdale, AZ	31.3577	29.9786
38220	Pine Bluff, AR	25.2840	25.1920
38300	Pittsburgh, PA	26.0226	25.3927
38340	Pittsfield, MA	31.1782	30.0596
38540	Pocatello, ID	28.4934	27.3130
38660	Ponce, PR	13.2197	13.6539
38860	Portland-South Portland-Biddeford, ME	30.9888	29.7785
38900	Portland-Vancouver-Beaverton, OR-WA	34.8215	33.1817
38940	Port St. Lucie, FL	31.1259	29.6067
39100	Poughkeepsie-Newburgh-Middletown, NY	34.0640	32.4120
39140	Prescott, AZ	30.8935	29.2139
39300	Providence-New Bedford-Fall River, RI-MA	32.6657	31.8184
39340	Provo-Orem, UT	29.4032	28.0289
39380	Pueblo, CO	27.0893	25.6378
39460	Punta Gorda, FL	29.6456	28.1432
39540	Racine, WI	29.7224	27.6182
39580	Raleigh-Cary, NC	29.9696	28.6624
39660	Rapid City, SD	26.9365	25.9833
39740	Reading, PA	29.1988	28.3941
39820	Redding, CA	39.7306	36.7803
39900	Reno-Sparks, NV	34.3107	33.6223
40060	Richmond, VA	28.6339	27.1478

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
40140	Riverside-San Bernardino-Ontario, CA	33.8115	32.2089
40220	Roanoke, VA	27.5669	25.7396
40340	Rochester, MN	32.5362	32.3328
40380	Rochester, NY	27.6600	26.7521
40420	Rockford, IL	30.4079	29.3760
40484	Rockingham County-Strafford County, NH	31.1894	30.1246
40580	Rocky Mount, NC	27.9351	26.4593
40660	Rome, GA	29.6117	28.2895
40900	Sacramento—Arden-Arcade—Roseville, CA	40.5303	38.5061
40980	Saginaw-Saginaw Township North, MI	28.2960	27.0569
41060	St. Cloud, MN	34.2980	31.6169
41100	St. George, UT	29.5761	28.1943
41140	St. Joseph, MO-KS	27.3754	28.2413
41180	St. Louis, MO-IL	27.8586	26.5418
41420	Salem, OR	32.2491	30.6939
41500	Salinas, CA	45.2648	42.3717
41540	Salisbury, MD	27.6311	26.4523
41620	Salt Lake City, UT	29.3832	28.0017
41660	San Angelo, TX	26.8540	25.0310
41700	San Antonio, TX	27.5914	26.4240
41740	San Diego-Carlsbad-San Marcos, CA	34.7234	33.2467
41780	Sandusky, OH	27.1546	26.6090
41884	San Francisco-San Mateo-Redwood City, CA	45.9063	44.5739
41900	San Germán-Cabo Rojo, PR	14.2744	13.8609
41940	San Jose-Sunnyvale-Santa Clara, CA	47.8883	45.2793
41980	San Juan-Caguas-Guaynabo, PR	14.0384	13.4057
42020	San Luis Obispo-Paso Robles, CA	37.0690	33.9137
42044	Santa Ana-Anaheim-Irvine, CA	35.9446	34.0127
42060	Santa Barbara-Santa Maria-Goleta, CA	35.5323	33.4626
42100	Santa Cruz-Watsonville, CA	48.5956	45.3129
42140	Santa Fe, NM	33.1342	31.9538
42220	Santa Rosa-Petaluma, CA	44.8763	41.6974
42260	Sarasota-Bradenton-Venice, FL	30.3046	28.7388
42340	Savannah, GA	27.5761	27.0800
42540	Scranton—Wilkes-Barre, PA	25.8832	24.7503
42644	Seattle-Bellevue-Everett, WA	35.2419	33.6864
42680	Sebastian-Vero Beach, FL	30.0959	28.6117
43100	Sheboygan, WI	28.0852	26.7414
43300	Sherman-Denison, TX	26.4590	26.2413
43340	Shreveport-Bossier City, LA	26.5251	25.7648
43580	Sioux City, IA-NE-SD	28.1724	27.0701
43620	Sioux Falls, SD	29.6291	28.1071
43780	South Bend-Mishawaka, IN-MI	29.9101	28.9205
43900	Spartanburg, SC	29.1389	27.2257
44060	Spokane, WA	32.2318	31.1918
44100	Springfield, IL	27.7357	26.2616
44140	Springfield, MA	32.4121	30.4332
44180	Springfield, MO	27.2665	25.2881
44220	Springfield, OH	26.4842	25.0769
44300	State College, PA	26.7342	25.2071
44700	Stockton, CA	36.6289	34.1459
44940	Sumter, SC	27.5988	25.3447
45060	Syracuse, NY	30.8602	28.9261
45104	Tacoma, WA	33.9112	31.9624
45220	Tallahassee, FL	27.9986	26.3273
45300	Tampa-St. Petersburg-Clearwater, FL	28.2697	27.2080
45460	Terre Haute, IN	27.3687	25.3385
45500	Texarkana, TX-Texarkana, AR	24.1336	23.7947
45780	Toledo, OH	28.7454	27.8506
45820	Topeka, KS	26.5404	25.8367
45940	Trenton-Ewing, NJ	33.2313	31.9690
46060	Tucson, AZ	29.2073	27.5084
46140	Tulsa, OK	26.3577	25.0127
46220	Tuscaloosa, AL	26.4577	25.5487
46340	Tyler, TX	28.4760	26.8685
46540	Utica-Rome, NY	27.2131	25.5649
46660	Valdosta, GA	25.4439	25.1429
46700	Vallejo-Fairfield, CA	44.7630	43.6070
47020	Victoria, TX	25.1713	24.3382

TABLE 3A.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR URBAN AREAS BY CBSA—Continued

[*Based on the salaries and hours computed for Federal FYs 2006, 2007, and 2008.]

CBSA code	Urban area	FY 2008 average hourly wage	3-Year average hourly wage
47220	Vineland-Millville-Bridgeton, NJ	33.0258	30.4634
47260	Virginia Beach-Norfolk-Newport News, VA-NC	27.2219	26.0009
47300	Visalia-Porterville, CA	31.6363	30.0714
47380	Waco, TX	26.6549	25.4931
47580	Warner Robins, GA	29.8158	26.8114
47644	Warren-Troy-Farmington Hills, MI	31.1197	29.5882
47894	Washington-Arlington-Alexandria, DC-VA-MD-WV	33.1099	32.0932
47940	Waterloo-Cedar Falls, IA	27.0432	25.5301
48140	Wausau, WI	30.5724	29.0613
48260	Weirton-Steubenville, WV-OH	24.4665	23.3434
48300	Wenatchee, WA	34.9713	31.3444
48424	West Palm Beach-Boca Raton-Boynton Beach, FL	29.7017	28.7143
48540	Wheeling, WV-OH	21.7324	20.9335
48620	Wichita, KS	27.7241	26.6808
48660	Wichita Falls, TX	25.4414	24.7129
48700	Williamsport, PA	24.6495	23.9559
48864	Wilmington, DE-MD-NJ	33.0826	31.3165
48900	Wilmington, NC	28.9236	28.2353
49020	Winchester, VA-WV	30.5349	29.6413
49180	Winston-Salem, NC	28.1570	26.9279
49340	Worcester, MA	35.2178	32.7401
49420	Yakima, WA	31.6531	29.7148
49500	Yauco, PR	09.9278	11.1280
49620	York-Hanover, PA	29.2356	27.8962
49660	Youngstown-Warren-Boardman, OH-PA	27.8874	25.9939
49700	Yuba City, CA	32.6363	31.5712
49740	Yuma, AZ	31.2815	28.0280

[1] This area has no average hourly wage because there are no short-term, acute care hospitals in the area.

[2] This a new CBSA for fiscal year 2008. To calculate the 3-year average hourly wage for this new area, we included the hospitals data from their previous geographic location for fiscal year 2006 and fiscal year 2007.

TABLE 3B.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR RURAL AREAS BY CBSA

[*Based on the sum of the salaries and hours computed for federal fiscal years 2006, 2007, and 2008]

CBSA code	Nonurban area	FY 2008 average hourly wage	3-Year average hourly wage
01	Alabama	23.4686	22.3386
02	Alaska	37.4766	33.9221
03	Arizona	27.4632	26.0832
04	Arkansas	23.2843	22.1169
05	California	36.3980	33.2793
06	Colorado	29.3035	27.5010
07	Connecticut	34.8710	34.5456
08	Delaware	30.5175	28.9016
10	Florida	26.6208	25.5360
11	Georgia	24.3828	23.0350
12	Hawaii	33.3125	31.5134
13	Idaho	24.2477	23.5535
14	Illinois	25.8829	24.5970
15	Indiana	26.5753	25.3117
16	Iowa	26.2900	25.1302
17	Kansas	24.6910	23.6030
18	Kentucky	24.2238	23.0413
19	Louisiana	23.5288	22.3360
20	Maine	26.0794	25.2187
21	Maryland	27.6405	26.7369
22	Massachusetts	.....	.....
23	Michigan	27.6315	26.4190
24	Minnesota	28.2328	26.9455
25	Mississippi	23.9977	22.8764
26	Missouri	25.1550	23.7800
27	Montana	25.8521	25.3526
28	Nebraska	27.1868	25.6379
29	Nevada	30.0915	27.4332
30	New Hampshire	32.6655	31.8760
31	New Jersey [1]	.....	.....

TABLE 3B.—FY 2008 AND 3-YEAR* AVERAGE HOURLY WAGE FOR RURAL AREAS BY CBSA—Continued

[*Based on the sum of the salaries and hours computed for federal fiscal years 2006, 2007, and 2008]

CBSA code	Nonurban area	FY 2008 average hourly wage	3-Year average hourly wage
32	New Mexico	27.8053	25.6447
33	New York	25.9034	24.5021
34	North Carolina	26.6853	25.3994
35	North Dakota	22.6685	21.5967
36	Ohio	26.9711	25.8029
37	Oklahoma	23.8499	22.8005
38	Oregon	30.7608	28.9519
39	Pennsylvania	25.8624	24.5739
40	Puerto Rico [1]	.....	.....
41	Rhode Island [1]	.....	.....
42	South Carolina	27.0046	25.7091
43	South Dakota	25.8767	24.7974
44	Tennessee	24.3974	23.4911
45	Texas	25.4256	24.0797
46	Utah	25.4798	24.1789
47	Vermont	30.2117	28.6350
49	Virginia	24.9884	23.8157
50	Washington	31.5042	30.3819
51	West Virginia	23.4724	22.6983
52	Wisconsin	30.0360	28.3535
53	Wyoming	28.4210	27.0268

[1] All counties within the State or territory are classified as urban.

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008

CBSA code	Urban area (constituent counties)	Wage index	GAF
10180	Abilene, TX	0.8240	0.8758
	Callahan County, TX.		
	Jones County, TX.		
	Taylor County, TX.		
10380	Aguadilla-Isabela-San Sebastián, PR	0.3345	0.4724
	Aguada Municipio, PR.		
	Aguadilla Municipio, PR.		
	Añasco Municipio, PR.		
	Isabela Municipio, PR.		
	Lares Municipio, PR.		
	Moca Municipio, PR.		
	Rincón Municipio, PR.		
	San Sebastián Municipio, PR.		
10420	Akron, OH	0.8699	0.9090
	Portage County, OH.		
	Summit County, OH.		
10500	Albany, GA	0.8666	0.9066
	Baker County, GA.		
	Dougherty County, GA.		
	Lee County, GA.		
	Terrell County, GA.		
	Worth County, GA.		
10580	Albany-Schenectady-Troy, NY	0.8667	0.9067
	Albany County, NY.		
	Rensselaer County, NY.		
	Saratoga County, NY.		
	Schenectady County, NY.		
	Schoharie County, NY.		
	.		
10740	Albuquerque, NM	0.9725	0.9811
	Bernalillo County, NM.		
	Sandoval County, NM.		
	Torrance County, NM.		
	Valencia County, NM.		
10780	Alexandria, LA	0.7977	0.8566
	Grant Parish, LA.		
	Rapides Parish, LA.		
10900	Allentown-Bethlehem-Easton, PA-NJ (PA Hospitals)	1.0003	1.0002
	Warren County, NJ.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Carbon County, PA.		
	Lehigh County, PA.		
	Northampton County, PA.		
10900	[2] Allentown-Bethlehem-Easton, PA-NJ (NJ Hospitals)	1.1616	1.1080
	Warren County, NJ.		
	Carbon County, PA.		
	Lehigh County, PA.		
	Northampton County, PA.		
11020	[2] Altoona, PA	0.8357	0.8843
	Blair County, PA.		
11100	Amarillo, TX	0.9151	0.9411
	Armstrong County, TX.		
	Carson County, TX.		
	Potter County, TX.		
	Randall County, TX.		
11180	Ames, IA	0.9976	0.9984
	Story County, IA.		
11260	[2] Anchorage, AK	1.2083	1.1383
	Anchorage Municipality, AK.		
	Matanuska-Susitna Borough, AK.		
11300	Anderson, IN	0.8964	0.9278
	Madison County, IN.		
11340	Anderson, SC	0.9208	0.9451
	Anderson County, SC.		
11460	Ann Arbor, MI	1.0498	1.0338
	Washtenaw County, MI.		
11500	Anniston-Oxford, AL	0.7975	0.8565
	Calhoun County, AL.		
11540	[2] Appleton, WI	0.9684	0.9783
	Calumet County, WI.		
	Outagamie County, WI.		
11700	Asheville, NC	0.9201	0.9446
	Buncombe County, NC.		
	Haywood County, NC.		
	Henderson County, NC.		
	Madison County, NC.		
12020	Athens-Clarke County, GA	0.9996	0.9997
	Clarke County, GA.		
	Madison County, GA.		
	Oconee County, GA.		
	Oglethorpe County, GA.		
12060	[1] Atlanta-Sandy Springs-Marietta, GA	0.9812	0.9871
	Barrow County, GA.		
	Bartow County, GA.		
	Butts County, GA.		
	Carroll County, GA.		
	Cherokee County, GA.		
	Clayton County, GA.		
	Cobb County, GA.		
	Coweta County, GA.		
	Dawson County, GA.		
	DeKalb County, GA.		
	Douglas County, GA.		
	Fayette County, GA.		
	Forsyth County, GA.		
	Fulton County, GA.		
	Gwinnett County, GA.		
	Haralson County, GA.		
	Heard County, GA.		
	Henry County, GA.		
	Jasper County, GA.		
	Lamar County, GA.		
	Meriwether County, GA.		
	Newton County, GA.		
	Paulding County, GA.		
	Pickens County, GA.		
	Pike County, GA.		
	Rockdale County, GA.		
	Spalding County, GA.		
	Walton County, GA.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
12100	Atlantic City, NJ	1.2063	1.1371
	Atlantic County, NJ.		
12220	Auburn-Opelika, AL	0.8075	0.8638
	Lee County, AL.		
12260	Augusta-Richmond County, GA-SC	0.9598	0.9723
	Burke County, GA.		
	Columbia County, GA.		
	McDuffie County, GA.		
	Richmond County, GA.		
	Aiken County, SC.		
	Edgefield County, SC.		
12420	[1] Austin-Round Rock, TX	0.9501	0.9656
	Bastrop County, TX.		
	Caldwell County, TX.		
	Hays County, TX.		
	Travis County, TX.		
	Williamson County, TX.		
12540	[2] Bakersfield, CA	1.1735	1.1158
	Kern County, CA.		
12580	[1] Baltimore-Towson, MD	1.0030	1.0021
	Anne Arundel County, MD.		
	Baltimore County, MD.		
	Carroll County, MD.		
	Harford County, MD.		
	Howard County, MD.		
	Queen Anne's County, MD.		
	Baltimore City, MD.		
12620	Bangor, ME	0.9881	0.9918
	Penobscot County, ME.		
12700	Barnstable Town, MA	1.2611	1.1722
	Barnstable County, MA.		
12940	Baton Rouge, LA	0.8009	0.8590
	Ascension Parish, LA.		
	East Baton Rouge Parish, LA.		
	East Feliciana Parish, LA.		
	Iberville Parish, LA.		
	Livingston Parish, LA.		
	Pointe Coupee Parish, LA.		
	St. Helena Parish, LA.		
	West Baton Rouge Parish, LA.		
	West Feliciana Parish, LA.		
12980	Battle Creek, MI	1.0052	1.0036
	Calhoun County, MI.		
13020	Bay City, MI	0.9394	0.9581
	Bay County, MI.		
13140	Beaumont-Port Arthur, TX	0.8615	0.9029
	Hardin County, TX.		
	Jefferson County, TX.		
	Orange County, TX.		
13380	Bellingham, WA	1.1257	1.0845
	Whatcom County, WA.		
13460	Bend, OR	1.0586	1.0398
	Deschutes County, OR.		
13644	[1] Bethesda-Gaithersburg-Frederick, MD	1.1016	1.0685
	Frederick County, MD.		
	Montgomery County, MD.		
13740	Billings, MT	0.8870	0.9212
	Carbon County, MT.		
	Yellowstone County, MT.		
13780	Binghamton, NY	0.9068	0.9352
	Broome County, NY.		
	Tioga County, NY.		
13820	[1] Birmingham-Hoover, AL	0.8855	0.9201
	Bibb County, AL.		
	Blount County, AL.		
	Chilton County, AL.		
	Jefferson County, AL.		
	St. Clair County, AL.		
	Shelby County, AL.		
	Walker County, AL.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
13900	Bismarck, ND	0.7311	0.8070
	Burleigh County, ND.		
	Morton County, ND.		
13980	Blacksburg-Christiansburg-Radford, VA	0.8129	0.8677
	Giles County, VA.		
	Montgomery County, VA.		
	Pulaski County, VA.		
	Radford City, VA.		
14020	Bloomington, IN.		
	Greene County, IN.		
	Monroe County, IN.		
	Owen County, IN	0.9323	0.9531
14060	Bloomington-Normal, IL	0.9483	0.9643
	McLean County, IL.		
14260	Boise City-Nampa, ID	0.9496	0.9652
	Ada County, ID.		
	Boise County, ID.		
	Canyon County, ID.		
	Gem County, ID.		
	Owyhee County, ID.		
14484	[1] Boston-Quincy, MA	1.1843	1.1228
	Norfolk County, MA.		
	Plymouth County, MA.		
	Suffolk County, MA.		
14500	Boulder, CO	1.0109	1.0075
	Boulder County, CO.		
14540	Bowling Green, KY	0.8085	0.8645
	Edmonson County, KY.		
	Warren County, KY.		
14740	Bremerton-Silverdale, WA	1.0820	1.0555
	Kitsap County, WA.		
14860	Bridgeport-Stamford-Norwalk, CT	1.2778	1.1828
	Fairfield County, CT.		
15180	Brownsville-Harlingen, TX	0.9192	0.9439
	Cameron County, TX.		
15260	Brunswick, GA	0.9764	0.9838
	Brantley County, GA.		
	Glynn County, GA.		
	McIntosh County, GA.		
15380	[1] Buffalo-Niagara Falls, NY	0.9588	0.9716
	Erie County, NY.		
	Niagara County, NY.		
15500	[2] Burlington, NC	0.8603	0.9021
	Alamance County, NC.		
15540	[2] Burlington-South Burlington, VT	1.0387	1.0263
	Chittenden County, VT.		
	Franklin County, VT.		
	Grand Isle County, VT.		
15764	[1] Cambridge-Newton-Framingham, MA	1.1216	1.0818
	Middlesex County, MA.		
15804	[1,2] Camden, NJ	1.1616	1.1080
	Burlington County, NJ.		
	Camden County, NJ.		
	Gloucester County, NJ.		
15940	Canton-Massillon, OH	0.8917	0.9245
	Carroll County, OH.		
	Stark County, OH.		
15980	Cape Coral-Fort Myers, FL	0.9485	0.9644
	Lee County, FL.		
16180	[2] Carson City, NV	0.9701	0.9794
	Carson City, NV.		
16220	Casper, WY	0.9270	0.9494
	Natrona County, WY.		
16300	Cedar Rapids, IA	0.8684	0.9079
	Benton County, IA.		
	Jones County, IA.		
	Linn County, IA.		
16580	Champaign-Urbana, IL	0.9315	0.9526
	Champaign County, IL.		
	Ford County, IL.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Piatt County, IL.		
16620	Charleston, WV	0.8393	0.8869
	Boone County, WV.		
	Clay County, WV.		
	Kanawha County, WV.		
	Lincoln County, WV.		
	Putnam County, WV.		
16700	Charleston-North Charleston, SC	0.9101	0.9375
	Berkeley County, SC.		
	Charleston County, SC.		
	Dorchester County, SC.		
16740	[1] Charlotte-Gastonia-Concord, NC-SC	0.9505	0.9658
	Anson County, NC.		
	Cabarrus County, NC.		
	Gaston County, NC.		
	Mecklenburg County, NC.		
	Union County, NC.		
	York County, SC.		
16820	Charlottesville, VA	0.9160	0.9417
	Albemarle County, VA.		
	Fluvanna County, VA.		
	Greene County, VA.		
	Nelson County, VA.		
	Charlottesville City, VA.		
16860	Chattanooga, TN-GA	0.8962	0.9277
	Catoosa County, GA.		
	Dade County, GA.		
	Walker County, GA.		
	Hamilton County, TN.		
	Marion County, TN.		
	Sequatchie County, TN.		
16940	Cheyenne, WY	0.9204	0.9448
	Laramie County, WY.		
16974	[1] Chicago-Naperville-Joliet, IL	1.0588	1.0399
	Cook County, IL.		
	DeKalb County, IL.		
	DuPage County, IL.		
	Grundy County, IL.		
	Kane County, IL.		
	Kendall County, IL.		
	McHenry County, IL.		
	Will County, IL.		
17020	[2] Chico, CA	1.1735	1.1158
	Butte County, CA.		
17140	[1] Cincinnati-Middletown, OH-KY-IN	0.9661	0.9767
	Dearborn County, IN.		
	Franklin County, IN.		
	Ohio County, IN.		
	Boone County, KY.		
	Bracken County, KY.		
	Campbell County, KY.		
	Gallatin County, KY.		
	Grant County, KY.		
	Kenton County, KY.		
	Pendleton County, KY.		
	Brown County, OH.		
	Butler County, OH.		
	Clermont County, OH.		
	Hamilton County, OH.		
	Warren County, OH.		
17300	Clarksville, TN-KY	0.8218	0.8742
	Christian County, KY.		
	Trigg County, KY.		
	Montgomery County, TN.		
	Stewart County, TN.		
17420	Cleveland, TN	0.8171	0.8708
	Bradley County, TN.		
	Polk County, TN.		
17460	[1] Cleveland-Elyria-Mentor, OH	0.9345	0.9547
	Cuyahoga County, OH.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Geauga County, OH.		
	Lake County, OH.		
	Lorain County, OHMedina County, OH.		
17660	Coeur d'Alene, ID	0.9355	0.9554
	Kootenai County, ID.		
17780	College Station-Bryan, TX	0.9171	0.9425
	Brazos County, TX.		
	Burleson County, TX.		
	Robertson County, TX.		
17820	Colorado Springs, CO	0.9466	0.9631
	El Paso County, CO.		
	Teller County, CO.		
17860	Columbia, MO	0.8537	0.8973
	Boone County, MO.		
	Howard County, MO.		
17900	Columbia, SC	0.8829	0.9182
	Calhoun County, SC.		
	Fairfield County, SC.		
	Kershaw County, SC.		
	Lexington County, SC.		
	Richland County, SC.		
	Saluda County, SC.		
17980	Columbus, GA-AL	0.9019	0.9317
	Russell County, AL.		
	Chattahoochee County, GA.		
	Harris County, GA.		
	Marion County, GA.		
	Muscogee County, GA.		
18020	Columbus, IN	0.9625	0.9742
	Bartholomew County, IN.		
18140	[1] Columbus, OH	1.0024	1.0016
	Delaware County, OH.		
	Fairfield County, OH.		
	Franklin County, OH.		
	Licking County, OH.		
	Madison County, OH.		
	Morrow County, OH.		
	Pickaway County, OH.		
	Union County, OH.		
18580	Corpus Christi, TX	0.8456	0.8915
	Aransas County, TX.		
	Nueces County, TX.		
	San Patricio County, TX.		
18700	Corvallis, OR	1.0701	1.0475
	Benton County, OR.		
19060	[2] Cumberland, MD-WV (MD Hospitals)	0.8911	0.9241
	Allegany County, MD.		
	Mineral County, WV.		
19060	Cumberland, MD-WV (WV Hospitals)	0.7962	0.8555
	Allegany County, MD.		
	Mineral County, WV.		
19124	[1] Dallas-Plano-Irving, TX	0.9785	0.9852
	Collin County, TX.		
	Dallas County, TX.		
	Delta County, TX.		
	Denton County, TX.		
	Ellis County, TX.		
	Hunt County, TX.		
	Kaufman County, TX.		
	Rockwall County, TX.		
19140	Dalton, GA	0.8582	0.9006
	Murray County, GA.		
	Whitfield County, GA.		
19180	Danville, IL	0.9244	0.9476
	Vermilion County, IL.		
19260	Danville, VA	0.8296	0.8799
	Pittsylvania County, VA.		
	Danville City, VA.		
19340	Davenport-Moline-Rock Island, IA-IL	0.8893	0.9228
	Henry County, IL.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Mercer County, IL.		
	Rock Island County, IL.		
	Scott County, IA.		
19380	Dayton, OH	0.9278	0.9500
	Greene County, OH.		
	Miami County, OH.		
	Montgomery County, OH.		
	Preble County, OH.		
19460	Decatur, AL	0.7832	0.8459
	Lawrence County, AL.		
	Morgan County, AL.		
19500	[2] Decatur, IL.		
	Macon County, IL0.83450.8835.		
19660	Deltona-Daytona Beach-Ormond Beach, FL	0.8943	0.9264
	Volusia County, FL.		
19740	[1] Denver-Aurora, CO	1.0454	1.0309
	Adams County, CO.		
	Arapahoe County, CO.		
	Broomfield County, CO.		
	Clear Creek County, CO.		
	Denver County, CO.		
	Douglas County, CO.		
	Elbert County, CO.		
	Gilpin County, CO.		
	Jefferson County, CO.		
	Park County, CO.		
19780	Des Moines-West Des Moines, IA	0.9157	0.9415
	Dallas County, IA.		
	Guthrie County, IA.		
	Madison County, IA.		
	Polk County, IA.		
	Warren County, IA.		
19804	[1] Detroit-Livonia-Dearborn, MI	1.0095	1.0065
	Wayne County, MI.		
20020	[2] Dothan, AL	0.7567	0.8262
	Geneva County, AL.		
	Henry County, AL.		
	Houston County, AL.		
20100	Dover, DE	1.0396	1.0270
	Kent County, DE.		
20220	Dubuque, IA	0.8875	0.9215
	Dubuque County, IA.		
20260	Duluth, MN-WI	1.0081	1.0055
	Carlton County, MN.		
	St. Louis County, MN.		
	Douglas County, WI.		
20500	Durham, NC	0.9738	0.9820
	Chatham County, NC.		
	Durham County, NC.		
	Orange County, NC.		
	Person County, NC.		
20740	[2] Eau Claire, WI	0.968	40.9783
	Chippewa County, WI.		
	Eau Claire County, WI.		
20764	[1,2] Edison, NJ	1.1616	1.1080
	Middlesex County, NJ.		
	Monmouth County, NJ.		
	Ocean County, NJ.		
	Somerset County, NJ.		
20940	[2] El Centro, CA	1.1735	1.1158
	Imperial County, CA.		
21060	Elizabethtown, KY	0.8617	0.9031
	Hardin County, KY.		
	Larue County, KY.		
21140	Elkhart-Goshen, IN	0.9540	0.9683
	Elkhart County, IN.		
21300	[2] Elmira, NY	0.8416	0.8886
	Chemung County, NY.		
21340	El Paso, TX	0.9140	0.9403
	El Paso County, TX.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
21500	Erie, PA Erie County, PA.	0.8503	0.8949
21660	Eugene-Springfield, OR Lane County, OR.	1.1002	1.0676
21780	[2] Evansville, IN-KY (IN Hospitals) Gibson County, IN. Posey County, IN. Vanderburgh County, IN. Warrick County, IN. Henderson County, KY. Webster County, KY.	0.8568	0.8996
21780	Evansville, IN-KY (KY Hospitals) Gibson County, IN. Posey County, IN. Vanderburgh County, IN. Warrick County, IN. Henderson County, KY. Webster County, KY.	0.8465	0.8922
21820	[2] Fairbanks, AK Fairbanks North Star Borough, AK.	1.2083	1.1383
21940	Fajardo, PR Ceiba Municipio, PR. Fajardo Municipio, PR. Luquillo Municipio, PR.	0.4365	0.5668
22020	[2] Fargo, ND-MN (MN Hospitals) Clay County, MN. Cass County, ND.	0.9113	0.9384
22020	Fargo, ND-MN (ND Hospitals) Clay County, MN. Cass County, ND.	0.7943	0.8541
22140	Farmington, NM San Juan County, NM.	0.9282	0.9503
22180	Fayetteville, NC Cumberland County, NC. Hoke County, NC.	0.9917	0.9943
22220	Fayetteville-Springdale-Rogers, AR-MO Benton County, AR. Madison County, AR. Washington County, AR. McDonald County, MO.	0.8871	0.9212
22380	Flagstaff, AZ Coconino County, AZ.	1.1551	1.1038
22420	Flint, MI Genesee County, MI.	1.1012	1.0682
22500	[2] Florence, SC Darlington County, SC. Florence County, SC.	0.8707	0.9095
22520	Florence-Muscle Shoals, AL Colbert County, AL. Lauderdale County, AL.	0.7692	0.8355
22540	Fond du Lac, WI Fond du Lac County, WI.	0.9887	0.9922
22660	Fort Collins-Loveland, CO Larimer County, CO.	0.9579	0.9710
22744	[1] Fort Lauderdale-Pompano Beach-Deerfield Beach, FL Broward County, FL.	1.0247	1.0168
22900	Fort Smith, AR-OK Crawford County, AR. Franklin County, AR. Sebastian County, AR. Le Flore County, OK. Sequoyah County, OK.	0.8052	0.8621
23020	[2] Fort Walton Beach-Crestview-Destin, FL Okaloosa County, FL.	0.8733	0.9114
23060	Fort Wayne, IN Allen County, IN. Wells County, IN. Whitley County, IN.	0.9041	0.9333
23104	[1] Fort Worth-Arlington, TX Johnson County, TX.	0.9636	0.9749

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Parker County, TX. Tarrant County, TX. Wise County, TX.		
23420	[2] Fresno, CA Fresno County, CA.	1.1735	1.1158
23460	Gadsden, AL Etowah County, AL.	0.8144	0.8688
23540	Gainesville, FL Alachua County, FL. Gilchrist County, FL.	0.9301	0.9516
23580	Gainesville, GA Hall County, GA.	0.9418	0.9598
23844	Gary, IN Jasper County, IN. Lake County, IN. Newton County, IN. Porter County, IN.	0.9241	0.9474
24020	Glens Falls, NY Warren County, NY. Washington County, NY.	0.8522	0.8963
24140	Goldsboro, NC Wayne County, NC.	0.9271	0.9495
24220	[2] Grand Forks, ND-MN (MN Hospitals) Polk County, MN. Grand Forks County, ND.	0.9113	0.9384
24220	Grand Forks, ND-MN (ND Hospitals) Polk County, MN. Grand Forks County, ND.	0.8048	0.8618
24300	Grand Junction, CO Mesa County, CO.	1.0135	1.0092
24340	Grand Rapids-Wyoming, MI Barry County, MI. Ionia County, MI. Kent County, MI. Newaygo County, MI.	0.9374	0.9567
24500	Great Falls, MT Cascade County, MT.	0.8761	0.9134
24540	Greeley, CO Weld County, CO.	0.9996	0.9997
24580	[2] Green Bay, WI Brown County, WI. Kewaunee County, WI. Oconto County, WI.	0.9684	0.9783
24660	Greensboro-High Point, NC Guilford County, NC. Randolph County, NC. Rockingham County, NC.	0.9106	0.9379
24780	Greenville, NC Greene County, NC. Pitt County, NC.	0.9267	0.9492
24860	Greenville-Mauldin-Easley, SC Greenville County, SC. Laurens County, SC. Pickens County, SC.	0.9636	0.9749
25020	Guayama, PR Arroyo Municipio, PR. Guayama Municipio, PR. Patillas Municipio, PR.	0.2944	0.4328
25060	Gulfport-Biloxi, MS Hancock County, MS. Harrison County, MS. Stone County, MS.	0.8607	0.9024
25180	Hagerstown-Martinsburg, MD-WV Washington County, MD. Berkeley County, WV. Morgan County, WV.	0.9255	0.9484
25260	[2] Hanford-Corcoran, CA Kings County, CA.	1.1735	1.1158
25420	Harrisburg-Carlisle, PA Cumberland County, PA.	0.9230	0.9466

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Dauphin County, PA. Perry County, PA.		
25500	Harrisonburg, VA Rockingham County, VA. Harrisonburg City, VA.	0.8895	0.9229
25540	[1,2] Hartford-West Hartford-East Hartford, CT Hartford County, CT. Middlesex County, CT. Tolland County, CT.	1.2432	1.1608
25620	[2] Hattiesburg, MS Forrest County, MS. Lamar County, MS. Perry County, MS.	0.7752	0.8400
25860	Hickory-Lenoir-Morganton, NC Alexander County, NC. Burke County, NC. Caldwell County, NC. Catawba County, NC.	0.8972	0.9284
25980	Hinesville-Fort Stewart, GA Liberty County, GALong County, GA.	0.7861	0.8481
26100	Holland-Grand Haven, MI Ottawa County, MI.	0.9063	0.9348
26180	Honolulu, HI Honolulu County, HI.	1.1305	1.0876
26300	Hot Springs, AR Garland County, AR.	0.9105	0.9378
26380	Houma-Bayou Cane-Thibodaux, LA Lafourche Parish, LA. Terrebonne Parish, LA.	0.7975	0.8565
26420	[1] Houston-Sugar Land-Baytown, TX Austin County, TX. Brazoria County, TX. Chambers County, TX. Fort Bend County, TX. Galveston County, TX. Harris County, TX. Liberty County, TX. Montgomery County, TX. San Jacinto County, TX. Waller County, TX.	0.9996	0.9997
26580	Huntington-Ashland, WV-KY-OH Boyd County, KY. Greenup County, KY. Lawrence County, OH. Cabell County, WV. Wayne County, WV.	0.8878	0.9217
26620	Huntsville, AL Limestone County, AL. Madison County, AL.	0.9017	0.9316
26820	Idaho Falls, ID Bonneville County, ID. Jefferson County, ID.	0.9272	0.9496
26900	[1] Indianapolis-Carmel, IN Boone County, IN. Brown County, IN. Hamilton County, IN. Hancock County, IN. Hendricks County, IN. Johnson County, IN. Marion County, IN. Morgan County, IN. Putnam County, IN. Shelby County, IN.	0.9717	0.9805
26980	Iowa City, IA Johnson County, IA. Washington County, IA.	0.9423	0.9601
27060	Ithaca, NY Tompkins County, NY.	0.9709	0.9800
27100	Jackson, MI Jackson County, MI.	0.9460	0.9627

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
27140	Jackson, MS	0.7950	0.8546
	Copiah County, MS.		
	Hinds County, MS.		
	Madison County, MS.		
	Rankin County, MS.		
	Simpson County, MS.		
27180	Jackson, TN	0.8591	0.9012
	Chester County, TN.		
	Madison County, TN.		
27260	[1] Jacksonville, FL	0.9089	0.9367
	Baker County, FL.		
	Clay County, FL.		
	Duval County, FL.		
	Nassau County, FL.		
	St. Johns County, FL.		
27340	[2] Jacksonville, NC	0.8603	0.9021
	Onslow County, NC.		
27500	Janesville, WI	0.9852	0.9898
	Rock County, WI.		
27620	Jefferson City, MO	0.8702	0.9092
	Callaway County, MO.		
	Cole County, MO.		
	Moniteau County, MO.		
	Osage County, MO.		
27740	[2] Johnson City, TN	0.7917	0.8522
	Carter County, TN.		
	Unicoi County, TN.		
	Washington County, TN.		
27780	[2] Johnstown, PA	0.8357	0.8843
	Cambria County, PA.		
27860	Jonesboro, AR	0.8503	0.8949
	Craighead County, AR.		
	Poinsett County, AR.		
27900	Joplin, MO	0.9211	0.9453
	Jasper County, MO.		
	Newton County, MO.		
28020	Kalamazoo-Portage, MI	1.0500	1.0340
	Kalamazoo County, MI.		
	Van Buren County, MI.		
28100	Kankakee-Bradley, IL V	1.0144	1.0098
	Kankakee County, IL.		
28140	[1] Kansas City, MO-KS	0.9318	0.9528
	Franklin County, KS.		
	Johnson County, KS.		
	Leavenworth County, KS.		
	Linn County, KS.		
	Miami County, KS.		
	Wyandotte County, KS.		
	Bates County, MO.		
	Caldwell County, MO.		
	Cass County, MO.		
	Clay County, MO.		
	Clinton County, MO.		
	Jackson County, MO.		
	Lafayette County, MO.		
	Platte County, MO.		
	Ray County, MO.		
28420	[2] Kennewick-Richland-Pasco, WA	1.0558	1.0379
	Benton County, WA.		
	Franklin County, WA.		
28660	Killeen-Temple-Fort Hood, TX	0.8303	0.8804
	Bell County, TX.		
	Coryell County, TX.		
	Lampasas County, TX.		
28700	[2] Kingsport-Bristol-Bristol, TN-VA (VA Hospitals)	0.8073	0.8636
	Hawkins County, TN.		
	Sullivan County, TN.		
	Bristol City, VA.		
	Scott County, VA.		
	Washington County, VA.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
28700	[2] Kingsport-Bristol-Bristol, TN-VA (TN Hospitals).		
	Hawkins County, TN	0.7917	0.8522
	Sullivan County, TN.		
	Bristol City, VA.		
	Scott County, VA.		
	Washington County, VA.		
28740	Kingston, NY	0.9578	0.9709
	Ulster County, NY.		
28940	Knoxville, TN	0.8012	0.8592
	Anderson County, TN.		
	Blount County, TN.		
	Knox County, TN.		
	Loudon County, TN.		
	Union County, TN.		
29020	Kokomo, IN	0.9463	0.9629
	Howard County, IN.		
	Tipton County, IN.		
29100	La Crosse, WI-MN	0.9698	0.9792
	Houston County, MN.		
	La Crosse County, WI.		
29140	Lafayette, IN	0.8676	0.9073
	Benton County, IN.		
	Carroll County, IN.		
	Tippecanoe County, IN.		
29180	Lafayette, LA	0.8322	0.8818
	Lafayette Parish, LA.		
	St. Martin Parish, LA.		
29340	Lake Charles, LA	0.7783	0.8423
	Calcasieu Parish, LA.		
	Cameron Parish, LA.		
29404	Lake County-Kenosha County, IL-WI	1.0583	1.0396
	Lake County, IL.		
	Kenosha County, WI.		
29420	Lake Havasu City-Kingman, AZ	0.9333	0.9538
	Mohave County, AZ.		
29460	Lakeland, FL	0.8834	0.9186
	Polk County, FL.		
29540	Lancaster, PA	0.9650	0.9759
	Lancaster County, PA.		
29620	Lansing-East Lansing, MI	1.0047	1.0032
	Clinton County, MI.		
	Eaton County, MI.		
	Ingham County, MI.		
29700	Laredo, TX	0.8501	0.8947
	Webb County, TX.		
29740	[2] Las Cruces, NM	0.8965	0.9279
	Dona Ana County, NM.		
29820	[1] Las Vegas-Paradise, NV	1.1452	1.0973
	Clark County, NV.		
29940	Lawrence, KS	0.8170	0.8707
	Douglas County, KS.		
30020	Lawton, OK	0.8405	0.8878
	Comanche County, OK.		
30140	[2] Lebanon, PA	0.8357	0.8843
	Lebanon County, PA.		
30300	[2] Lewiston, ID-WA (WA Hospitals)	1.0558	1.0379
	Nez Perce County, ID.		
	Asotin County, WA.		
30300	Lewiston, ID-WA (ID Hospitals)	0.9225	0.9463
	Nez Perce County, ID.		
	Asotin County, WA.		
30340	Lewiston-Auburn, ME	0.9289	0.9507
	Androscoggin County, ME.		
30460	Lexington-Fayette, KY	0.9002	0.9305
	Bourbon County, KY.		
	Clark County, KY.		
	Fayette County, KY.		
	Jessamine County, KY.		
	Scott County, KY.		
	Woodford County, KY.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
30620	Lima, OH	0.9307	0.9520
	Allen County, OH.		
30700	Lincoln, NE	0.9872	0.9912
	Lancaster County, NE.		
	Seward County, NE.		
30780	Little Rock-North Little Rock-Conway, AR	0.8960	0.9276
	Faulkner County, AR.		
	Grant County, AR.		
	Lonoke County, AR.		
	Perry County, AR.		
	Pulaski County, AR.		
	Saline County, AR.		
30860	Logan, UT-ID	0.9214	0.9455
	Franklin County, ID.		
	Cache County, UT.		
30980	Longview, TX	0.8871	0.9212
	Gregg County, TX.		
	Rusk County, TX.		
	Upshur County, TX.		
31020	Longview, WA	1.1027	1.0692
	Cowlitz County, WA.		
31084	[1,2] Los Angeles-Long Beach-Glendale, CA	1.1735	1.1158
	Los Angeles County, CA.		
31140	[1] Louisville-Jefferson County, KY-IN	0.9029	0.9324
	Clark County, IN.		
	Floyd County, IN.		
	Harrison County, IN.		
	Washington County, IN.		
	Bullitt County, KY.		
	Henry County, KY.		
	Jefferson County, KY.		
	Meade County, KY.		
	Nelson County, KY.		
	Oldham County, KY.		
	Shelby County, KY.		
	Spencer County, KY.		
	Trimble County, KY.		
31180	Lubbock, TX	0.8641	0.9048
	Crosby County, TX.		
	Lubbock County, TX.		
31340	Lynchburg, VA	0.8605	0.9022
	Amherst County, VA.		
	Appomattox County, VA.		
	Bedford County, VA.		
	Campbell County, VA.		
	Bedford City, VA.		
	Lynchburg City, VA.		
31420	Macon, GA	0.9748	0.9827
	Bibb County, GA.		
	Crawford County, GA.		
	Jones County, GA.		
	Monroe County, GA.		
	Twiggs County, GA.		
31460	[2] Madera, CA	1.1735	1.1158
	Madera County, CA.		
31540	Madison, WI.		
	Columbia County, WI	1.1176	1.0791
	Dane County, WI.		
	Iowa County, WI.		
31700	[2] Manchester-Nashua, NH	1.1259	1.0846
	Hillsborough County, NH.		
31900	Mansfield, OH	0.9209	0.9451
	Richland County, OH.		
32420	Mayagnez, PR	0.3657	0.5021
	Hormigueros Municipio, PR.		
	Mayagüez Municipio, PR.		
32580	McAllen-Edinburg-Mission, TX	0.9135	0.9399
	Hidalgo County, TX.		
32780	Medford, OR	1.0297	1.0202
	Jackson County, OR.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
32820	[1] Memphis, TN-MS-AR Crittenden County, AR. DeSoto County, MS. Marshall County, MS. Tate County, MS. Tunica County, MS. Fayette County, TN. Shelby County, TN. Tipton County, TN.	0.9313	0.9524
32900	Merced, CA Merced County, CA.	1.1980	1.1317
33124	[1] Miami-Miami Beach-Kendall, FL Miami-Dade County, FL.	1.0008	1.0005
33140	Michigan City-La Porte, IN LaPorte County, IN.	0.8786	0.9152
33260	Midland, TX Midland County, TX.	0.9711	0.9801
33340	[1] Milwaukee-Waukesha-West Allis, WI Milwaukee County, WI. Ozaukee County, WI. Washington County, WI. Waukesha County, WI.	1.0295	1.0201
33460	[1] Minneapolis-St. Paul-Bloomington, MN-WI Anoka County, MN. Carver County, MN. Chisago County, MN. Dakota County, MN. Hennepin County, MN. Isanti County, MN. Ramsey County, MN. Scott County, MN. Sherburne County, MN. Washington County, MN. Wright County, MN. Pierce County, WI. St. Croix County, WI.	1.0896	1.0605
33540	Missoula, MT Missoula County, MT.	0.8738	0.9118
33660	Mobile, AL Mobile County, AL.	0.7947	0.8544
33700	Modesto, CA Stanislaus County, CA.	1.2019	1.1342
33740	Monroe, LA Ouachita Parish, LA. Union Parish, LA.	0.7869	0.8486
33780	Monroe, MI Monroe County, MI.	0.9469	0.9633
33860	Montgomery, AL Autauga County, AL. Elmore County, AL. Lowndes County, AL. Montgomery County, AL.	0.8111	0.8664
34060	Morgantown, WV Monongalia County, WV. Preston County, WV.	0.8407	0.8880
34100	[2] Morristown, TN Grainger County, TN. Hamblen County, TN. Jefferson County, TN.	0.7917	0.8522
34580	[2] Mount Vernon-Anacortes, WA Skagit County, WA.	1.0558	1.0379
34620	[2] Muncie, IN Delaware County, IN.	0.858	0.8996
34740	Muskegon-Norton Shores, MI Muskegon County, MI.	0.9968	0.9978
34820	[2] Myrtle Beach-Conway-North Myrtle Beach, SC Horry County, SC.	0.8707	0.9095
34900	Napa, CA Napa County, CA.	1.3959	1.2566
34940	Naples-Marco Island, FL	0.9618	0.9737

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Collier County, FL.		
34980	[1] Nashville-Davidson-Murfreesboro-Franklin, TN	0.9618	0.9737
	Cannon County, TN.		
	Cheatham County, TN.		
	Davidson County, TN.		
	Dickson County, TN.		
	Hickman County, TN.		
	Macon County, TN.		
	Robertson County, TN.		
	Rutherford County, TN.		
	Smith County, TN.		
	Sumner County, TN.		
	Trousdale County, TN.		
	Williamson County, TN.		
	Wilson County, TN.		
35004	[1] Nassau-Suffolk, NY	1.2877	1.1891
	Nassau County, NY.		
	Suffolk County, NY.		
35084	[1] Newark-Union, NJ-PA	1.1673	1.1117
	Essex County, NJ.		
	Hunterdon County, NJ.		
	Morris County, NJ.		
	Sussex County, NJ.		
	Union County, NJ.		
	Pike County, PA.		
35300	[2] New Haven-Milford, CT	1.2432	1.1608
	New Haven County, CT.		
35380	[1] New Orleans-Metairie-Kenner, LA	0.8711	0.9098
	Jefferson Parish, LA.		
	Orleans Parish, LA.		
	Plaquemines Parish, LA.		
	St. Bernard Parish, LA.		
	St. Charles Parish, LA.		
	St. John the Baptist Parish, LA.		
	St. Tammany Parish, LA.		
35644	[1] New York-White Plains-Wayne, NY-NJ	1.3229	1.2112
	Bergen County, NJ.		
	Hudson County, NJ.		
	Passaic County, NJ.		
	Bronx County, NY.		
	Kings County, NY.		
	New York County, NY.		
	Putnam County, NY.		
	Queens County, NY.		
	Richmond County, NY.		
	Rockland County, NY.		
	Westchester County, NY.		
35660	Niles-Benton Harbor, MI	0.9133	0.9398
	Berrien County, MI.		
35980	[2] Norwich-New London, CT	1.2432	1.1608
	New London County, CT.		
36084	[1] Oakland-Fremont-Hayward, CA	1.5343	1.3406
	Alameda County, CA.		
	Contra Costa County, CA.		
36100	[2] Ocala, FL	0.8733	0.9114
	Marion County, FL.		
36140	[2] Ocean City, NJ	1.1616	1.1080
	Cape May County, NJ.		
36220	Odessa, TX	0.9954	0.9968
	Ector County, TX.		
36260	Ogden-Clearfield, UT	0.9053	0.9341
	Davis County, UT.		
	Morgan County, UT.		
	Weber County, UT.		
36420	[1] Oklahoma City, OK	0.8754	0.9129
	Canadian County, OK.		
	Cleveland County, OK.		
	Grady County, OK.		
	Lincoln County, OK.		
	Logan County, OK.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	McClain County, OK.		
	Oklahoma County, OK.		
36500	Olympia, WA	1.1419	1.0951
	Thurston County, WA.		
36540	Omaha-Council Bluffs, NE-IA	0.9473	0.9636
	Harrison County, IA.		
	Mills County, IA.		
	Pottawattamie County, IA.		
	Cass County, NE.		
	Douglas County, NE.		
	Sarpy County, NE.		
	Saunders County, NE.		
	Washington County, NE.		
36740	[1] Orlando-Kissimmee, FL	0.9284	0.9504
	Lake County, FL.		
	Orange County, FL.		
	Osceola County, FL.		
	Seminole County, FL.		
36780	[2] Oshkosh-Neenah, WI	0.9684	0.9783
	Winnebago County, WI.		
36980	Owensboro, KY	0.8697	0.9088
	Daviess County, KY.		
	Hancock County, KY.		
	McLean County, KY.		
37100	[2] Oxnard-Thousand Oaks-Ventura, CA	1.1735	1.1158
	Ventura County, CA.		
37340	Palm Bay-Melbourne-Titusville, FL	0.9380	0.9571
	Brevard County, FL.		
37380	Palm Coast, FL	0.8737	0.9117
	Flager County, FL.		
37460	[2] Panama City-Lynn Haven, FL	0.8733	0.9114
	Bay County, FL.		
37620	[2] Parkersburg-Marietta-Vienna, WV-OH (OH Hospitals).		
	Washington County, OH	0.8696	0.9088
	Pleasants County, WV.		
	Wirt County, WV.		
	Wood County, WV.		
37620	Parkersburg-Marietta-Vienna, WV-OH (WV Hospitals)	0.8258	0.8772
	Washington County, OH.		
	Pleasants County, WV.		
	Wirt County, WV.		
	Wood County, WV.		
37700	Pascagoula, MS	0.8539	0.8975
	George County, MS.		
	Jackson County, MS.		
37764	Peabody, MA	1.0599	1.0406
	Essex County, MA.		
37860	[2] Pensacola-Ferry Pass-Brent, FL	0.8733	0.9114
	Escambia County, FL.		
	Santa Rosa County, FL.		
37900	Peoria, IL	0.9385	0.9575
	Marshall County, IL.		
	Peoria County, IL.		
	Stark County, IL.		
	Tazewell County, IL.		
	Woodford County, IL.		
37964	[1] Philadelphia, PA	1.0892	1.0603
	Bucks County, PA.		
	Chester County, PA.		
	Delaware County, PA.		
	Montgomery County, PA.		
	Philadelphia County, PA.		
38060	[1] Phoenix-Mesa-Scottsdale, AZ	1.0110	1.0075
	Maricopa County, AZ.		
	Pinal County, AZ.		
38220	Pine Bluff, AR	0.8152	.....
	Cleveland County, AR.		
	Jefferson County, AR.		
	Lincoln County, AR 0.8694.		
38300	[1] Pittsburgh, PA	0.8390	.....

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Allegheny County, PA. Armstrong County, PA. Beaver County, PA. Butler County, PA. Fayette County, PA. Washington County, PA. Westmoreland County, PA 0.8867.		
38340	Pittsfield, MA Berkshire County, MA.	1.0052	1.0036
38540	Pocatello, ID Bannock County, ID. Power County, ID.	0.9186	0.9435
38660	Ponce, PR Juana Dfaz Municipio, PR. Ponce Municipio, PR. Villalba Municipio, PR.	0.4262	0.5576
38860	Portland-South Portland-Biddeford, ME Cumberland County, ME. Sagadahoc County, ME. York County, ME.	0.9991	0.9994
38900	[1] Portland-Vancouver-Beaverton, OR-WA Clackamas County, OR. Columbia County, OR. Multnomah County, OR. Washington County, OR. Yamhill County, OR. Clark County, WA. Skamania County, WA.	1.1226	1.0824
38940	Port St. Lucie, FL Martin County, FL. St. Lucie County, FL.	1.0035	1.0024
39100	Poughkeepsie-Newburgh-Middletown, NY Dutchess County, NY. Orange County, NY.	1.0982	1.0662
39140	Prescott, AZ Yavapai County, AZ.	l0.9961	0.9973
39300	[1] Providence-New Bedford-Fall River, RI-MA Bristol County, MA. Bristol County, RI. Kent County, RI. Newport County, RI. Providence County, RI. Washington County, RI.	1.0532	1.0361
39340	Provo-Orem, UT Juab County, UT. Utah County, UT.	0.9480	0.9641
39380	[2] Pueblo, CO Pueblo County, CO.	0.9447	0.9618
39460	Punta Gorda, FL Charlotte County, FL.	0.9558	0.9695
39540	[2] Racine, WI Racine County, WI.	0.9684	0.9783
39580	Raleigh-Cary, NC Franklin County, NC. Johnston County, NC. Wake County, NC.	0.9663	0.9768
39660	Rapid City, SD Meade County, SD. Pennington County, SD.	0.8685	0.9080
39740	Reading, PA Berks County, PA.	0.9413	0.9594
39820	Redding, CA Shasta County, CA.	1.2809	1.1847
39900	Reno-Sparks, NV Storey County, NV. Washoe County, NV.	1.1062	1.0716
40060	[1] Richmond, VA Amelia County, VA. Caroline County, VA. Charles City County, VA.	0.9232	0.9467

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Chesterfield County, VA.		
	Cumberland County, VA.		
	Dinwiddie County, VA.		
	Goochland County, VA.		
	Hanover County, VA.		
	Henrico County, VA.		
	King and Queen County, VA.		
	King William County, VA.		
	Louisa County, VA.		
	New Kent County, VA.		
	Powhatan County, VA.		
	Prince George County, VA.		
	Sussex County, VA.		
	Colonial Heights City, VA.		
	Hopewell City, VA.		
	Petersburg City, VA.		
	Richmond City, VA.		
40140	[1,2] Riverside-San Bernardino-Ontario, CA	1.1735	1.1158
	Riverside County, CA.		
	San Bernardino County, CA.		
40220	Roanoke, VA	0.8888	0.9224
	Botetourt County, VA.		
	Craig County, VA.		
	Franklin County, VA.		
	Roanoke County, VA.		
	Roanoke City, VA.		
	Salem City, VA.		
40340	Rochester, MN	1.0490	1.0333
	Dodge County, MN.		
	Olmsted County, MN.		
	Wabasha County, MN.		
40380	[1] Rochester, NY	0.8918	0.9246
	Livingston County, NY.		
	Monroe County, NY.		
	Ontario County, NY.		
	Orleans County, NY.		
	Wayne County, NY.		
40420	Rockford, IL	0.9804	0.9865
	Boone County, IL.		
	Winnebago County, IL.		
40484	[2] Rockingham County-Strafford County, NH	1.1259	1.0846
	Rockingham County, NH.		
	Strafford County, NH.		
40580	Rocky Mount, NC	0.9007	0.9309
	Edgecombe County, NC.		
	Nash County, NC.		
40660	Rome, GA	0.9547	0.9688
	Floyd County, GA.		
40900	[1] Sacramento—Arden-Arcade—Roseville, CA.		
	El Dorado County, CA	1.3067	1.2010
	Placer County, CA.		
	Sacramento County, CA.		
	Yolo County, CA.		
40980	Saginaw-Saginaw Township North, MI	0.9122	0.9390
	Saginaw County, MI.		
41060	St. Cloud, MN	1.1058	1.0713
	Benton County, MN.		
	Stearns County, MN.		
41100	St. George, UT	0.9535	0.9679
	Washington County, UT.		
41140	St. Joseph, MO-KS	0.8826	0.9180
	Doniphan County, KS.		
	Andrew County, MO.		
	Buchanan County, MO.		
	DeKalb County, MO.		
41180	[1] St. Louis, MO-IL	0.8982	0.9291
	Bond County, IL.		
	Calhoun County, IL.		
	Clinton County, IL.		
	Jersey County, IL.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Macoupin County, IL.		
	Madison County, IL.		
	Monroe County, IL.		
	St. Clair County, IL.		
	Crawford County, MO.		
	Franklin County, MO.		
	Jefferson County, MO.		
	Lincoln County, MO.		
	St. Charles County, MO.		
	St. Louis County, MO.		
	Warren County, MO.		
	Washington County, MO.		
	St. Louis City, MO.		
41420	Salem, OR	1.0397	1.0270
	Marion County, OR.		
	Polk County, OR.		
41500	Salinas, CA	1.4593	1.2954
	Monterey County, CA.		
41540	[2] Salisbury, MD	0.8911	0.9241
	Somerset County, MD.		
	Wicomico County, MD.		
41620	Salt Lake City, UT	0.9473	0.9636
	Salt Lake County, UT.		
	Summit County, UT.		
	Tooele County, UT.		
41660	San Angelo, TX	0.8658	0.9060
	Irion County, TX.		
	Tom Green County, TX.		
41700	[1] San Antonio, TX	0.8895	0.9229
	Atascosa County, TX.		
	Bandera County, TX.		
	Bexar County, TX.		
	Comal County, TX.		
	Guadalupe County, TX.		
	Kendall County, TX.		
	Medina County, TX.		
	Wilson County, TX.		
41740	[1,2] San Diego-Carlsbad-San Marcos, CA	1.1735	1.1158
	San Diego County, CA.		
41780	Sandusky, OH	0.8755	0.9130
	Erie County, OH.		
41884	[1] San Francisco-San Mateo-Redwood City, CA	1.4800	1.3080
	Marin County, CA.		
	San Francisco County, CA.		
	San Mateo County, CA.		
41900	San Germán-Cabo Rojo, PR	0.4603	0.5878
	Cabo Rojo Municipio, PR.		
	Lajas Municipio, PRSabana Grande Municipio, PR.		
	San Germán Municipio, PR.		
41940	[1] San Jose-Sunnyvale-Santa Clara, CA	1.5439	1.3464
	San Benito County, CA.		
	Santa Clara County, CA.		
41980	[1] San Juan-Caguas-Guaynabo, PR	0.4526	0.5811
	Aguas Buenas Municipio, PR.		
	Aibonito Municipio, PR.		
	Arecibo Municipio, PR.		
	Barceloneta Municipio, PR.		
	Barranquitas Municipio, PR.		
	Bayamón Municipio, PR.		
	Caguas Municipio, PR.		
	Camuy Municipio, PR.		
	Canóvanas Municipio, PR.		
	Carolina Municipio, PR.		
	Cataño Municipio, PR.		
	Cayey Municipio, PR.		
	Ciales Municipio, PR.		
	Cidra Municipio, PR.		
	Comerio Municipio, PR.		
	Corozal Municipio, PR.		
	Dorado Municipio, PR.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Florida Municipio, PR. Guaynabo Municipio, PR. Gurabo Municipio, PR. Hatillo Municipio, PR. Humacao Municipio, PR. Juncos Municipio, PR. Las Piedras Municipio, PR. Lofza Municipio, PR. Manati Municipio, PR. Maunabo Municipio, PR. Morovis Municipio, PR. Naguabo Municipio, PR. Naranjito Municipio, PR. Orocovis Municipio, PR. Quebradillas Municipio, PR. Rio Grande Municipio, PR. San Juan Municipio, PR. San Lorenzo Municipio, PR. Toa Alta Municipio, PR. Toa Baja Municipio, PR. Trujillo Alto Municipio, PR. Vega Alta Municipio, PR. Vega Baja Municipio, PRYabucoa Municipio, PR.		
42020	San Luis Obispo-Paso Robles, CA San Luis Obispo County, CA.	1.1951	1.1298
42044	[1,2] Santa Ana-Anaheim-Irvine, CA Orange County, CA.	1.1735	1.1158
42060	[2] Santa Barbara-Santa Maria-Goleta, CA Santa Barbara County, CA.	1.1735	1.1158
42100	Santa Cruz-Watsonville, CA Santa Cruz County, CA.	1.5667	1.3600
42140	Santa Fe, NM Santa Fe County, NM.	1.0682	1.0462
42220	Santa Rosa-Petaluma, CA Sonoma County, CA.	1.4469	1.2879
42260	Sarasota-Bradenton-Venice, FL Manatee County, FL. Sarasota County, FL.	0.9770	0.9842
42340	Savannah, GA Bryan County, GA. Chatham County, GA. Effingham County, GA.	0.8890	0.9226
42540	[2] Scranton—Wilkes-Barre, PA Lackawanna County, PA. Luzerne County, PA. Wyoming County, PA.	0.8357	0.8843
42644	[1] Seattle-Bellevue-Everett, WA King County, WA. Snohomish County, WA.	1.1362	1.0914
42680	Sebastian-Vero Beach, FL Indian River County, FL.	0.9703	0.9796
43100	[2] Sheboygan, WI Sheboygan County, WI.	0.9684	0.9783
43300	Sherman-Denison, TX Grayson County, TX.	0.8530	0.8968
43340	Shreveport-Bossier City, LA Bossier Parish, LA. Caddo Parish, LA. De Soto Parish, LA.	0.8551	0.8983
43580	Sioux City, IA-NE-SD Woodbury County, IA. Dakota County, NE. Dixon County, NE. Union County, SD.	0.9083	0.9363
43620	Sioux Falls, SD Lincoln County, SD. McCook County, SD. Minnehaha County, SD. Turner County, SD.	0.9553	0.9692
43780	South Bend-Mishawaka, IN-MI	0.9643	0.9754

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	St. Joseph County, IN.		
	Cass County, MI.		
43900	Spartanburg, SC	0.9395	0.9582
	Spartanburg County, SC.		
44060	[2] Spokane, WA	1.0558	1.0379
	Spokane County, WA.		
44100	Springfield, IL	0.8942	0.9263
	Menard County, IL.		
	Sangamon County, IL.		
44140	Springfield, MA	1.0450	1.0306
	Franklin County, MA.		
	Hampden County, MA.		
	Hampshire County, MA.		
44180	Springfield, MO	0.8791	0.9155
	Christian County, MO.		
	Dallas County, MO.		
	Greene County, MO.		
	Polk County, MO.		
	Webster County, MO.		
44220	[2] Springfield, OH	0.8696	0.9088
	Clark County, OH.		
44300	State College, PA	0.8619	0.9032
	Centre County, PA.		
44700	Stockton, CA	1.1809	1.1206
	San Joaquin County, CA.		
44940	Sumter, SC	0.8898	0.9232
	Sumter County, SC.		
45060	Syracuse, NY	0.9950	0.9966
	Madison County, NY.		
	Onondaga County, NY.		
	Oswego County, NY.		
45104	Tacoma, WA	1.0933	1.0630
	Pierce County, WA.		
45220	Tallahassee, FL	0.9027	0.9323
	Gadsden County, FL.		
	Jefferson County, FL.		
	Leon County, FL.		
	Wakulla County, FL.		
45300	[1] Tampa-St. Petersburg-Clearwater, FL	0.9170	0.9424
	Hernando County, FL.		
	Hillsborough County, FL.		
	Pasco County, FL.		
	Pinellas County, FL.		
45460	Terre Haute, IN	0.8823	0.9178
	Clay County, IN.		
	Sullivan County, IN.		
	Vermillion County, IN.		
	Vigo County, IN.		
45500	[2] Texarkana, TX-Texarkana, AR (TX Hospitals)	0.8198	0.8728
	Miller County, AR.		
	Bowie County, TX.		
45500	Texarkana, TX-Texarkana, AR (AR Hospitals)	0.7781	0.8421
	Miller County, AR.		
	Bowie County, TX.		
45780	Toledo, OH	0.9268	0.9493
	Fulton County, OH.		
	Lucas County, OH.		
	Ottawa County, OH.		
	Wood County, OH.		
45820	Topeka, KS	0.8556	0.8987
	Jackson County, KS.		
	Jefferson County, KS.		
	Osage County, KS.		
	Shawnee County, KS.		
	Wabaunsee County, KS.		
45940	[2] Trenton-Ewing, NJ	1.1616	1.1080
	Mercer County, NJ.		
46060	Tucson, AZ	0.9416	0.9596
	Pima County, AZ.		
46140	Tulsa, OK	0.8498	0.8945

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Creek County, OK.		
	Okmulgee County, OK.		
	Osage County, OK.		
	Pawnee County, OK.		
	Rogers County, OK.		
	Tulsa County, OK.		
	Wagoner County, OK.		
46220	Tuscaloosa, AL	0.8530	0.8968
	Greene County, AL.		
	Hale County, AL.		
	Tuscaloosa County, AL.		
46340	Tyler, TX	0.9181	0.9432
	Smith County, TX.		
46540	Utica-Rome, NY	0.8774	0.9143
	Herkimer County, NY.		
	Oneida County, NY.		
46660	Valdosta, GA.		
	Brooks County, GA.		
	Echols County, GA.		
	Lanier County, GA.		
	Lowndes County, GA	0.8204	0.8732
46700	Vallejo-Fairfield, CA.		
	Solano County, CA	1.4432	1.2856
47020	[2] Victoria, TX.		
	Calhoun County, TX.		
	Goliad County, TX.		
	Victoria County, TX	0.8198	0.8728
47220	Vineland-Millville-Bridgeton, NJ	1.0647	1.0439
	Cumberland County, NJ.		
47260	[1] Virginia Beach-Norfolk-Newport News, VA-NC	0.8777	0.9145
	Currituck County, NC.		
	Gloucester County, VA.		
	Isle of Wight County, VA.		
	James City County, VA.		
	Mathews County, VA.		
	Surry County, VA.		
	York County, VA.		
	Chesapeake City, VA.		
	Hampton City, VA.		
	Newport News City, VA.		
	Norfolk City, VA.		
	Poquoson City, VA.		
	Portsmouth City, VA.		
	Suffolk City, VA.		
	Virginia Beach City, VA.		
	Williamsburg City, VA.		
47300	[2] Visalia-Porterville, CA	1.1735	1.1158
	Tulare County, CA.		
47380	Waco, TX	0.8593	0.9014
	McLennan County, TX.		
47580	Warner Robins, GA	0.9613	0.9733
	Houston County, GA.		
47644	[1] Warren-Troy-Farmington Hills, MI	1.0033	1.0023
	Lapeer County, MI.		
	Livingston County, MI.		
	Macomb County, MI.		
	Oakland County, MI.		
	St. Clair County, MI.		
47894	[1] Washington-Arlington-Alexandria, DC-VA-MD-WV	1.0675	1.0457
	District of Columbia, DC.		
	Calvert County, MD.		
	Charles County, MD.		
	Prince George's County, MD.		
	Arlington County, VA.		
	Clarke County, VA.		
	Fairfax County, VA.		
	Fauquier County, VA.		
	Loudoun County, VA.		
	Prince William County, VA.		
	Spotsylvania County, VA.		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
	Stafford County, VA. Warren County, VA. Alexandria City, VA. Fairfax City, VA. Falls Church City, VA. Fredericksburg City, VA. Manassas City, VA. Manassas Park City, VA. Jefferson County, WV.		
47940	Waterloo-Cedar Falls, IA Black Hawk County, IA. Bremer County, IA. Grundy County, IA.	0.8719	0.9104
48140	Wausau, WI Marathon County, WI.	1.0004	1.0003
48260	[2] Weirton-Steubenville, WV-OH (OH Hospitals) Jefferson County, OH. Brooke County, WV. Hancock County, WV.	0.8696	0.9088
48260	Weirton-Steubenville, WV-OH (WV Hospitals) Jefferson County, OH. Brooke County, WV. Hancock County, WV.	0.7889	0.8501
48300	Wenatchee, WA Chelan County, WA. Douglas County, WA.	1.1275	1.0856
48424	[1] West Palm Beach-Boca Raton-Boynton Beach, FL Palm Beach County, FL.	0.9576	0.9708
48540	[2] Wheeling, WV-OH (OH Hospitals) Belmont County, OH. Marshall County, WV. Ohio County, WV.	0.8696	0.9088
48540	[2] Wheeling, WV-OH (WV Hospitals) Belmont County, OH. Marshall County, WV. Ohio County, WV.	0.7568	0.8263
48620	Wichita, KS Butler County, KS. Harvey County, KS. Sedgwick County, KS. Sumner County, KS.	0.8938	0.9260
48660	Wichita Falls, TX Archer County, TX. Clay County, TX. Wichita County, TX.	0.8203	0.8731
48700	[2] Williamsport, PA Lycoming County, PA.	0.8357	0.8843
48864	Wilmington, DE-MD-NJ (DE, MD Hospitals) New Castle County, DE. Cecil County, MD. Salem County, NJ.	1.0666	1.0451
48864	[2] Wilmington, DE-MD-NJ (NJ Hospitals) New Castle County, DE. Cecil County, MD. Salem County, NJ.	1.1616	1.1080
48900	Wilmington, NC Brunswick County, NC. New Hanover County, NC. Pender County, NC.	0.9325	0.9533
49020	Winchester, VA-WV Frederick County, VA. Winchester City, VA. Hampshire County, WV.	0.9845	0.9894
49180	Winston-Salem, NC Davie County, NC. Forsyth County, NC. Stokes County, NC. Yadkin County, NC.	0.9078	0.9359
49340	Worcester, MA Worcester County, MA.	1.1354	1.0909

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS BY CBSA—FY 2008—Continued

CBSA code	Urban area (constituent counties)	Wage index	GAF
49420	[2] Yakima, WA Yakima County, WA.	1.0558	1.0379
49500	Yauco, PR Guánica Municipio, PR. Guayanilla Municipio, PR. Peñuelas Municipio, PR. Yauco Municipio, PR.	0.3200	0.4583
49620	York-Hanover, PA York County, PA.	0.9425	0.9603
49660	Youngstown-Warren-Boardman, OH-PA Mahoning County, OH. Trumbull County, OH. Mercer County, PA.	0.8991	0.9298
49700	[2] Yuba City, CA Sutter County, CA. Yuba County, CA.	1.1735	1.1158
40740	Yuma, AZ Yuma County, AZ.	1.0085	1.0058

[1] Large urban area.
[2] Hospitals geographically located in the area are assigned the statewide rural wage index for FY 2008. New Jersey floor is imputed as discussed in the FY 2005 IPPS final rule (69 FR 49109) and in section III.G.2 of the preamble in this final rule.

TABLE 4B.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT (GAF) FOR RURAL AREAS BY CBSA—FY 2008

CBSA code	Nonurban area	Wage index	GAF
01	Alabama	0.7567	0.8262
02	Alaska	1.2083	1.1383
03	Arizona	0.8854	0.9200
04	Arkansas	0.7516	0.8224
05	California	1.1735	1.1158
06	Colorado	0.9447	0.9618
07	Connecticut	1.2432	1.1608
08	Delaware	1.0104	1.0071
10	Florida	0.8733	0.9114
11	Georgia	0.7861	0.8481
12	Hawaii	1.0740	1.0501
13	Idaho	0.7818	0.8449
14	Illinois	0.8345	0.8835
15	Indiana	0.8568	0.8996
16	Iowa	0.8476	0.8929
17	Kansas	0.7979	0.8568
18	Kentucky	0.7810	0.8443
19	Louisiana	0.7586	0.8276
20	Maine	0.8408	0.8880
21	Maryland	0.8911	0.9241
22	Massachusetts	0.9705	0.9797
23	Michigan	0.8908	0.9239
24	Minnesota	0.9113	0.9384
25	Mississippi	0.7752	0.8400
26	Missouri	0.8153	0.8695
27	Montana	0.8335	0.8827
28	Nebraska	0.8846	0.9195
29	Nevada	0.9701	0.9794
30	New Hampshire	1.1259	1.0846
31	New Jersey[1]	1.1616	1.1080
32	New Mexico	0.8965	0.9279
33	New York	0.8416	0.8886
34	North Carolina	0.8603	0.9021
35	North Dakota	0.7309	0.8068
36	Ohio	0.8696	0.9088
37	Oklahoma	0.7701	0.8362
38	Oregon	0.9957	0.9971
39	Pennsylvania	0.8357	0.8843
40	Puerto Rico[1]	.....	.....
41	Rhode Island[1]	.....	.....
42	South Carolina	0.8707	0.9095
43	South Dakota	0.8343	0.8833
44	Tennessee	0.7917	0.8522

TABLE 4B.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT (GAF) FOR RURAL AREAS BY CBSA—FY 2008—Continued

CBSA code	Nonurban area	Wage index	GAF
45	Texas	0.8198	0.8728
46	Utah	0.8214	0.8740
47	Vermont	1.0387	1.0263
49	Virginia	0.8073	0.8636
50	Washington	1.0558	1.0379
51	West Virginia	0.7568	0.8263
52	Wisconsin	0.9684	0.9783
53	Wyoming	0.9163	0.9419

[1] All counties in the State or Territory are classified as urban. New Jersey floor is imputed as discussed in the FY 2005 final rule (69 FR 49109) and in section III.G.2 of the preamble in this final rule.

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED BY CBSA—FY 2008

CBSA code	Area	Wage index	GAF
10500	Albany, GA	0.8666	0.9066
10580	Albany-Schenectady-Troy, NY	0.8667	0.9067
10740	Albuquerque, NM	0.9725	0.9811
10780	Alexandria, LA	0.7977	0.8566
10900	Allentown-Bethlehem-Easton, PA-NJ	1.0003	1.0002
11100	Amarillo, TX	0.9151	0.9411
11180	Ames, IA	0.9222	0.9460
11260	Anchorage, AK	1.2083	1.1383
11460	Ann Arbor, MI	1.0143	1.0098
11500	Anniston-Oxford, AL	0.7975	0.8565
12060	Atlanta-Sandy Springs-Marietta, GA	0.9812	0.9871
12260	Augusta-Richmond County, GA-SC	0.9598	0.9723
12420	Austin-Round Rock, TX	0.9501	0.9656
12580	Baltimore-Towson, MD	1.0030	1.0021
12620	Bangor, ME	0.9881	0.9918
12940	Baton Rouge, LA	0.8009	0.8590
13020	Bay City, MI	0.9394	0.9581
13644	Bethesda-Gaithersburg-Frederick, MD	1.1016	1.0685
13780	Binghamton, NY	0.8775	0.9144
13820	Birmingham-Hoover, AL	0.8724	0.9108
13900	Bismarck, ND	0.7311	0.8070
13980	Blacksburg-Christiansburg-Radford, VA	0.7732	0.8385
14020	Bloomington, IN	0.8823	0.9178
14484	Boston-Quincy, MA	1.1303	1.0875
14740	Bremerton-Silverdale, WA	1.0820	1.0555
14860	Bridgeport-Stamford-Norwalk, CT	1.2341	1.1549
15380	Buffalo-Niagara Falls, NY	0.9588	0.9716
15540	Burlington-South Burlington, VT	0.9584	0.9713
15940	Canton-Massillon, OH	0.8806	0.9166
16180	Carson City, NV	0.9701	0.9794
16620	Charleston, WV	0.8393	0.8869
16700	Charleston-North Charleston, SC	0.9101	0.9375
16740	Charlotte-Gastonia-Concord, NC-SC	0.9342	0.9545
16820	Charlottesville, VA	0.9160	0.9417
16860	Chattanooga, TN-GA	0.8962	0.9277
16974	Chicago-Naperville-Joliet, IL	1.0471	1.0320
17140	Cincinnati-Middletown, OH-KY-IN	0.9661	0.9767
17300	Clarksville, TN-KY	0.8095	0.8653
17460	Cleveland-Elyria-Mentor, OH	0.9215	0.9456
17820	Colorado Springs, CO	0.9466	0.9631
17860	Columbia, MO	0.8537	0.8973
17980	Columbus, GA-AL	0.8587	0.9009
18140	Columbus, OH	0.9820	0.9876
18700	Corvallis, OR	1.0315	1.0215
19124	Dallas-Plano-Irving, TX	0.9681	0.9780
19340	Davenport-Moline-Rock Island, IA-IL	0.8893	0.9228
19380	Dayton, OH	0.9278	0.9500
19460	Decatur, AL	0.7832	0.8459
19740	Denver-Aurora, CO	1.0454	1.0309
19804	Detroit-Livonia-Dearborn, MI	1.0095	1.0065
20100	Dover, DE	1.0104	1.0071
20260	Duluth, MN-WI	0.9956	0.9970
20500	Durham, NC	0.9738	0.9820
20764	Edison, NJ	1.1616	1.1080

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED BY CBSA—FY 2008—Continued

CBSA code	Area	Wage index	GAF
21060	Elizabethtown, KY	0.7978	0.8567
21500	Erie, PA	0.8416	0.8886
21660	Eugene-Springfield, OR	1.0707	1.0479
21780	Evansville, IN-KY (KY Hospitals)	0.8123	0.8673
21780	Evansville, IN-KY (IN Hospitals)	0.8568	0.8996
22020	Fargo, ND-MN	0.7943	0.8541
22180	Fayetteville, NC	0.9593	0.9719
22220	Fayetteville-Springdale-Rogers, AR-MO	0.8714	0.9100
22380	Flagstaff, AZ	1.1187	1.0798
22420	Flint, MI	1.0243	1.0166
22520	Florence-Muscle Shoals, AL	0.7752	0.8400
22540	Fond du Lac, WI	0.9715	0.9804
22660	Fort Collins-Loveland, CO	0.9579	0.9710
22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	1.0247	1.0168
23020	Fort Walton Beach-Crestview-Destin, FL	0.8733	0.9114
23060	Fort Wayne, IN	0.9041	0.9333
23104	Fort Worth-Arlington, TX	0.9636	0.9749
23540	Gainesville, FL	0.9301	0.9516
23844	Gary, IN	0.9241	0.9474
24300	Grand Junction, CO	1.0135	1.0092
24340	Grand Rapids-Wyoming, MI	0.9374	0.9567
24500	Great Falls, MT	0.8761	0.9134
24540	Greeley, CO	0.9744	0.9824
24580	Green Bay, WI (MI Hospitals)	0.9357	0.9555
24580	Green Bay, WI (WI Hospitals)	0.9684	0.9783
24660	Greensboro-High Point, NC	0.9106	0.9379
24780	Greenville, NC	0.9267	0.9492
24860	Greenville-Mauldin-Easley, SC	0.9403	0.9587
25060	Gulfport-Biloxi, MS	0.8216	0.8741
25420	Harrisburg-Carlisle, PA	0.9115	0.9385
25540	Hartford-West Hartford-East Hartford, CT (CT Hospitals)	1.2432	1.1608
25540	Hartford-West Hartford-East Hartford, CT (MA Hospitals)	1.1025	1.0691
25860	Hickory-Lenoir-Morganton, NC	0.8814	0.9172
26180	Honolulu, HI	1.1305	1.0876
26420	Houston-Sugar Land-Baytown, TX	0.9996	0.9997
26580	Huntington-Ashland, WV-KY-OH	0.8724	0.9108
26620	Huntsville, AL	0.8629	0.9040
26820	Idaho Falls, ID	0.9272	0.9496
26900	Indianapolis-Carmel, IN	0.9589	0.9717
26980	Iowa City, IA	0.9137	0.9401
27060	Ithaca, NY	0.9709	0.9800
27140	Jackson, MS	0.7950	0.8546
27180	Jackson, TN	0.8435	0.8900
27260	Jacksonville, FL	0.9089	0.9367
27620	Jefferson City, MO	0.8702	0.9092
27780	Johnstown, PA	0.8357	0.8843
27860	Jonesboro, AR	0.8503	0.8949
27900	Joplin, MO	0.8966	0.9280
28020	Kalamazoo-Portage, MI	1.0146	1.0100
28140	Kansas City, MO-KS	0.9318	0.9528
28420	Kennewick-Richland-Pasco, WA (ID Hospitals)	0.9614	0.9734
28420	Kennewick-Richland-Pasco, WA (WA Hospitals)	1.0558	1.0379
28700	Kingsport-Bristol-Bristol, TN-VA	0.7810	0.8443
28740	Kingston, NY	0.9270	0.9494
28940	Knoxville, TN	0.8012	0.8592
29180	Lafayette, LA	0.8322	0.8818
29404	Lake County-Kenosha County, IL-WI	1.0583	1.0396
29460	Lakeland, FL	0.8834	0.9186
29540	Lancaster, PA	0.9650	0.9759
29620	Lansing-East Lansing, MI	0.9906	0.9936
29740	Las Cruces, NM	0.8965	0.9279
29820	Las Vegas-Paradise, NV	1.1222	1.0822
30020	Lawton, OK	0.8070	0.8634
30460	Lexington-Fayette, KY	0.8797	0.9160
30620	Lima, OH	0.9307	0.9520
30700	Lincoln, NE	0.9626	0.9742
30780	Little Rock-North Little Rock-Conway, AR	0.8725	0.9108
30860	Logan, UT-ID	0.9214	0.9455
30980	Longview, TX	0.8871	0.9212
31084	Los Angeles-Long Beach-Santa Ana, CA	1.1735	1.1158
31140	Louisville-Jefferson County, KY-IN	0.9029	0.9324

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED BY CBSA—FY 2008—Continued

CBSA code	Area	Wage index	GAF
31340	Lynchburg, VA	0.8605	0.9022
31420	Macon, GA	0.9567	0.9701
31540	Madison, WI	1.0996	1.0672
31700	Manchester-Nashua, NH	1.1259	1.0846
32780	Medford, OR	1.0146	1.0100
32820	Memphis, TN-MS-AR	0.8963	0.9278
33124	Miami-Miami Beach-Kendall, FL	1.0008	1.0005
33340	Milwaukee-Waukesha-West Allis, WI	1.0295	1.0201
33460	Minneapolis-St. Paul-Bloomington, MN-WI	1.0896	1.0605
33540	Missoula, MT	0.8738	0.9118
33700	Modesto, CA	1.2019	1.1342
33740	Monroe, LA	0.7764	0.8409
33860	Montgomery, AL	0.8111	0.8664
34060	Morgantown, WV	0.8255	0.8769
34740	Muskegon-Norton Shores, MI	0.9474	0.9637
34820	Myrtle Beach-Conway-North Myrtle Beach, SC	0.8707	0.9095
34980	Nashville-Davidson-Murfreesboro-Franklin, TN	0.9364	0.9560
35004	Nassau-Suffolk, NY	1.2625	1.1731
35084	Newark-Union, NJ-PA (NJ Hospitals)	1.1616	1.1080
35084	Newark-Union, NJ-PA (PA, NY Hospitals)	1.1570	1.1050
35300	New Haven-Milford, CT	1.2432	1.1608
35380	New Orleans-Metairie-Kenner, LA	0.8711	0.9098
35644	New York-White Plains-Wayne, NY-NJ	1.3001	1.1969
35980	Norwich-New London, CT	1.1732	1.1156
36084	Oakland-Fremont-Hayward, CA	1.5343	1.3406
36140	Ocean City, NJ	1.0498	1.0338
36220	Odessa, TX	0.9522	0.9670
36420	Oklahoma City, OK	0.8754	0.9129
36500	Olympia, WA	1.1287	1.0864
36740	Orlando-Kissimmee, FL	0.9170	0.9424
37700	Pascagoula, MS	0.8539	0.8975
37860	Pensacola-Ferry Pass-Brent, FL	0.8123	0.8673
37900	Peoria, IL	0.9225	0.9463
37964	Philadelphia, PA (DE, PA Hospitals)	1.0765	1.0518
37964	Philadelphia, PA (NJ Hospitals)	1.1616	1.1080
38220	Pine Bluff, AR	0.7955	0.8550
38300	Pittsburgh, PA (PA, WV Hospitals)	0.8390	0.8867
38300	Pittsburgh, PA (OH Hospitals)	0.8696	0.9088
38340	Pittsfield, MA	1.0387	1.0263
38860	Portland-South Portland-Biddeford, ME	0.9589	0.9717
38900	Portland-Vancouver-Beaverton, OR-WA	1.1226	1.0824
38940	Port St. Lucie, FL	0.9851	0.9898
39100	Poughkeepsie-Newburgh-Middletown, NY	1.0762	1.0516
39140	Prescott, AZ	0.9576	0.9708
39340	Provo-Orem, UT	0.9380	0.9571
39580	Raleigh-Cary, NC	0.9474	0.9637
39740	Reading, PA	0.9413	0.9594
39820	Redding, CA	1.2651	1.1747
39900	Reno-Sparks, NV	1.0851	1.0575
40060	Richmond, VA	0.9232	0.9467
40220	Roanoke, VA	0.8746	0.9123
40340	Rochester, MN	1.0490	1.0333
40380	Rochester, NY	0.8918	0.9246
40420	Rockford, IL	0.9703	0.9796
40484	Rockingham County, NH	1.0173	1.0118
40660	Rome, GA	0.9388	0.9577
40900	Sacramento—Arden-Arcade—Roseville, CA	1.2918	1.1916
40980	Saginaw-Saginaw Township North, MI	0.8974	0.9285
41060	St. Cloud, MN	1.0322	1.0219
41100	St. George, UT	0.9535	0.9679
41140	St. Joseph, MO-KS	0.8826	0.9180
41180	St. Louis, MO-IL	0.8982	0.9291
41620	Salt Lake City, UT	0.9473	0.9636
41700	San Antonio, TX	0.8895	0.9229
41884	San Francisco-San Mateo-Redwood City, CA	1.4800	1.3080
41980	San Juan-Caguas-Guaynabo, PR	0.4526	0.5811
42044	Santa Ana-Anaheim-Irvine, CA	1.1735	1.1158
42140	Santa Fe, NM	1.0379	1.0258
42220	Santa Rosa-Petaluma, CA	1.4146	1.2681
42260	Sarasota-Bradenton-Venice, FL	0.9770	0.9842
42340	Savannah, GA	0.8890	0.9226

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED BY CBSA—FY 2008—Continued

CBSA code	Area	Wage index	GAF
42644	Seattle-Bellevue-Everett, WA	1.1208	1.0812
43300	Sherman-Denison, TX	0.8530	0.8968
43340	Shreveport-Bossier City, LA	0.8551	0.8983
43580	Sioux City, IA-NE-SD	0.8846	0.9195
43620	Sioux Falls, SD	0.9373	0.9566
43780	South Bend-Mishawaka, IN-MI	0.9503	0.9657
43900	Spartanburg, SC	0.9395	0.9582
44060	Spokane, WA	1.0226	1.0154
44180	Springfield, MO	0.8619	0.9032
44940	Sumter, SC	0.8707	0.9095
45060	Syracuse, NY	0.9602	0.9726
45220	Tallahassee, FL	0.8454	0.8914
45300	Tampa-St. Petersburg-Clearwater, FL	0.9170	0.9424
45500	Texarkana, TX-Texarkana, AR	0.7781	0.8421
45780	Toledo, OH	0.9268	0.9493
45820	Topeka, KS	0.8452	0.8912
46140	Tulsa, OK	0.8498	0.8945
46220	Tuscaloosa, AL	0.8162	0.8702
46340	Tyler, TX	0.9181	0.9432
46700	Vallejo-Fairfield, CA	1.4267	1.2755
47260	Virginia Beach-Norfolk-Newport News, VA	0.8777	0.9145
47894	Washington-Arlington-Alexandria, DC-VA	1.0675	1.0457
48140	Wausau, WI	1.0004	1.0003
48620	Wichita, KS	0.8717	0.9103
48700	Williamsport, PA	0.8357	0.8843
48864	Wilmington, DE-MD-NJ (NJ Hospitals)	1.1616	1.1080
48864	Wilmington, DE-MD-NJ (DE Hospitals)	1.0666	1.0451
48900	Wilmington, NC	0.9156	0.9414
49180	Winston-Salem, NC	0.9078	0.9359
49340	Worcester, MA	1.1259	1.0846
49660	Youngstown-Warren-Boardman, OH-PA	0.8697	0.9088
04	Rural Arkansas	0.7586	0.8276
05	Rural California	1.1735	1.1158
10	Rural Florida	0.8733	0.9114
14	Rural Illinois	0.8345	0.8835
16	Rural Iowa	0.8476	0.8929
17	Rural Kansas	0.7979	0.8568
22	Rural Massachusetts	0.9705	0.9797
23	Rural Michigan	0.8908	0.9239
24	Rural Minnesota	0.9113	0.9384
25	Rural Mississippi	0.7752	0.8400
26	Rural Missouri	0.8153	0.8695
29	Rural Nevada	0.8706	0.9095
30	Rural New Hampshire	1.0532	1.0361
33	Rural New York	0.8416	0.8886
34	Rural North Carolina	0.8603	0.9021
36	Rural Ohio	0.8696	0.9088
37	Rural Oklahoma	0.7701	0.8362
38	Rural Oregon	0.9957	0.9971
39	Rural Pennsylvania (PA Hospitals)	0.8357	0.8843
39	Rural Pennsylvania (NY Hospitals)	0.8416	0.8886
44	Rural Tennessee	0.7917	0.8522
45	Rural Texas	0.8198	0.8728
47	Rural Vermont	0.9427	0.9604
49	Rural Virginia	0.8073	0.8636
50	Rural Washington	1.0558	1.0379
53	Rural Wyoming	0.9009	0.9310

TABLE 4F.—PUERTO RICO WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) BY CBSA FY 2008

CBSA code	Area	Wage index	GAF	Wage index—reclassified hospitals	GAF—reclassified hospitals
10380	Aguadilla-Isabela-San Sebastián, PR	0.7754	0.8401	.....	.....
21940	Fajardo, PR	1.0049	1.0034	.....	.....
25020	Guayama, PR	0.6861	0.7726	.....	.....
32420	Mayagüez, PR	0.8478	0.8931	.....	.....
38660	Ponce, PR	0.9869	0.9910	.....	.....

TABLE 4F.—PUERTO RICO WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) BY CBSA FY 2008—Continued

CBSA code	Area	Wage index	GAF	Wage index—reclassified hospitals	GAF—reclassified hospitals
41900	San Germán-Cabo Rojo, PR	1.0548	1.0372		
41980	San Juan-Caguas-Guaynabo, PR	1.0401	1.0273	1.0401	1.0273
49500	Yauco, PR	0.7432	0.8161		

The following list represents all hospitals that are eligible to have their wage index increased by the out-migration adjustment listed in this table. Hospitals cannot receive the out-migration adjustment if they are reclassified under section 1886(d)(10) of the Act or redesignated under section 1886(d)(8) of the Act. Hospitals that have already been reclassified under section 1886(d)(10) of the Act or redesignated under section 1886(d)(8(B)) of the Act are designated with an asterisk. We automatically assume that hospitals that have already been reclassified under section 1886(d)(10) of the Act or redesignated under section 1886(d)(8) of the Act wish to retain their reclassification/redesignation status and waive the application of the out-migration adjustment. Section 1886(d)(10) hospitals that wished to receive the out-migration adjustment, rather than their reclassification, had to follow the termination/withdrawal procedures specified in 42 CFR 412.273 and section III.I.3. of the preamble of the FY 2008 IPPS proposed rule. Otherwise, they were deemed to have waived the out-migration adjustment. Hospitals redesignated under section 1886(d)(8) of the Act were deemed to have waived the out-migration adjustment, unless they explicitly notified CMS that they elected to receive the out migration adjustment instead within 45 days from the publication of the proposed rule.

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
010005	*	0.0296	MARSHALL	01470
010008		0.0174	CRENSHAW	01200
010009	*	0.0092	MORGAN	01510
010010	*	0.0296	MARSHALL	01470
010012	*	0.0186	DE KALB	01240
010015		0.0046	CLARKE	01120
010022	*	0.1127	CHEROKEE	01090
010025	*	0.0235	CHAMBERS	01080
010029	*	0.0289	LEE	01400
010032		0.0325	RANDOLPH	01550
010035	*	0.0254	CULLMAN	01210
010038		0.0047	CALHOUN	01070
010045	*	0.0222	FAYETTE	01280
010047		0.0127	BUTLER	01060
010052		0.0103	TALLAPOOSA	01610
010054	*	0.0092	MORGAN	01510
010061		0.0541	JACKSON	01350
010065	*	0.0103	TALLAPOOSA	01610
010078		0.0047	CALHOUN	01070
010083	*	0.0134	BALDWIN	01010
010085	*	0.0092	MORGAN	01510
010091		0.0046	CLARKE	01120
010100	*	0.0134	BALDWIN	01010
010101	*	0.0211	TALLADEGA	01600
010109		0.0451	PICKENS	01530
010110		0.0214	BULLOCK	01050
010125		0.0476	WINSTON	01660
010128		0.0046	CLARKE	01120
010129		0.0134	BALDWIN	01010
010138		0.0066	SUMTER	01590
010143	*	0.0254	CULLMAN	01210
010146		0.0047	CALHOUN	01070
010150	*	0.0127	BUTLER	01060
010158	*	0.0022	FRANKLIN	01290
010164	*	0.0211	TALLADEGA	01600
030067		0.0298	LAPAZ	03055
040014	*	0.0198	WHITE	04720
040019	*	0.0258	ST. FRANCIS	04610
040039	*	0.0172	GREENE	04270
040047		0.0117	RANDOLPH	04600
040067		0.0007	COLUMBIA	04130
040071	*	0.0148	JEFFERSON	04340

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
040076	*	0.1000	HOT SPRING	04290
040081		0.0357	PIKE	04540
040100	*	0.0198	WHITE	04720
050002		0.0010	ALAMEDA	05000
050007		0.0146	SAN MATEO	05510
050008		0.0026	SAN FRANCISCO	05480
050009	*	0.0180	NAPA	05380
050013	*	0.0180	NAPA	05380
050014	*	0.0139	AMADOR	05020
050016		0.0103	SAN LUIS OBISPO	05500
050042	*	0.0162	TEHAMA	05620
050043		0.0010	ALAMEDA	05000
050047		0.0026	SAN FRANCISCO	05480
050055		0.0026	SAN FRANCISCO	05480
050070		0.0146	SAN MATEO	05510
050073	*	0.0171	SOLANO	05580
050075		0.0010	ALAMEDA	05000
050076	*	0.0026	SAN FRANCISCO	05480
050084		0.0132	SAN JOAQUIN	05490
050090	*	0.0058	SONOMA	05590
050101	*	0.0171	SOLANO	05580
050113		0.0146	SAN MATEO	05510
050118	*	0.0132	SAN JOAQUIN	05490
050122		0.0132	SAN JOAQUIN	05490
050133	*	0.0178	YUBA	05680
050136	*	0.0058	SONOMA	05590
050150	*	0.0342	NEVADA	05390
050152		0.0026	SAN FRANCISCO	05480
050167		0.0132	SAN JOAQUIN	05490
050174	*	0.0058	SONOMA	05590
050194		0.0052	SANTA CRUZ	05540
050195		0.0010	ALAMEDA	05000
050197	*	0.0146	SAN MATEO	05510
050211		0.0010	ALAMEDA	05000
050228		0.0026	SAN FRANCISCO	05480
050232		0.0103	SAN LUIS OBISPO	05500
050242		0.0052	SANTA CRUZ	05540
050264		0.0010	ALAMEDA	05000
050283		0.0010	ALAMEDA	05000
050289		0.0146	SAN MATEO	05510
050291	*	0.0058	SONOMA	05590
050305		0.0010	ALAMEDA	05000
050313		0.0132	SAN JOAQUIN	05490
050320		0.0010	ALAMEDA	05000
050325		0.0033	TUOLUMNE	05650
050335		0.0033	TUOLUMNE	05650
050336		0.0132	SAN JOAQUIN	05490
050366		0.0015	CALAVERAS	05040
050367	*	0.0171	SOLANO	05580
050385	*	0.0058	SONOMA	05590
050407		0.0026	SAN FRANCISCO	05480
050444		0.0233	MERCED	05340
050454		0.0026	SAN FRANCISCO	05480
050457		0.0026	SAN FRANCISCO	05480
050476	*	0.0278	LAKE	05160
050488		0.0010	ALAMEDA	05000
050494	*	0.0342	NEVADA	05390
050506		0.0103	SAN LUIS OBISPO	05500
050512		0.0010	ALAMEDA	05000
050528	*	0.0233	MERCED	05340
050541	*	0.0146	SAN MATEO	05510
050547	*	0.0058	SONOMA	05590
050633		0.0103	SAN LUIS OBISPO	05500
050667	*	0.0180	NAPA	05380
050668		0.0026	SAN FRANCISCO	05480
050680	*	0.0171	SOLANO	05580
050690	*	0.0058	SONOMA	05590
050707		0.0146	SAN MATEO	05510
050714		0.0052	SANTA CRUZ	05540
050748		0.0132	SAN JOAQUIN	05490
050754		0.0146	SAN MATEO	05510

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
060001	*	0.0042	WELD	06610
060003	*	0.0069	BOULDER	06060
060010		0.0153	LARIMER	06340
060027	*	0.0069	BOULDER	06060
060030		0.0153	LARIMER	06340
060103	*	0.0069	BOULDER	06060
060116	*	0.0069	BOULDER	06060
070006	*	0.0045	FAIRFIELD	07000
070010	*	0.0045	FAIRFIELD	07000
070018	*	0.0045	FAIRFIELD	07000
070028	*	0.0045	FAIRFIELD	07000
070033	*	0.0045	FAIRFIELD	07000
070034	*	0.0045	FAIRFIELD	07000
080001	*	0.0063	NEW CASTLE	08010
080003	*	0.0063	NEW CASTLE	08010
100014	*	0.0047	VOLUSIA	10630
100017	*	0.0047	VOLUSIA	10630
100045	*	0.0047	VOLUSIA	10630
100047	*	0.0028	CHARLOTTE	10070
100068	*	0.0047	VOLUSIA	10630
100072	*	0.0047	VOLUSIA	10630
100077	*	0.0028	CHARLOTTE	10070
100102		0.0125	COLUMBIA	10110
100118	*	0.0177	FLAGLER	10170
100156	*	0.0125	COLUMBIA	10110
100232	*	0.0054	PUTNAM	10530
100236	*	0.0028	CHARLOTTE	10070
100252	*	0.0151	OKEECHOBEE	10460
100290		0.0582	SUMTER	10590
110023	*	0.0416	GORDON	11500
110029	*	0.0052	HALL	11550
110040	*	0.1455	JACKSON	11610
110041	*	0.0623	HABERSHAM	11540
110100		0.0790	JEFFERSON	11620
110101		0.0067	COOK	11311
110142		0.0185	EVANS	11441
110146	*	0.0805	CAMDEN	11170
110150	*	0.0227	BALDWIN	11030
110187	*	0.0643	LUMPKIN	11701
110189	*	0.0066	FANNIN	11450
110190		0.0241	MACON	11710
110205		0.0507	GILMER	11471
130003	*	0.0235	NEZ PERCE	13340
130024		0.0675	BONNER	13080
130049	*	0.0319	KOOTENAI	13270
130066		0.0319	KOOTENAI	13270
130067	*	0.0725	BINGHAM	13050
130068		0.0319	KOOTENAI	13270
140001		0.0369	FULTON	14370
140026		0.0315	LA SALLE	14580
140043	*	0.0056	WHITESIDE	14988
140058	*	0.0126	MORGAN	14770
140110	*	0.0315	LA SALLE	14580
140160	*	0.0332	STEPHENSON	14970
140161	*	0.0168	LIVINGSTON	14610
140167	*	0.0632	IROQUOIS	14460
140234		0.0315	LA SALLE	14580
150006	*	0.0113	LA PORTE	15450
150015		0.0113	LA PORTE	15450
150022		0.0158	MONTGOMERY	15530
150030	*	0.0192	HENRY	15320
150072		0.0105	CASS	15080
150076	*	0.0215	MARSHALL	15490
150088	*	0.0111	MADISON	15470
150091	*	0.0050	HUNTINGTON	15340
150102	*	0.0108	STARKE	15740
150113	*	0.0111	MADISON	15470
150133	*	0.0193	KOSCIUSKO	15420
150146	*	0.0319	NOBLE	15560
160013		0.0179	MUSCATINE	16690
160030		0.0040	STORY	16840

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
160032		0.0235	JASPER	16490
160080	*	0.0066	CLINTON	16220
170137	*	0.0336	DOUGLAS	17220
170150		0.0166	COWLEY	17170
180012	*	0.0080	HARDIN	18460
180017	*	0.0035	BARREN	18040
180049	*	0.0488	MADISON	18750
180064		0.0314	MONTGOMERY	18860
180066	*	0.0439	LOGAN	18700
180070		0.0239	GRAYSON	18420
180079		0.0259	HARRISON	18480
190003	*	0.0085	IBERIA	19220
190015	*	0.0243	TANGIPAHOA	19520
190017		0.0187	ST. LANDRY	19480
190034		0.0189	VERMILION	19560
190044		0.0260	ACADIA	19000
190050		0.0044	BEAUREGARD	19050
190053		0.0100	JEFFRSON DAVIS	19260
190054		0.0085	IBERIA	19220
190078		0.0187	ST. LANDRY	19480
190086	*	0.0061	LINCOLN	19300
190088	*	0.0387	WEBSTER	19590
190099	*	0.0189	AVOYELLES	19040
190106	*	0.0101	ALLEN	19010
190116		0.0085	MOREHOUSE	19330
190133		0.0101	ALLEN	19010
190140		0.0035	FRANKLIN	19200
190144	*	0.0387	WEBSTER	19590
190145		0.0090	LA SALLE	19290
190184	*	0.0161	CALDWELL	19100
190190		0.0161	CALDWELL	19100
190191	*	0.0187	ST. LANDRY	19480
190246		0.0161	CALDWELL	19100
190257		0.0061	LINCOLN	19300
200024	*	0.0094	ANDROSCOGGIN	20000
200032		0.0466	OXFORD	20080
200034	*	0.0094	ANDROSCOGGIN	20000
200050	*	0.0227	HANCOCK	20040
210001		0.0187	WASHINGTON	21210
210023		0.0079	ANNE ARUNDEL	21010
210028		0.0512	ST. MARYS	21180
210043		0.0079	ANNE ARUNDEL	21010
220002		0.0271	MIDDLESEX	22090
220010	*	0.0355	ESSEX	22040
220011		0.0271	MIDDLESEX	22090
220029	*	0.0355	ESSEX	22040
220033	*	0.0355	ESSEX	22040
220035	*	0.0355	ESSEX	22040
220049		0.0271	MIDDLESEX	22090
220063		0.0271	MIDDLESEX	22090
220070		0.0271	MIDDLESEX	22090
220080	*	0.0355	ESSEX	22040
220082		0.0271	MIDDLESEX	22090
220084		0.0271	MIDDLESEX	22090
220098		0.0271	MIDDLESEX	22090
220101		0.0271	MIDDLESEX	22090
220105		0.0271	MIDDLESEX	22090
220171		0.0271	MIDDLESEX	22090
220174	*	0.0355	ESSEX	22040
230003	*	0.0220	OTTAWA	23690
230005		0.0473	LENAWEE	23450
230013	*	0.0025	OAKLAND	23620
230015		0.0295	ST. JOSEPH	23740
230019	*	0.0025	OAKLAND	23620
230021	*	0.0102	BERRIEN	23100
230022	*	0.0212	BRANCH	23110
230029	*	0.0025	OAKLAND	23620
230035	*	0.0095	MONTCALM	23580
230037	*	0.0210	HILLSDALE	23290
230047	*	0.0021	MACOMB	23490
230069	*	0.0210	LIVINGSTON	23460

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
230071	*	0.0025	OAKLAND	23620
230072	*	0.0220	OTTAWA	23690
230075		0.0047	CALHOUN	23120
230078	*	0.0102	BERRIEN	23100
230092	*	0.0223	JACKSON	23370
230093		0.0058	MECOSTA	23530
230096	*	0.0295	ST. JOSEPH	23740
230099	*	0.0231	MONROE	23570
230121	*	0.0678	SHIAWASSEE	23770
230130	*	0.0025	OAKLAND	23620
230151	*	0.0025	OAKLAND	23620
230174	*	0.0220	OTTAWA	23690
230195	*	0.0021	MACOMB	23490
230204	*	0.0021	MACOMB	23490
230207	*	0.0025	OAKLAND	23620
230208	*	0.0095	MONTCALM	23580
230217		0.0047	CALHOUN	23120
230222	*	0.0035	MIDLAND	23550
230223	*	0.0025	OAKLAND	23620
230227	*	0.0021	MACOMB	23490
230254	*	0.0025	OAKLAND	23620
230257	*	0.0021	MACOMB	23490
230264	*	0.0021	MACOMB	23490
230269	*	0.0025	OAKLAND	23620
230277	*	0.0025	OAKLAND	23620
230279	*	0.0210	LIVINGSTON	23460
240018		0.0805	GOODHUE	24240
240044		0.0625	WINONA	24840
240064	*	0.0134	ITASCA	24300
240069	*	0.0267	STEELE	24730
240071	*	0.0385	RICE	24650
240117		0.0527	MOWER	24490
240211		0.0812	PINE	24570
250023	*	0.0541	PEARL RIVER	25540
250040	*	0.0021	JACKSON	25290
250117	*	0.0541	PEARL RIVER	25540
250128		0.0446	PANOLA	25530
250160		0.0446	PANOLA	25530
260059		0.0077	LACLEDE	26520
260064	*	0.0089	AUDRAIN	26030
260097		0.0300	JOHNSON	26500
260116		0.0087	ST. FRANCOIS	26930
260163		0.0087	ST. FRANCOIS	26930
270081		0.0234	MUSSELSHELL	27320
280077		0.0080	DODGE	28260
280123		0.0123	GAGE	28330
290002	*	0.0277	LYON	29090
300011		0.0069	HILLSBOROUGH	30050
300012		0.0069	HILLSBOROUGH	30050
300020		0.0069	HILLSBOROUGH	30050
300034		0.0069	HILLSBOROUGH	30050
310002	*	0.0268	ESSEX	31200
310009	*	0.0268	ESSEX	31200
310010		0.0092	MERCER	31260
310011		0.0115	CAPE MAY	31180
310013	*	0.0268	ESSEX	31200
310018	*	0.0268	ESSEX	31200
310021	*	0.0092	MERCER	31260
310038	*	0.0209	MIDDLESEX	31270
310039	*	0.0209	MIDDLESEX	31270
310044		0.0092	MERCER	31260
310054	*	0.0268	ESSEX	31200
310070	*	0.0209	MIDDLESEX	31270
310076	*	0.0268	ESSEX	31200
310083	*	0.0268	ESSEX	31200
310092		0.0092	MERCER	31260
310093	*	0.0268	ESSEX	31200
310096	*	0.0268	ESSEX	31200
310108	*	0.0209	MIDDLESEX	31270
310110		0.0092	MERCER	31260
310119	*	0.0268	ESSEX	31200

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
320003	*	0.0629	SAN MIGUEL	32230
320011		0.0442	RIO ARRIBA	32190
320018		0.0024	DONA ANA	32060
320085		0.0024	DONA ANA	32060
330004	*	0.0633	ULSTER	33740
330008	*	0.0112	WYOMING	33900
330010		0.0054	MONTGOMERY	33380
330027	*	0.0123	NASSAU	33400
330033		0.0214	CHENANGO	33080
330047		0.0054	MONTGOMERY	33380
330073	*	0.0134	GENESEE	33290
330094	*	0.0478	COLUMBIA	33200
330103	*	0.0124	CATTARAUGUS	33040
330106	*	0.0123	NASSAU	33400
330126	*	0.0642	ORANGE	33540
330132		0.0124	CATTARAUGUS	33040
330135		0.0642	ORANGE	33540
330167	*	0.0123	NASSAU	33400
330175		0.0249	CORTLAND	33210
330181	*	0.0123	NASSAU	33400
330182	*	0.0123	NASSAU	33400
330191	*	0.0017	WARREN	33750
330198	*	0.0123	NASSAU	33400
330205		0.0642	ORANGE	33540
330224	*	0.0633	ULSTER	33740
330225	*	0.0123	NASSAU	33400
330235	*	0.0293	CAYUGA	33050
330259	*	0.0123	NASSAU	33400
330264		0.0642	ORANGE	33540
330276		0.0029	FULTON	33280
330331	*	0.0123	NASSAU	33400
330332	*	0.0123	NASSAU	33400
330372	*	0.0123	NASSAU	33400
330386	*	0.0727	SULLIVAN	33710
340020		0.0156	LEE	34520
340021	*	0.0162	CLEVELAND	34220
340024		0.0177	SAMPSON	34810
340027	*	0.0128	LENOIR	34530
340037		0.0162	CLEVELAND	34220
340038		0.0253	BEAUFORT	34060
340039	*	0.0101	IREDELL	34480
340068	*	0.0087	COLUMBUS	34230
340069	*	0.0015	WAKE	34910
340070	*	0.0395	ALAMANCE	34000
340071	*	0.0226	HARNETT	34420
340073	*	0.0015	WAKE	34910
340085		0.0250	DAVIDSON	34280
340096		0.0250	DAVIDSON	34280
340104		0.0162	CLEVELAND	34220
340114	*	0.0015	WAKE	34910
340124	*	0.0226	HARNETT	34420
340126	*	0.0100	WILSON	34970
340129	*	0.0101	IREDELL	34480
340133		0.0308	MARTIN	34580
340138	*	0.0015	WAKE	34910
340144	*	0.0101	IREDELL	34480
340145	*	0.0336	LINCOLN	34540
340151		0.0052	HALIFAX	34410
340173	*	0.0015	WAKE	34910
360002		0.0142	ASHLAND	36020
360010	*	0.0074	TUSCARAWAS	36800
360013	*	0.0135	SHELBY	36760
360025	*	0.0077	ERIE	36220
360036	*	0.0126	WAYNE	36860
360040		0.0387	KNOX	36430
360044		0.0127	DARKE	36190
360065	*	0.0075	HURON	36400
360071		0.0035	VAN WERT	36820
360086	*	0.0186	CLARK	36110
360096	*	0.0071	COLUMBIANA	36140
360107	*	0.0119	SANDUSKY	36730

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
360125	*	0.0134	ASHTABULA	36030
360156		0.0119	SANDUSKY	36730
360175	*	0.0183	CLINTON	36130
360185	*	0.0071	COLUMBIANA	36140
360187	*	0.0186	CLARK	36110
360245	*	0.0134	ASHTABULA	36030
370014	*	0.0361	BRYAN	37060
370015	*	0.0367	MAYES	37480
370023		0.0090	STEPHENS	37680
370065		0.0096	CRAIG	37170
370072		0.0258	LATIMER	37380
370083		0.0051	PUSHMATAHA	37630
370100		0.0100	CHOCTAW	37110
370149	*	0.0302	POTTAWATOMIE	37620
370156		0.0121	GARVIN	37240
370169		0.0163	MCINTOSH	37450
370172		0.0258	LATIMER	37380
370214		0.0121	GARVIN	37240
380022	*	0.0067	LINN	38210
380029		0.0075	MARION	38230
380051		0.0075	MARION	38230
380056		0.0075	MARION	38230
390008		0.0056	LAWRENCE	39450
390016	*	0.0056	LAWRENCE	39450
390030	*	0.0284	SCHUYLKILL	39650
390031	*	0.0284	SCHUYLKILL	39650
390044	*	0.0191	BERKS	39110
390052		0.0044	CLEARFIELD	39230
390065	*	0.0523	ADAMS	39000
390066	*	0.0364	LEBANON	39460
390079	*	0.0007	BRADFORD	39130
390086	*	0.0044	CLEARFIELD	39230
390096	*	0.0191	BERKS	39110
390113	*	0.0050	CRAWFORD	39260
390122		0.0050	CRAWFORD	39260
390138	*	0.0214	FRANKLIN	39350
390146		0.0020	WARREN	39740
390150		0.0022	GREENE	39370
390151	*	0.0214	FRANKLIN	39350
390162	*	0.0200	NORTHAMPTON	39590
390181		0.0284	SCHUYLKILL	39650
390183	*	0.0284	SCHUYLKILL	39650
390201	*	0.1163	MONROE	39550
390236		0.0007	BRADFORD	39130
390313	*	0.0284	SCHUYLKILL	39650
420007	*	0.0027	SPARTANBURG	42410
420009	*	0.0113	OCONEE	42360
420019		0.0158	CHESTER	42110
420027	*	0.0108	ANDERSON	42030
420030	*	0.0069	COLLETON	42140
420036	*	0.0064	LANCASTER	42280
420039	*	0.0153	UNION	42430
420043		0.0157	CHEROKEE	42100
420053		0.0035	NEWBERRY	42350
420062	*	0.0109	CHESTERFIELD	42120
420068	*	0.0027	ORANGEBURG	42370
420069	*	0.0052	CLARENDON	42130
420083	*	0.0027	SPARTANBURG	42410
430008		0.0535	BROOKINGS	43050
430048		0.0129	LAWRENCE	43400
430094		0.0129	LAWRENCE	43400
440007		0.0219	COFFEE	44150
440008	*	0.0449	HENDERSON	44380
440016		0.0144	CARROLL	44080
440024	*	0.0230	BRADLEY	44050
440030		0.0056	HAMBLEN	44310
440031		0.0019	ROANE	44720
440033		0.0027	CAMPBELL	44060
440035	*	0.0301	MONTGOMERY	44620
440047		0.0338	GIBSON	44260
440051		0.0082	MC NAIRY	44540

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
440057		0.0021	CLAIBORNE	44120
440060	*	0.0338	GIBSON	44260
440067		0.0056	HAMBLEN	44310
440070		0.0109	DECATUR	44190
440081		0.0052	SEVIER	44770
440084		0.0025	MONROE	44610
440109		0.0070	HARDIN	44350
440115		0.0338	GIBSON	44260
440137		0.0738	BEDFORD	44010
440144	*	0.0219	COFFEE	44150
440148	*	0.0296	DE KALB	44200
440153		0.0007	COCKE	44140
440174		0.0312	HAYWOOD	44370
440180		0.0027	CAMPBELL	44060
440181		0.0365	HARDEMAN	44340
440182		0.0144	CARROLL	44080
440185	*	0.0230	BRADLEY	44050
450032	*	0.0254	HARRISON	45620
450039	*	0.0024	TARRANT	45910
450052	*	0.0276	BOSQUE	45160
450059	*	0.0075	COMAL	45320
450064	*	0.0024	TARRANT	45910
450087	*	0.0024	TARRANT	45910
450090		0.0649	COOKE	45340
450099	*	0.0145	GRAY	45563
450135	*	0.0024	TARRANT	45910
450137	*	0.0024	TARRANT	45910
450144		0.0559	ANDREWS	45010
450163		0.0054	KLEBERG	45743
450192		0.0271	HILL	45651
450194		0.0213	CHEROKEE	45281
450210		0.0150	PANOLA	45842
450224	*	0.0195	WOOD	45974
450236		0.0388	HOPKINS	45654
450270		0.0271	HILL	45651
450283	*	0.0653	VAN ZANDT	45947
450324	*	0.0132	GRAYSON	45564
450347	*	0.0370	WALKER	45949
450348	*	0.0059	FALLS	45500
450370		0.0235	COLORADO	45312
450389	*	0.0618	HENDERSON	45640
450393	*	0.0132	GRAYSON	45564
450395	*	0.0440	POLK	45850
450419	*	0.0024	TARRANT	45910
450438	*	0.0235	COLORADO	45312
450451		0.0535	SOMERVELL	45893
450460		0.0053	TYLER	45942
450469	*	0.0132	GRAYSON	45564
450497		0.0375	MONTAGUE	45800
450539		0.0067	HALE	45582
450547		0.0195	WOOD	45974
450563	*	0.0024	TARRANT	45910
450565		0.0486	PALO PINTO	45841
450573		0.0125	JASPER	45690
450596	*	0.0742	HOOD	45653
450639	*	0.0024	TARRANT	45910
450641		0.0375	MONTAGUE	45800
450672	*	0.0024	TARRANT	45910
450675	*	0.0024	TARRANT	45910
450677	*	0.0024	TARRANT	45910
450698		0.0127	LAMB	45751
450747	*	0.0126	ANDERSON	45000
450755		0.0276	HOCKLEY	45652
450770	*	0.0181	MILAM	45795
450779	*	0.0024	TARRANT	45910
450813	*	0.0126	ANDERSON	45000
450838		0.0125	JASPER	45690
450872	*	0.0024	TARRANT	45910
450880	*	0.0024	TARRANT	45910
450884		0.0049	UPSHUR	45943
450886		0.0024	TARRANT	45910

TABLE 4J.—OUT-MIGRATION ADJUSTMENT—FY 2008—Continued

Provider No.	Reclassified for FY 2008	Out-migration adjustment	Qualifying county name	County code
450888		0.0024	TARRANT	45910
460017		0.0384	BOX ELDER	46010
460039	*	0.0384	BOX ELDER	46010
490019	*	0.1088	CULPEPER	49230
490084		0.0187	ESSEX	49280
490110		0.0184	MONTGOMERY	49600
500003	*	0.0166	SKAGIT	50280
500007	*	0.0166	SKAGIT	50280
500019		0.0131	LEWIS	50200
500039	*	0.0094	KITSAP	50170
500041	*	0.0020	COWLITZ	50070
510012		0.0124	MASON	51260
510018	*	0.0187	JACKSON	51170
510047	*	0.0269	MARION	51240
510077	*	0.0021	MINGO	51290
520028	*	0.0286	GREEN	52220
520035		0.0076	SHEBOYGAN	52580
520044		0.0076	SHEBOYGAN	52580
520057		0.0193	SAUK	52550
520059	*	0.0195	RACINE	52500
520071	*	0.0161	JEFFERSON	52270
520076	*	0.0146	DODGE	52130
520095	*	0.0193	SAUK	52550
520096		0.0195	RACINE	52500
520102	*	0.0242	WALWORTH	52630
520116	*	0.0161	JEFFERSON	52270

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
001	No	No	PRE	SURG	Heart transplant or implant of heart assist system w MCC.	23.1117	30.8	45.6
002	No	No	PRE	SURG	Heart transplant or implant of heart assist system w/o MCC.	16.2735	16.1	22.8
003	Yes	No	PRE	SURG	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R..	18.7707	33.4	40.6
004	Yes	No	PRE	SURG	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R..	11.4219	23.8	29.3
005	No	No	PRE	SURG	Liver transplant w MCC or intestinal transplant.	10.6120	17.6	23.5
006	No	No	PRE	SURG	Liver transplant w/o MCC	7.2562	9.1	10.5
007	No	No	PRE	SURG	Lung transplant	8.4002	14.6	17.3
008	No	No	PRE	SURG	Simultaneous pancreas/kidney transplant.	5.1726	10.1	11.8
009	No	No	PRE	SURG	Bone marrow transplant	6.4842	18.1	21.7
010	No	No	PRE	SURG	Pancreas transplant	3.8902	9.2	10.5
011	No	No	PRE	SURG	Tracheostomy for face,mouth & neck diagnoses w MCC.	4.1482	12.8	16.2
012	No	No	PRE	SURG	Tracheostomy for face,mouth & neck diagnoses w CC.	3.2472	8.9	10.9
013	No	No	PRE	SURG	Tracheostomy for face,mouth & neck diagnoses w/o CC/MCC.	2.6760	6.1	7.2
020	No	No	01	SURG	Intracranial vascular procedures w PDX hemorrhage w MCC.	7.7073	15.2	19.1
021	No	No	01	SURG	Intracranial vascular procedures w PDX hemorrhage w CC.	6.7021	13.4	15.5
022	No	No	01	SURG	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC.	5.6085	7.8	9.6
023	No	No	01	SURG	Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant.	4.7036	9.0	12.8
024	No	No	01	SURG	Cranio w major dev impl/acute complex CNS PDX w/o MCC.	3.8978	6.1	8.9
025	Yes	No	01	SURG	Craniotomy & endovascular intracranial procedures w MCC.	4.2362	10.3	13.3

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
026	Yes	No	01	SURG	Craniotomy & endovascular intracranial procedures w CC.	3.1582	6.5	8.2
027	Yes	No	01	SURG	Craniotomy & endovascular intracranial procedures w/o CC/MCC.	2.3259	3.5	4.6
028	Yes	Yes	01	SURG	Spinal procedures w MCC	4.2339	10.8	14.7
029	Yes	Yes	01	SURG	Spinal procedures w CC or spinal neurostimulators.	2.8356	5.3	7.3
030	Yes	Yes	01	SURG	Spinal procedures w/o CC/MCC	1.7617	2.8	3.7
031	Yes	No	01	SURG	Ventricular shunt procedures w MCC	3.2226	9.2	13.2
032	Yes	No	01	SURG	Ventricular shunt procedures w CC	1.9342	3.8	5.8
033	Yes	No	01	SURG	Ventricular shunt procedures w/o CC/MCC.	1.4281	2.3	3.1
034	No	No	01	SURG	Carotid artery stent procedure w MCC	2.5438	4.8	7.3
035	No	No	01	SURG	Carotid artery stent procedure w CC	1.8996	2.0	2.9
036	No	No	01	SURG	Carotid artery stent procedure w/o CC/MCC.	1.6977	1.3	1.6
037	No	No	01	SURG	Extracranial procedures w MCC	2.2630	6.0	8.7
038	No	No	01	SURG	Extracranial procedures w CC	1.4686	2.5	3.7
039	No	No	01	SURG	Extracranial procedures w/o CC/MCC	1.0909	1.5	1.8
040	Yes	Yes	01	SURG	Periph/cranial nerve & other nerv syst proc w MCC.	3.2550	10.0	13.6
041	Yes	Yes	01	SURG	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim.	2.3595	5.4	7.3
042	Yes	Yes	01	SURG	Periph/cranial nerve & other nerv syst proc w/o CC/MCC.	1.8710	2.5	3.6
052	No	No	01	MED	Spinal disorders & injuries w CC/MCC	1.4329	4.7	7.0
053	No	No	01	MED	Spinal disorders & injuries w/o CC/MCC.	1.1172	3.1	4.0
054	Yes	No	01	MED	Nervous system neoplasms w MCC	1.4228	5.3	7.2
055	Yes	No	01	MED	Nervous system neoplasms w/o MCC	1.1213	3.8	5.0
056	Yes	No	01	MED	Degenerative nervous system disorders w MCC.	1.2820	5.8	7.8
057	Yes	No	01	MED	Degenerative nervous system disorders w/o MCC.	0.8951	3.9	4.9
058	No	No	01	MED	Multiple sclerosis & cerebellar ataxia w MCC.	1.2669	5.8	8.0
059	No	No	01	MED	Multiple sclerosis & cerebellar ataxia w CC.	0.9226	4.3	5.2
060	No	No	01	MED	Multiple sclerosis & cerebellar ataxia w/o CC/MCC.	0.8160	3.4	4.1
061	No	No	01	MED	Acute ischemic stroke w use of thrombolytic agent w MCC.	2.5541	7.3	9.6
062	No	No	01	MED	Acute ischemic stroke w use of thrombolytic agent w CC.	2.0886	5.3	6.3
063	No	No	01	MED	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC.	1.8642	3.9	4.5
064	Yes	No	01	MED	Intracranial hemorrhage or cerebral infarction w MCC.	1.5470	5.6	7.6
065	Yes	No	01	MED	Intracranial hemorrhage or cerebral infarction w CC.	1.1901	4.3	5.3
066	Yes	No	01	MED	Intracranial hemorrhage or cerebral infarction w/o CC/MCC.	1.0303	3.1	3.8
067	No	No	01	MED	Nonspecific cva & precerebral occlusion w/o infarct w MCC.	1.2194	4.7	6.2
068	No	No	01	MED	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC.	0.9131	2.8	3.6
069	No	No	01	MED	Transient ischemia	0.7339	2.5	3.1
070	Yes	No	01	MED	Nonspecific cerebrovascular disorders w MCC.	1.6212	6.0	7.9
071	Yes	No	01	MED	Nonspecific cerebrovascular disorders w CC.	1.2522	4.5	5.6
072	Yes	No	01	MED	Nonspecific cerebrovascular disorders w/o CC/MCC.	0.9586	2.9	3.7
073	No	No	01	MED	Cranial & peripheral nerve disorders w MCC.	1.1717	4.8	6.4
074	No	No	01	MED	Cranial & peripheral nerve disorders w/o MCC.	0.8954	3.4	4.4

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
075	No	No	01	MED	Viral meningitis w CC/MCC	1.5369	6.0	7.6
076	No	No	01	MED	Viral meningitis w/o CC/MCC	1.1439	3.4	4.2
077	No	No	01	MED	Hypertensive encephalopathy w MCC	1.4611	5.6	7.2
078	No	No	01	MED	Hypertensive encephalopathy w CC	1.0996	3.7	4.6
079	No	No	01	MED	Hypertensive encephalopathy w/o CC/MCC.	0.9839	2.8	3.4
080	No	No	01	MED	Nontraumatic stupor & coma w MCC	0.9014	3.6	4.9
081	No	No	01	MED	Nontraumatic stupor & coma w/o MCC.	0.7161	2.7	3.4
082	No	No	01	MED	Traumatic stupor & coma, coma ≥1 hr w MCC.	1.6724	3.9	6.4
083	No	No	01	MED	Traumatic stupor & coma, coma ≥1 hr w CC.	1.3328	3.7	5.2
084	No	No	01	MED	Traumatic stupor & coma, coma ≥1 hr w/o CC/MCC.	1.1106	2.3	3.1
085	Yes	No	01	MED	Traumatic stupor & coma, coma <1 hr w MCC.	1.6946	5.7	7.9
086	Yes	No	01	MED	Traumatic stupor & coma, coma <1 hr w CC.	1.2337	4.0	5.1
087	Yes	No	01	MED	Traumatic stupor & coma, coma <1 hr w/o CC/MCC.	0.9235	2.6	3.4
088	No	No	01	MED	Concussion w MCC	1.2968	4.3	6.1
089	No	No	01	MED	Concussion w CC	0.9479	3.0	3.8
090	No	No	01	MED	Concussion w/o CC/MCC	0.7405	2.0	2.5
091	Yes	No	01	MED	Other disorders of nervous system w MCC.	1.3242	4.7	6.6
092	Yes	No	01	MED	Other disorders of nervous system w CC.	0.9529	3.5	4.4
093	Yes	No	01	MED	Other disorders of nervous system w/o CC/MCC.	0.7710	2.6	3.2
094	No	No	01	MED	Bacterial & tuberculous infections of nervous system w MCC.	3.1499	9.7	12.5
095	No	No	01	MED	Bacterial & tuberculous infections of nervous system w CC.	2.5679	7.2	9.1
096	No	No	01	MED	Bacterial & tuberculous infections of nervous system w/o CC/MCC.	2.3482	4.9	6.2
097	No	No	01	MED	Non-bacterial infect of nervous sys exc viral meningitis w MCC.	2.6665	9.3	11.8
098	No	No	01	MED	Non-bacterial infect of nervous sys exc viral meningitis w CC.	2.0568	6.8	8.5
099	No	No	01	MED	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC.	1.8177	5.1	6.3
100	Yes	No	01	MED	Seizures w MCC	1.2500	4.7	6.3
101	Yes	No	01	MED	Seizures w/o MCC	0.8258	2.9	3.7
102	No	No	01	MED	Headaches w MCC	0.8710	3.6	5.1
103	No	No	01	MED	Headaches w/o MCC	0.6677	2.5	3.2
113	No	No	02	SURG	Orbital procedures w CC/MCC	1.4141	3.8	5.5
114	No	No	02	SURG	Orbital procedures w/o CC/MCC	1.0292	2.0	2.7
115	No	No	02	SURG	Extraocular procedures except orbit	1.1185	3.3	4.5
116	No	No	02	SURG	Intraocular procedures w CC/MCC	0.8891	2.2	3.4
117	No	No	02	SURG	Intraocular procedures w/o CC/MCC	0.7094	1.5	1.9
121	No	No	02	MED	Acute major eye infections w CC/MCC	0.8800	4.6	5.8
122	No	No	02	MED	Acute major eye infections w/o CC/MCC.	0.6608	3.3	4.1
123	No	No	02	MED	Neurological eye disorders	0.7224	2.4	2.9
124	No	No	02	MED	Other disorders of the eye w MCC	0.9308	3.9	5.3
125	No	No	02	MED	Other disorders of the eye w/o MCC	0.6792	2.7	3.5
129	No	No	03	SURG	Major head & neck procedures w CC/MCC or major device.	1.7992	3.7	5.1
130	No	No	03	SURG	Major head & neck procedures w/o CC/MCC.	1.3987	2.4	3.2
131	No	No	03	SURG	Cranial/facial procedures w CC/MCC	1.6300	4.0	5.8
132	No	No	03	SURG	Cranial/facial procedures w/o CC/MCC.	1.2054	2.1	2.6
133	No	No	03	SURG	Other ear, nose, mouth & throat O.R. procedures w CC/MCC.	1.4331	3.7	5.8
134	No	No	03	SURG	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC.	0.9474	1.7	2.1

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
135	No	No	03	SURG	Sinus & mastoid procedures w CC/MCC.	1.5318	4.3	6.4
136	No	No	03	SURG	Sinus & mastoid procedures w/o CC/MCC.	1.1094	1.8	2.6
137	No	No	03	SURG	Mouth procedures w CC/MCC	1.2677	3.7	5.4
138	No	No	03	SURG	Mouth procedures w/o CC/MCC	0.8474	1.9	2.4
139	No	No	03	SURG	Salivary gland procedures	0.8470	1.4	1.8
146	No	No	03	MED	Ear, nose, mouth & throat malignancy w MCC.	1.7734	7.1	10.3
147	No	No	03	MED	Ear, nose, mouth & throat malignancy w CC.	1.2182	4.2	5.8
148	No	No	03	MED	Ear, nose, mouth & throat malignancy w/o CC/MCC.	1.0070	2.5	3.5
149	No	No	03	MED	Dysequilibrium	0.6154	2.2	2.7
150	No	No	03	MED	Epistaxis w MCC	0.9916	4.0	5.5
151	No	No	03	MED	Epistaxis w/o MCC	0.6227	2.3	2.9
152	No	No	03	MED	Otitis media & URI w MCC	0.8160	3.7	4.7
153	No	No	03	MED	Otitis media & URI w/o MCC	0.6207	2.8	3.4
154	No	No	03	MED	Nasal trauma & deformity w MCC	1.1294	4.8	6.5
155	No	No	03	MED	Nasal trauma & deformity w CC	0.8630	3.5	4.5
156	No	No	03	MED	Nasal trauma & deformity w/o CC/MCC.	0.7412	2.5	3.2
157	No	No	03	MED	Dental & Oral Diseases w MCC	1.1909	5.0	6.9
158	No	No	03	MED	Dental & Oral Diseases w CC	0.8653	3.4	4.4
159	No	No	03	MED	Dental & Oral Diseases w/o CC/MCC	0.7361	2.4	3.1
163	Yes	No	04	SURG	Major chest procedures w MCC	4.0452	12.2	15.0
164	Yes	No	04	SURG	Major chest procedures w CC	2.8081	6.9	8.3
165	Yes	No	04	SURG	Major chest procedures w/o CC/MCC	2.4106	4.5	5.4
166	Yes	No	04	SURG	Other resp system O.R. procedures w MCC.	3.2677	10.1	13.0
167	Yes	No	04	SURG	Other resp system O.R. procedures w CC.	2.4151	6.5	8.1
168	Yes	No	04	SURG	Other resp system O.R. procedures w/o CC/MCC.	1.8181	4.0	5.4
175	Yes	No	04	MED	Pulmonary embolism w MCC	1.4152	6.1	7.4
176	Yes	No	04	MED	Pulmonary embolism w/o MCC	1.1580	4.7	5.5
177	Yes	No	04	MED	Respiratory infections & inflammations w MCC.	1.8444	7.2	9.2
178	Yes	No	04	MED	Respiratory infections & inflammations w CC.	1.5636	6.0	7.4
179	Yes	No	04	MED	Respiratory infections & inflammations w/o CC/MCC.	1.2754	4.6	5.6
180	No	No	04	MED	Respiratory neoplasms w MCC	1.5550	6.1	8.0
181	No	No	04	MED	Respiratory neoplasms w CC	1.3126	4.5	6.0
182	No	No	04	MED	Respiratory neoplasms w/o CC/MCC	1.1455	3.3	4.3
183	No	No	04	MED	Major chest trauma w MCC	1.2664	5.7	7.2
184	No	No	04	MED	Major chest trauma w CC	0.9611	3.8	4.6
185	No	No	04	MED	Major chest trauma w/o CC/MCC	0.7298	2.7	3.3
186	Yes	No	04	MED	Pleural effusion w MCC	1.4542	5.8	7.5
187	Yes	No	04	MED	Pleural effusion w CC	1.1947	4.2	5.5
188	Yes	No	04	MED	Pleural effusion w/o CC/MCC	0.9745	3.2	4.1
189	No	No	04	MED	Pulmonary edema & respiratory failure	1.3660	4.8	6.2
190	Yes	No	04	MED	Chronic obstructive pulmonary disease w MCC.	1.1138	5.1	6.5
191	Yes	No	04	MED	Chronic obstructive pulmonary disease w CC.	0.9405	4.2	5.1
192	Yes	No	04	MED	Chronic obstructive pulmonary disease w/o CC/MCC.	0.8145	3.4	4.0
193	Yes	No	04	MED	Simple pneumonia & pleurisy w MCC	1.2505	5.5	6.9
194	Yes	No	04	MED	Simple pneumonia & pleurisy w CC	1.0235	4.5	5.3
195	Yes	No	04	MED	Simple pneumonia & pleurisy w/o CC/MCC.	0.8398	3.5	4.1
196	Yes	No	04	MED	Interstitial lung disease w MCC	1.3781	5.8	7.3
197	Yes	No	04	MED	Interstitial lung disease w CC	1.1458	4.4	5.4
198	Yes	No	04	MED	Interstitial lung disease w/o CC/MCC	0.9654	3.5	4.3
199	No	No	04	MED	Pneumothorax w MCC	1.4699	6.6	8.5
200	No	No	04	MED	Pneumothorax w CC	1.0753	3.9	5.1
201	No	No	04	MED	Pneumothorax w/o CC/MCC	0.8588	3.2	4.1

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
202	No	No	04	MED	Bronchitis & asthma w CC/MCC	0.7841	3.6	4.5
203	No	No	04	MED	Bronchitis & asthma w/o CC/MCC	0.6252	2.9	3.5
204	No	No	04	MED	Respiratory signs & symptoms	0.6658	2.2	2.9
205	Yes	No	04	MED	Other respiratory system diagnoses w MCC.	1.0636	4.2	5.6
206	Yes	No	04	MED	Other respiratory system diagnoses w/o MCC.	0.7848	2.7	3.5
207	Yes	No	04	MED	Respiratory system diagnosis w ventilator support 96+ hours.	5.1231	12.6	15.0
208	No	No	04	MED	Respiratory system diagnosis w ventilator support 96 hours.	2.2463	5.2	7.3
215	No	No	05	SURG	Other heart assist system implant	12.0016	6.3	12.0
216	Yes	No	05	SURG	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC.	9.3040	15.9	18.7
217	Yes	No	05	SURG	Cardiac valve & oth maj cardiothoracic proc w card cath w CC.	7.5813	10.9	12.2
218	Yes	No	05	SURG	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC.	6.8595	8.3	9.1
219	Yes	Yes	05	SURG	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC.	7.2072	11.7	14.5
220	Yes	Yes	05	SURG	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC.	5.7278	7.6	8.6
221	Yes	Yes	05	SURG	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC.	5.2463	6.0	6.4
222	No	No	05	SURG	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC.	8.0234	10.8	13.3
223	No	No	05	SURG	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC.	6.8809	5.0	6.6
224	No	No	05	SURG	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC.	7.3178	9.2	11.5
225	No	No	05	SURG	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC.	6.2956	4.5	5.7
226	No	No	05	SURG	Cardiac defibrillator implant w/o cardiac cath w MCC.	5.9123	6.2	9.4
227	No	No	05	SURG	Cardiac defibrillator implant w/o cardiac cath w/o MCC.	5.0411	1.8	2.8
228	Yes	No	05	SURG	Other cardiothoracic procedures w MCC.	6.7400	12.0	14.6
229	Yes	No	05	SURG	Other cardiothoracic procedures w CC	5.3191	7.9	9.0
230	Yes	No	05	SURG	Other cardiothoracic procedures w/o CC/MCC.	4.7847	5.6	6.6
231	No	No	05	SURG	Coronary bypass w PTCA w MCC	7.2993	10.8	13.2
232	No	No	05	SURG	Coronary bypass w PTCA w/o MCC	6.1947	8.0	9.0
233	Yes	No	05	SURG	Coronary bypass w cardiac cath w MCC.	6.4496	12.4	14.3
234	Yes	No	05	SURG	Coronary bypass w cardiac cath w/o MCC.	4.9216	8.2	8.9
235	Yes	No	05	SURG	Coronary bypass w/o cardiac cath w MCC.	5.1381	9.7	11.5
236	Yes	No	05	SURG	Coronary bypass w/o cardiac cath w/o MCC.	3.7307	6.1	6.6
237	No	No	05	SURG	Major cardiovasc procedures w MCC or thoracic aortic anuerysm repair.	4.4954	7.8	11.2
238	No	No	05	SURG	Major cardiovasc procedures w/o MCC.	3.1891	3.4	4.9
239	Yes	No	05	SURG	Amputation for circ sys disorders exc upper limb & toe w MCC.	3.9454	12.1	15.6
240	Yes	No	05	SURG	Amputation for circ sys disorders exc upper limb & toe w CC.	2.9983	8.4	10.5
241	Yes	No	05	SURG	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC.	2.4709	5.7	6.9

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
242	Yes	No	05	SURG	Permanent cardiac pacemaker implant w MCC.	3.2586	6.9	8.9
243	Yes	No	05	SURG	Permanent cardiac pacemaker implant w CC.	2.5483	3.8	5.1
244	Yes	No	05	SURG	Permanent cardiac pacemaker implant w/o CC/MCC.	2.1367	2.2	2.9
245	No	No	05	SURG	AICD lead & generator procedures	3.1073	2.1	3.3
246	No	No	05	SURG	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents.	2.9046	3.7	5.5
247	No	No	05	SURG	Perc cardiovasc proc w drug-eluting stent w/o MCC.	2.1255	1.7	2.2
248	No	No	05	SURG	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents.	2.5180	4.3	6.2
249	No	No	05	SURG	Perc cardiovasc proc w non-drug-eluting stent w/o MCC.	1.8124	1.9	2.5
250	No	No	05	SURG	Perc cardiovasc proc w/o coronary artery stent or AMI w MCC.	2.4870	5.3	7.5
251	No	No	05	SURG	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC.	1.7480	2.1	3.0
252	No	No	05	SURG	Other vascular procedures w MCC	2.7564	5.6	8.8
253	No	No	05	SURG	Other vascular procedures w CC	2.2536	4.1	6.0
254	No	No	05	SURG	Other vascular procedures w/o CC/MCC.	1.6786	2.0	2.8
255	Yes	No	05	SURG	Upper limb & toe amputation for circ system disorders w MCC.	2.1486	7.3	9.9
256	Yes	No	05	SURG	Upper limb & toe amputation for circ system disorders w CC.	1.6847	5.8	7.5
257	Yes	No	05	SURG	Upper limb & toe amputation for circ system disorders w/o CC/MCC.	1.3990	3.7	4.9
258	No	No	05	SURG	Cardiac pacemaker device replacement w MCC.	2.2926	5.5	7.6
259	No	No	05	SURG	Cardiac pacemaker device replacement w/o MCC.	1.6553	1.9	2.6
260	No	No	05	SURG	Cardiac pacemaker revision except device replacement w MCC.	2.1625	7.2	10.2
261	No	No	05	SURG	Cardiac pacemaker revision except device replacement w CC.	1.3212	2.8	3.9
262	No	No	05	SURG	Cardiac pacemaker revision except device replacement w/o CC/MCC.	1.1245	1.9	2.5
263	No	No	05	SURG	Vein ligation & stripping	1.4977	3.5	5.5
264	Yes	No	05	SURG	Other circulatory system O.R. procedures.	2.4840	5.9	9.0
280	Yes	No	05	MED	Acute myocardial infarction, discharged alive w MCC.	1.7391	5.9	7.5
281	Yes	No	05	MED	Acute myocardial infarction, discharged alive w CC.	1.3126	4.0	4.9
282	Yes	No	05	MED	Acute myocardia infarction, discharged alive w/o CC/MCC.	1.0617	2.6	3.2
283	No	No	05	MED	Acute myocardial infarction, expired w MCC.	1.5787	3.4	5.5
284	No	No	05	MED	Acute myocardial infarction, expired w CC.	1.2074	2.3	3.5
285	No	No	05	MED	Acute myocardial infarction, expired w/o CC/MCC.	1.0421	1.6	2.2
286	No	No	05	MED	Circulatory disorders except AMI, w card cath w MCC.	1.6667	5.2	7.1
287	No	No	05	MED	Circulatory disorders except AMI, w card cath w/o MCC.	1.1412	2.5	3.2
288	Yes	No	05	MED	Acute & subacute endocarditis w MCC.	2.9143	9.6	12.2
289	Yes	No	05	MED	Acute & subacute endocarditis w CC	2.3075	7.1	8.7
290	Yes	No	05	MED	Acute & subacute endocarditis w/o CC/MCC.	1.9733	5.2	6.6
291	Yes	No	05	MED	Heart failure & shock w MCC	1.2585	5.1	6.6
292	Yes	No	05	MED	Heart failure & shock w CC	1.0134	4.1	5.0
293	Yes	No	05	MED	Heart failure & shock w/o CC/MCC	0.8765	3.1	3.7

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
294	No	No	05	MED	Deep vein thrombophlebitis w CC/MCC.	0.8665	4.6	5.5
295	No	No	05	MED	Deep vein thrombophlebitis w/o CC/MCC.	0.6950	3.8	4.4
296	No	No	05	MED	Cardiac arrest, unexplained w MCC	1.1144	2.0	3.3
297	No	No	05	MED	Cardiac arrest, unexplained w CC	0.8490	1.5	1.9
298	No	No	05	MED	Cardiac arrest, unexplained w/o CC/MCC.	0.7207	1.2	1.4
299	Yes	No	05	MED	Peripheral vascular disorders w MCC	1.2220	5.2	6.9
300	Yes	No	05	MED	Peripheral vascular disorders w CC	0.9451	4.1	5.1
301	Yes	No	05	MED	Peripheral vascular disorders w/o CC/MCC.	0.7183	3.1	3.8
302	No	No	05	MED	Atherosclerosis w MCC	0.8236	3.3	4.4
303	No	No	05	MED	Atherosclerosis w/o MCC	0.6055	2.1	2.6
304	No	No	05	MED	Hypertension w MCC	0.8312	3.9	5.2
305	No	No	05	MED	Hypertension w/o MCC	0.5942	2.3	2.9
306	No	No	05	MED	Cardiac congenital & valvular disorders w MCC.	1.2007	4.5	6.5
307	No	No	05	MED	Cardiac congenital & valvular disorders w/o MCC.	0.8224	2.7	3.5
308	No	No	05	MED	Cardiac arrhythmia & conduction disorders w MCC.	1.0841	4.3	5.8
309	No	No	05	MED	Cardiac arrhythmia & conduction disorders w CC.	0.8233	3.1	3.9
310	No	No	05	MED	Cardiac arrhythmia & conduction disorders w/o CC/MCC.	0.6439	2.3	2.8
311	No	No	05	MED	Angina pectoris	0.5118	1.9	2.3
312	No	No	05	MED	Syncope & collapse	0.7197	2.5	3.2
313	No	No	05	MED	Chest pain	0.5489	1.7	2.1
314	Yes	No	05	MED	Other circulatory system diagnoses w MCC.	1.5606	5.1	7.1
315	Yes	No	05	MED	Other circulatory system diagnoses w CC.	1.1720	3.5	4.6
316	Yes	No	05	MED	Other circulatory system diagnoses w/o CC/MCC.	0.9075	2.4	3.0
326	Yes	No	06	SURG	Stomach, esophageal & duodenal proc w MCC.	5.1660	13.4	17.2
327	Yes	No	06	SURG	Stomach, esophageal & duodenal proc w CC.	3.2941	8.1	10.3
328	Yes	No	06	SURG	Stomach, esophageal & duodenal proc w/o CC/MCC.	1.8017	3.3	4.4
329	Yes	No	06	SURG	Major small & large bowel procedures w MCC.	4.5059	12.8	15.9
330	Yes	No	06	SURG	Major small & large bowel procedures w CC.	2.8935	8.4	9.8
331	Yes	No	06	SURG	Major small & large bowel procedures w/o CC/MCC.	1.8415	5.4	6.0
332	Yes	No	06	SURG	Rectal resection w MCC	3.7139	12.2	14.7
333	Yes	No	06	SURG	Rectal resection w CC	2.5787	7.8	8.9
334	Yes	No	06	SURG	Rectal resection w/o CC/MCC	1.7856	4.9	5.6
335	Yes	No	06	SURG	Peritoneal adhesiolysis w MCC	3.4785	11.8	14.4
336	Yes	No	06	SURG	Peritoneal adhesiolysis w CC	2.4776	7.7	9.3
337	Yes	No	06	SURG	Peritoneal adhesiolysis w/o CC/MCC	1.6984	4.4	5.7
338	No	No	06	SURG	Appendectomy w complicated principal diag w MCC.	2.7254	9.1	10.9
339	No	No	06	SURG	Appendectomy w complicated principal diag w CC.	1.9805	6.1	7.1
340	No	No	06	SURG	Appendectomy w complicated principal diag w/o CC/MCC.	1.3849	3.6	4.3
341	No	No	06	SURG	Appendectomy w/o complicated principal diag w MCC.	1.8824	5.3	7.3
342	No	No	06	SURG	Appendectomy w/o complicated principal diag w CC.	1.3562	3.4	4.3
343	No	No	06	SURG	Appendectomy w/o complicated principal diag w/o CC/MCC.	0.9887	1.9	2.3
344	No	No	06	SURG	Minor small & large bowel procedures w MCC.	2.5156	9.4	12.0

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
345	No	No	06	SURG	Minor small & large bowel procedures w CC.	1.7028	6.2	7.2
346	No	No	06	SURG	Minor small & large bowel procedures w/o CC/MCC.	1.2617	4.4	5.0
347	No	No	06	SURG	Anal & stomal procedures w MCC	1.7658	6.2	8.4
348	No	No	06	SURG	Anal & stomal procedures w CC	1.2781	4.1	5.5
349	No	No	06	SURG	Anal & stomal procedures w/o CC/MCC.	0.8629	2.4	3.0
350	No	No	06	SURG	Inguinal & femoral hernia procedures w MCC.	1.8330	5.9	8.1
351	No	No	06	SURG	Inguinal & femoral hernia procedures w CC.	1.2449	3.4	4.5
352	No	No	06	SURG	Inguinal & femoral hernia procedures w/o CC/MCC.	0.8967	1.9	2.4
353	No	No	06	SURG	Hernia procedures except inguinal & femoral w MCC.	2.0241	6.6	8.8
354	No	No	06	SURG	Hernia procedures except inguinal & femoral w CC.	1.4092	4.0	5.1
355	No	No	06	SURG	Hernia procedures except inguinal & femoral w/o CC/MCC.	1.0147	2.3	2.9
356	Yes	No	06	SURG	Other digestive system O.R. procedures w MCC.	3.3790	9.6	13.3
357	Yes	No	06	SURG	Other digestive system O.R. procedures w CC.	2.4946	6.1	8.0
358	Yes	No	06	SURG	Other digestive system O.R. procedures w/o CC/MCC.	1.7333	3.4	4.6
368	No	No	06	MED	Major esophageal disorders w MCC	1.3788	5.1	6.6
369	No	No	06	MED	Major esophageal disorders w CC	1.0839	3.7	4.6
370	No	No	06	MED	Major esophageal disorders w/o CC/MCC.	0.9558	2.8	3.4
371	Yes	No	06	MED	Major gastrointestinal disorders & peritoneal infections w MCC.	1.6263	6.6	8.8
372	Yes	No	06	MED	Major gastrointestinal disorders & peritoneal infections w CC.	1.3059	5.5	6.8
373	Yes	No	06	MED	Major gastrointestinal disorders & peritoneal infections w/o CC/MCC.	1.1109	4.2	5.0
374	Yes	No	06	MED	Digestive malignancy w MCC	1.7229	6.5	8.8
375	Yes	No	06	MED	Digestive malignancy w CC	1.3337	4.6	6.0
376	Yes	No	06	MED	Digestive malignancy w/o CC/MCC	1.0268	3.1	4.1
377	Yes	No	06	MED	G.I. hemorrhage w MCC	1.3367	5.0	6.5
378	Yes	No	06	MED	G.I. hemorrhage w CC	1.0195	3.7	4.5
379	Yes	No	06	MED	G.I. hemorrhage w/o CC/MCC	0.8476	2.9	3.4
380	Yes	No	06	MED	Complicated peptic ulcer w MCC	1.4334	5.5	7.2
381	Yes	No	06	MED	Complicated peptic ulcer w CC	1.1302	4.2	5.1
382	Yes	No	06	MED	Complicated peptic ulcer w/o CC/MCC	0.9662	3.0	3.6
383	No	No	06	MED	Uncomplicated peptic ulcer w MCC	1.1024	4.6	5.9
384	No	No	06	MED	Uncomplicated peptic ulcer w/o MCC	0.8399	3.2	3.8
385	No	No	06	MED	Inflammatory bowel disease w MCC	1.4936	6.7	9.0
386	No	No	06	MED	Inflammatory bowel disease w CC	1.0766	4.6	5.7
387	No	No	06	MED	Inflammatory bowel disease w/o CC/MCC.	0.9488	3.6	4.4
388	Yes	No	06	MED	G.I. obstruction w MCC	1.2860	5.5	7.4
389	Yes	No	06	MED	G.I. obstruction w CC	0.9533	4.0	5.0
390	Yes	No	06	MED	G.I. obstruction w/o CC/MCC	0.7260	3.0	3.6
391	No	No	06	MED	Esophagitis, gastroent & misc digest disorders w MCC.	0.9565	4.1	5.5
392	No	No	06	MED	Esophagitis, gastroent & misc digest disorders w/o MCC.	0.7121	2.8	3.5
393	No	No	06	MED	Other digestive system diagnoses w MCC.	1.3237	5.0	7.0
394	No	No	06	MED	Other digestive system diagnoses w CC.	1.0257	3.8	4.9
395	No	No	06	MED	Other digestive system diagnoses w/o CC/MCC.	0.7874	2.7	3.4
405	Yes	No	07	SURG	Pancreas, liver & shunt procedures w MCC.	4.8273	12.8	17.3
406	Yes	No	07	SURG	Pancreas, liver & shunt procedures w CC.	3.3149	7.1	9.5

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
407	Yes	No	07	SURG	Pancreas, liver & shunt procedures w/o CC/MCC.	2.2443	4.2	5.5
408	No	No	07	SURG	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC.	3.8540	12.2	15.1
409	No	No	07	SURG	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC.	2.9126	8.2	9.9
410	No	No	07	SURG	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC.	2.0794	5.7	6.8
411	No	No	07	SURG	Cholecystectomy w c.d.e. w MCC	3.4128	10.9	13.1
412	No	No	07	SURG	Cholecystectomy w c.d.e. w CC	2.6382	7.6	8.8
413	No	No	07	SURG	Cholecystectomy w c.d.e. w/o CC/MCC.	1.9412	5.2	6.0
414	Yes	No	07	SURG	Cholecystectomy except by laparoscope w/o c.d.e. w MCC.	3.0942	9.7	11.9
415	Yes	No	07	SURG	Cholecystectomy except by laparoscope w/o c.d.e. w CC.	2.2749	6.6	7.7
416	Yes	No	07	SURG	Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC.	1.5398	4.1	4.9
417	No	No	07	SURG	Laparoscopic cholecystectomy w/o c.d.e. w MCC.	2.1361	6.6	8.4
418	No	No	07	SURG	Laparoscopic cholecystectomy w/o c.d.e. w CC.	1.7104	4.5	5.6
419	No	No	07	SURG	Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC.	1.2400	2.5	3.2
420	No	No	07	SURG	Hepatobiliary diagnostic procedures w MCC.	3.4851	10.1	14.2
421	No	No	07	SURG	Hepatobiliary diagnostic procedures w CC.	2.2557	5.6	7.8
422	No	No	07	SURG	Hepatobiliary diagnostic procedures w/o CC/MCC.	1.9432	3.4	4.5
423	No	No	07	SURG	Other hepatobiliary or pancreas O.R. procedures w MCC.	3.9593	11.4	15.5
424	No	No	07	SURG	Other hepatobiliary or pancreas O.R. procedures w CC.	3.0104	7.8	10.2
425	No	No	07	SURG	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC.	2.5812	4.5	5.6
432	No	No	07	MED	Cirrhosis & alcoholic hepatitis w MCC	1.5033	5.1	6.9
433	No	No	07	MED	Cirrhosis & alcoholic hepatitis w CC	1.1431	3.8	4.9
434	No	No	07	MED	Cirrhosis & alcoholic hepatitis w/o CC/MCC.	1.0125	2.8	3.6
435	No	No	07	MED	Malignancy of hepatobiliary system or pancreas w MCC.	1.5661	5.8	7.7
436	No	No	07	MED	Malignancy of hepatobiliary system or pancreas w CC.	1.2906	4.5	5.9
437	No	No	07	MED	Malignancy of hepatobiliary system or pancreas w/o CC/MCC.	1.1709	3.3	4.4
438	No	No	07	MED	Disorders of pancreas except malignancy w MCC.	1.4201	5.6	7.7
439	No	No	07	MED	Disorders of pancreas except malignancy w CC.	1.0609	4.3	5.4
440	No	No	07	MED	Disorders of pancreas except malignancy w/o CC/MCC.	0.8912	3.2	3.9
441	Yes	No	07	MED	Disorders of liver except malig,cirr,alc hepa w MCC.	1.3973	5.1	7.0
442	Yes	No	07	MED	Disorders of liver except malig,cirr,alc hepa w CC.	1.0935	4.0	5.1
443	Yes	No	07	MED	Disorders of liver except malig,cirr,alc hepa w/o CC/MCC.	0.9079	3.1	3.8
444	No	No	07	MED	Disorders of the biliary tract w MCC	1.3744	5.0	6.6
445	No	No	07	MED	Disorders of the biliary tract w CC	1.1030	3.8	4.8
446	No	No	07	MED	Disorders of the biliary tract w/o CC/MCC.	0.8521	2.6	3.3
453	No	No	08	SURG	Combined anterior/posterior spinal fusion w MCC.	8.4313	12.7	15.9
454	No	No	08	SURG	Combined anterior/posterior spinal fusion w CC.	6.5810	6.8	8.4

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
455	No	No	08	SURG	Combined anterior/posterior spinal fusion w/o CC/MCC.	5.7023	4.1	4.7
456	No	No	08	SURG	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC.	6.7669	12.1	15.9
457	No	No	08	SURG	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC.	5.4650	6.4	7.8
458	No	No	08	SURG	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC.	4.9437	4.1	4.6
459	Yes	No	08	SURG	Spinal fusion except cervical w MCC	4.8679	7.8	9.6
460	Yes	No	08	SURG	Spinal fusion except cervical w/o MCC	3.4870	3.8	4.3
461	No	No	08	SURG	Bilateral or multiple major joint procs of lower extremity w MCC.	3.8345	6.9	8.5
462	No	No	08	SURG	Bilateral or multiple major joint procs of lower extremity w/o MCC.	3.0993	3.9	4.3
463	Yes	No	08	SURG	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC.	3.9615	12.3	16.9
464	Yes	No	08	SURG	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC.	2.8821	7.8	10.4
465	Yes	No	08	SURG	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC.	2.3417	4.6	6.2
466	Yes	No	08	SURG	Revision of hip or knee replacement w MCC.	3.5408	7.6	9.5
467	Yes	No	08	SURG	Revision of hip or knee replacement w CC.	2.7523	4.8	5.6
468	Yes	No	08	SURG	Revision of hip or knee replacement w/o CC/MCC.	2.4545	3.7	4.0
469	Yes	No	08	SURG	Major joint replacement or reattachment of lower extremity w MCC.	2.6664	7.1	8.4
470	Yes	No	08	SURG	Major joint replacement or reattachment of lower extremity w/o MCC.	1.9871	3.7	4.0
471	No	No	08	SURG	Cervical spinal fusion w MCC	3.4723	7.0	10.1
472	No	No	08	SURG	Cervical spinal fusion w CC	2.4819	2.9	4.3
473	No	No	08	SURG	Cervical spinal fusion w/o CC/MCC	1.9446	1.6	2.0
474	Yes	No	08	SURG	Amputation for musculoskeletal sys & conn tissue dis w MCC.	2.8432	9.5	12.5
475	Yes	No	08	SURG	Amputation for musculoskeletal sys & conn tissue dis w CC.	2.1308	6.6	8.6
476	Yes	No	08	SURG	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC.	1.6799	3.8	5.0
477	Yes	Yes	08	SURG	Biopsies of musculoskeletal system & connective tissue w MCC.	2.6555	9.6	12.5
478	Yes	Yes	08	SURG	Biopsies of musculoskeletal system & connective tissue w CC.	1.9836	4.8	6.8
479	Yes	Yes	08	SURG	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC.	1.6784	1.9	2.8
480	Yes	Yes	08	SURG	Hip & femur procedures except major joint w MCC.	2.4027	8.0	9.5
481	Yes	Yes	08	SURG	Hip & femur procedures except major joint w CC.	1.8485	5.4	6.0
482	Yes	Yes	08	SURG	Hip & femur procedures except major joint w/o CC/MCC.	1.5644	4.5	4.9
483	Yes	No	08	SURG	Major joint & limb reattachment proc of upper extremity w CC/MCC.	1.9905	3.5	4.4
484	Yes	No	08	SURG	Major joint & limb reattachment proc of upper extremity w/o CC/MCC.	1.7376	2.2	2.5
485	No	No	08	SURG	Knee procedures w pdx of infection w MCC.	2.9362	10.2	12.4
486	No	No	08	SURG	Knee procedures w pdx of infection w CC.	2.3382	6.8	8.1
487	No	No	08	SURG	Knee procedures w pdx of infection w/o CC/MCC.	1.7771	5.0	5.8
488	Yes	No	08	SURG	Knee procedures w/o pdx of infection w CC/MCC.	1.6584	4.1	5.1
489	Yes	No	08	SURG	Knee procedures w/o pdx of infection w/o CC/MCC.	1.4512	2.7	3.1
490	No	No	08	SURG	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim.	1.4912	3.3	4.7

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
491	No	No	08	SURG	Back & neck proc exc spinal fusion w/o CC/MCC.	1.0066	1.8	2.3
492	Yes	Yes	08	SURG	Lower extrem & humer proc except hip,foot,femur w MCC.	2.2413	6.9	8.7
493	Yes	Yes	08	SURG	Lower extrem & humer proc except hip,foot,femur w CC.	1.7186	4.4	5.3
494	Yes	Yes	08	SURG	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC.	1.2752	2.8	3.4
495	Yes	No	08	SURG	Local excision & removal int fix devices exc hip & femur w MCC.	2.5765	8.3	11.1
496	Yes	No	08	SURG	Local excision & removal int fix devices exc hip & femur w CC.	1.7792	4.6	6.0
497	Yes	No	08	SURG	Local excision & removal int fix devices exc hip & femur w/o CC/MCC.	1.2301	2.3	3.1
498	No	No	08	SURG	Local excision & removal int fix devices of hip & femur w CC/MCC.	1.7563	5.8	8.2
499	No	No	08	SURG	Local excision & removal int fix devices of hip & femur w/o CC/MCC.	1.1887	2.3	3.1
500	Yes	Yes	08	SURG	Soft tissue procedures w MCC	2.4096	8.1	11.3
501	Yes	Yes	08	SURG	Soft tissue procedures w CC	1.5598	4.4	5.9
502	Yes	Yes	08	SURG	Soft tissue procedures w/o CC/MCC	1.0342	2.3	2.9
503	No	No	08	SURG	Foot procedures w MCC	1.7538	6.9	8.9
504	No	No	08	SURG	Foot procedures w CC	1.4058	5.0	6.4
505	No	No	08	SURG	Foot procedures w/o CC/MCC	1.1584	2.6	3.4
506	No	No	08	SURG	Major thumb or joint procedures	1.0877	2.3	3.2
507	No	No	08	SURG	Major shoulder or elbow joint procedures w CC/MCC.	1.4296	3.6	5.2
508	No	No	08	SURG	Major shoulder or elbow joint procedures w/o CC/MCC.	1.1330	1.7	2.0
509	No	No	08	SURG	Arthroscopy	1.0769	1.9	2.8
510	Yes	No	08	SURG	Shoulder,elbow or forearm proc,exc major joint proc w MCC.	1.6616	5.0	6.6
511	Yes	No	08	SURG	Shoulder,elbow or forearm proc,exc major joint proc w CC.	1.2512	3.1	3.9
512	Yes	No	08	SURG	Shoulder,elbow or forearm proc,exc major joint proc w/o CC/MCC.	0.9602	1.7	2.1
513	No	No	08	SURG	Hand or wrist proc, except major thumb or joint proc w CC/MCC.	1.1748	3.7	5.1
514	No	No	08	SURG	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC.	0.8313	2.0	2.6
515	Yes	Yes	08	SURG	Other musculoskelet sys & conn tiss O.R. proc w MCC.	2.4858	8.1	10.9
516	Yes	Yes	08	SURG	Other musculoskelet sys & conn tiss O.R. proc w CC.	1.8307	4.4	6.0
517	Yes	Yes	08	SURG	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC.	1.4192	2.0	2.9
533	Yes	No	08	MED	Fractures of femur w MCC	1.1294	5.1	6.9
534	Yes	No	08	MED	Fractures of femur w/o MCC	0.7560	3.2	4.0
535	Yes	No	08	MED	Fractures of hip & pelvis w MCC	1.0836	4.8	6.4
536	Yes	No	08	MED	Fractures of hip & pelvis w/o MCC	0.7340	3.4	4.0
537	No	No	08	MED	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC.	0.7528	3.8	4.7
538	No	No	08	MED	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC.	0.5986	2.6	3.1
539	Yes	No	08	MED	Osteomyelitis w MCC	1.7648	7.7	10.2
540	Yes	No	08	MED	Osteomyelitis w CC	1.4026	5.8	7.2
541	Yes	No	08	MED	Osteomyelitis w/o CC/MCC	1.2101	4.4	5.7
542	Yes	No	08	MED	Pathological fractures & musculoskelet & conn tiss malig w MCC.	1.4877	6.8	8.7
543	Yes	No	08	MED	Pathological fractures & musculoskelet & conn tiss malig w CC.	1.1151	4.8	6.0
544	Yes	No	08	MED	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC.	0.9395	3.7	4.5
545	Yes	No	08	MED	Connective tissue disorders w MCC	1.8330	6.5	9.0
546	Yes	No	08	MED	Connective tissue disorders w CC	1.2092	4.3	5.5

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
547	Yes	No	08	MED	Connective tissue disorders w/o CC/MCC.	0.9054	3.2	3.9
548	No	No	08	MED	Septic arthritis w MCC	1.5372	7.0	9.3
549	No	No	08	MED	Septic arthritis w CC	1.1522	5.0	6.2
550	No	No	08	MED	Septic arthritis w/o CC/MCC	0.9567	3.6	4.5
551	Yes	No	08	MED	Medical back problems w MCC	1.1632	5.5	7.2
552	Yes	No	08	MED	Medical back problems w/o MCC	0.7839	3.4	4.2
553	No	No	08	MED	Bone diseases & arthropathies w MCC.	0.9199	4.8	6.1
554	No	No	08	MED	Bone diseases & arthropathies w/o MCC.	0.6475	3.0	3.7
555	No	No	08	MED	Signs & symptoms of musculoskeletal system & conn tissue w MCC.	0.7886	3.6	4.9
556	No	No	08	MED	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC.	0.5958	2.5	3.2
557	Yes	No	08	MED	Tendonitis, myositis & bursitis w MCC	1.2171	5.4	6.9
558	Yes	No	08	MED	Tendonitis, myositis & bursitis w/o MCC.	0.8480	3.5	4.3
559	Yes	No	08	MED	Aftercare, musculoskeletal system & connective tissue w MCC.	1.2104	5.1	7.3
560	Yes	No	08	MED	Aftercare, musculoskeletal system & connective tissue w CC.	0.8521	3.6	4.7
561	Yes	No	08	MED	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC.	0.6753	2.1	2.7
562	Yes	No	08	MED	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC.	1.1163	5.0	6.5
563	Yes	No	08	MED	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC.	0.6981	3.1	3.7
564	No	No	08	MED	Other musculoskeletal sys & connective tissue diagnoses w MCC.	1.1606	5.3	7.1
565	No	No	08	MED	Other musculoskeletal sys & connective tissue diagnoses w CC.	0.9003	4.0	5.1
566	No	No	08	MED	Other musculoskeletal sys & connective tissue diagnoses w/o CC/MCC.	0.7790	2.9	3.7
573	Yes	No	09	SURG	Skin graft &/or debrid for skn ulcer or cellulitis w MCC.	2.7483	10.1	13.8
574	Yes	No	09	SURG	Skin graft &/or debrid for skn ulcer or cellulitis w CC.	2.0177	7.2	9.5
575	Yes	No	09	SURG	Skin graft &/or debrid for skn ulcer or cellulitis w/o CC/MCC.	1.4216	4.7	5.9
576	No	No	09	SURG	Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC.	2.4766	7.8	12.1
577	No	No	09	SURG	Skin graft &/or debrid exc for skin ulcer or cellulitis w CC.	1.6262	4.1	6.0
578	No	No	09	SURG	Skin graft &/or debrid exc for skin ulcer or cellulitis w/o CC/MCC.	1.0742	2.5	3.4
579	Yes	No	09	SURG	Other skin, subcut tiss & breast proc w MCC.	2.3093	8.1	11.1
580	Yes	No	09	SURG	Other skin, subcut tiss & breast proc w CC.	1.4256	3.6	5.5
581	Yes	No	09	SURG	Other skin, subcut tiss & breast proc w/o CC/MCC.	0.9124	1.9	2.6
582	No	No	09	SURG	Mastectomy for malignancy w CC/MCC.	0.9432	2.1	2.9
583	No	No	09	SURG	Mastectomy for malignancy w/o CC/MCC.	0.7523	1.6	1.8
584	No	No	09	SURG	Breast biopsy, local excision & other breast procedures w CC/MCC.	1.2484	3.7	5.7
585	No	No	09	SURG	Breast biopsy, local excision & other breast procedures w/o CC/MCC.	0.9066	1.7	2.2
592	Yes	No	09	MED	Skin ulcers w MCC	1.4555	6.6	8.9
593	Yes	No	09	MED	Skin ulcers w CC	1.1060	5.2	6.5
594	Yes	No	09	MED	Skin ulcers w/o CC/MCC	0.9335	3.9	4.9
595	No	No	09	MED	Major skin disorders w MCC	1.3997	6.0	8.2
596	No	No	09	MED	Major skin disorders w/o MCC	0.8766	3.8	4.8
597	No	No	09	MED	Malignant breast disorders w MCC	1.4034	5.9	8.2
598	No	No	09	MED	Malignant breast disorders w CC	1.0695	4.2	5.6

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
599	No	No	09	MED	Malignant breast disorders w/o CC/MCC.	0.7232	2.6	3.6
600	No	No	09	MED	Non-malignant breast disorders w CC/MCC.	0.8471	4.1	5.4
601	No	No	09	MED	Non-malignant breast disorders w/o CC/MCC.	0.6715	3.1	3.8
602	Yes	No	09	MED	Cellulitis w MCC	1.1522	5.5	7.0
603	Yes	No	09	MED	Cellulitis w/o MCC	0.8087	3.9	4.7
604	No	No	09	MED	Trauma to the skin, subcut tiss & breast w MCC.	0.9681	4.1	5.4
605	No	No	09	MED	Trauma to the skin, subcut tiss & breast w/o MCC.	0.6863	2.8	3.5
606	No	No	09	MED	Minor skin disorders w MCC	0.9223	4.2	5.9
607	No	No	09	MED	Minor skin disorders w/o MCC	0.6505	2.9	3.8
614	No	No	10	SURG	Adrenal & pituitary procedures w CC/MCC.	2.1978	5.2	7.3
615	No	No	10	SURG	Adrenal & pituitary procedures w/o CC/MCC.	1.6502	2.8	3.4
616	Yes	No	10	SURG	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC.	3.1449	12.6	15.6
617	Yes	No	10	SURG	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC.	2.2071	7.2	9.0
618	Yes	No	10	SURG	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC.	1.7554	4.9	6.1
619	No	No	10	SURG	O.R. procedures for obesity w MCC	2.7625	6.4	9.3
620	No	No	10	SURG	O.R. procedures for obesity w CC	1.9294	3.4	4.2
621	No	No	10	SURG	O.R. procedures for obesity w/o CC/MCC.	1.6876	2.1	2.4
622	Yes	No	10	SURG	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC.	2.7257	9.7	13.2
623	Yes	No	10	SURG	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC.	2.0065	6.8	8.7
624	Yes	No	10	SURG	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC.	1.6056	4.6	5.9
625	No	No	10	SURG	Thyroid, parathyroid & thyroglossal procedures w MCC.	1.5928	5.0	7.5
626	No	No	10	SURG	Thyroid, parathyroid & thyroglossal procedures w CC.	1.0183	2.2	3.3
627	No	No	10	SURG	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC.	0.8169	1.3	1.5
628	Yes	No	10	SURG	Other endocrine, nutrit & metab O.R. proc w MCC.	3.0602	7.8	11.8
629	Yes	No	10	SURG	Other endocrine, nutrit & metab O.R. proc w CC.	2.4730	7.0	8.8
630	Yes	No	10	SURG	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC.	1.7767	3.7	5.1
637	Yes	No	10	MED	Diabetes w MCC	1.0891	4.6	6.2
638	Yes	No	10	MED	Diabetes w CC	0.8021	3.4	4.3
639	Yes	No	10	MED	Diabetes w/o CC/MCC	0.6742	2.5	3.1
640	Yes	No	10	MED	Nutritional & misc metabolic disorders w MCC.	0.9793	4.1	5.6
641	Yes	No	10	MED	Nutritional & misc metabolic disorders w/o MCC.	0.7248	3.1	3.9
642	No	No	10	MED	Inborn errors of metabolism	1.0616	3.8	5.3
643	Yes	No	10	MED	Endocrine disorders w MCC	1.3926	6.0	7.8
644	Yes	No	10	MED	Endocrine disorders w CC	1.0638	4.3	5.4
645	Yes	No	10	MED	Endocrine disorders w/o CC/MCC	0.8310	3.2	3.9
652	No	No	11	SURG	Kidney transplant	3.0654	6.6	7.9
653	Yes	No	11	SURG	Major bladder procedures w MCC	4.5710	13.3	16.8
654	Yes	No	11	SURG	Major bladder procedures w CC	3.1860	8.8	10.1
655	Yes	No	11	SURG	Major bladder procedures w/o CC/MCC.	2.7075	5.8	6.6
656	No	No	11	SURG	Kidney & ureter procedures for neoplasm w MCC.	2.6603	8.4	10.8
657	No	No	11	SURG	Kidney & ureter procedures for neoplasm w CC.	1.8997	5.1	6.1

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
658	No	No	11	SURG	Kidney & ureter procedures for neoplasm w/o CC/MCC.	1.6556	3.3	3.8
659	Yes	No	11	SURG	Kidney & ureter procedures for non-neoplasm w MCC.	2.8119	8.2	11.3
660	Yes	No	11	SURG	Kidney & ureter procedures for non-neoplasm w CC.	2.0605	4.8	6.5
661	Yes	No	11	SURG	Kidney & ureter procedures for non-neoplasm w/o CC/MCC.	1.4004	2.6	3.3
662	No	No	11	SURG	Minor bladder procedures w MCC	2.0375	7.3	10.5
663	No	No	11	SURG	Minor bladder procedures w CC	1.4254	3.6	5.3
664	No	No	11	SURG	Minor bladder procedures w/o CC/MCC.	1.0388	1.6	2.1
665	No	No	11	SURG	Prostatectomy w MCC	2.1393	9.3	12.2
666	No	No	11	SURG	Prostatectomy w CC	1.4691	4.3	6.3
667	No	No	11	SURG	Prostatectomy w/o CC/MCC	0.9335	2.0	2.7
668	No	No	11	SURG	Transurethral procedures w MCC	1.7208	6.3	8.6
669	No	No	11	SURG	Transurethral procedures w CC	1.2079	3.1	4.4
670	No	No	11	SURG	Transurethral procedures w/o CC/MCC.	0.8838	1.9	2.5
671	No	No	11	SURG	Urethral procedures w CC/MCC	1.2808	3.9	5.8
672	No	No	11	SURG	Urethral procedures w/o CC/MCC	0.8422	1.9	2.5
673	No	No	11	SURG	Other kidney & urinary tract procedures w MCC.	2.5235	6.0	10.2
674	No	No	11	SURG	Other kidney & urinary tract procedures w CC.	2.1024	4.0	6.6
675	No	No	11	SURG	Other kidney & urinary tract procedures w/o CC/MCC.	1.7196	1.4	1.9
682	Yes	No	11	MED	Renal failure w MCC	1.4664	5.3	7.3
683	Yes	No	11	MED	Renal failure w CC	1.1942	4.5	5.7
684	Yes	No	11	MED	Renal failure w/o CC/MCC	0.9835	3.1	3.8
685	No	No	11	MED	Admit for renal dialysis	0.8599	2.4	3.5
686	No	No	11	MED	Kidney & urinary tract neoplasms w MCC.	1.4513	6.0	8.1
687	No	No	11	MED	Kidney & urinary tract neoplasms w CC.	1.1147	4.0	5.3
688	No	No	11	MED	Kidney & urinary tract neoplasms w/o CC/MCC.	0.8577	2.5	3.2
689	Yes	No	11	MED	Kidney & urinary tract infections w MCC.	1.0587	5.0	6.4
690	Yes	No	11	MED	Kidney & urinary tract infections w/o MCC.	0.8000	3.6	4.3
691	No	No	11	MED	Urinary stones w esw lithotripsy w CC/MCC.	1.1508	3.0	4.2
692	No	No	11	MED	Urinary stones w esw lithotripsy w/o CC/MCC.	0.9457	1.8	2.3
693	No	No	11	MED	Urinary stones w/o esw lithotripsy w MCC.	1.0459	3.9	5.2
694	No	No	11	MED	Urinary stones w/o esw lithotripsy w/o MCC.	0.7110	2.0	2.6
695	No	No	11	MED	Kidney & urinary tract signs & symptoms w MCC.	0.9422	4.3	5.7
696	No	No	11	MED	Kidney & urinary tract signs & symptoms w/o MCC.	0.6276	2.6	3.2
697	No	No	11	MED	Urethral stricture	0.7223	2.4	3.3
698	Yes	No	11	MED	Other kidney & urinary tract diagnoses w MCC.	1.3017	5.1	6.8
699	Yes	No	11	MED	Other kidney & urinary tract diagnoses w CC.	1.0352	3.8	4.9
700	Yes	No	11	MED	Other kidney & urinary tract diagnoses w/o CC/MCC.	0.8232	2.7	3.5
707	No	No	12	SURG	Major male pelvic procedures w CC/MCC.	1.5521	3.5	4.5
708	No	No	12	SURG	Major male pelvic procedures w/o CC/MCC.	1.1858	2.0	2.4
709	No	No	12	SURG	Penis procedures w CC/MCC	1.6134	3.6	6.5
710	No	No	12	SURG	Penis procedures w/o CC/MCC	1.2986	1.5	1.9
711	No	No	12	SURG	Testes procedures w CC/MCC	1.6051	5.3	7.8
712	No	No	12	SURG	Testes procedures w/o CC/MCC	1.0842	2.1	3.0

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
713	No	No	12	SURG	Transurethral prostatectomy w CC/MCC.	0.9850	2.9	4.2
714	No	No	12	SURG	Transurethral prostatectomy w/o CC/MCC.	0.6710	1.7	2.0
715	No	No	12	SURG	Other male reproductive system O.R. proc for malignancy w CC/MCC.	1.5300	3.8	6.1
716	No	No	12	SURG	Other male reproductive system O.R. proc for malignancy w/o CC/MCC.	1.1310	1.3	1.5
717	No	No	12	SURG	Other male reproductive system O.R. proc exc malignancy w CC/MCC.	1.5653	5.0	7.5
718	No	No	12	SURG	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC.	1.0329	2.1	2.7
722	No	No	12	MED	Malignancy, male reproductive system w MCC.	1.2827	5.6	7.4
723	No	No	12	MED	Malignancy, male reproductive system w CC.	1.0603	4.2	5.4
724	No	No	12	MED	Malignancy, male reproductive system w/o CC/MCC.	0.7677	2.5	3.3
725	No	No	12	MED	Benign prostatic hypertrophy w MCC	0.9071	4.4	5.7
726	No	No	12	MED	Benign prostatic hypertrophy w/o MCC.	0.6886	2.8	3.5
727	No	No	12	MED	Inflammation of the male reproductive system w MCC.	1.0083	5.1	6.5
728	No	No	12	MED	Inflammation of the male reproductive system w/o MCC.	0.7241	3.3	4.0
729	No	No	12	MED	Other male reproductive system diagnoses w CC/MCC.	0.9542	3.7	5.1
730	No	No	12	MED	Other male reproductive system diagnoses w/o CC/MCC.	0.7058	2.4	3.2
734	No	No	13	SURG	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC.	2.0185	5.8	7.6
735	No	No	13	SURG	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC.	1.3798	3.0	3.5
736	No	No	13	SURG	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC.	3.2108	11.5	13.9
737	No	No	13	SURG	Uterine & adnexa proc for ovarian or adnexal malignancy w CC.	2.1022	6.2	7.4
738	No	No	13	SURG	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC.	1.6754	3.5	3.9
739	No	No	13	SURG	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC.	2.2081	7.9	10.2
740	No	No	13	SURG	Uterine,adnexa proc for non-ovarian/adnexal malig w CC.	1.4577	4.4	5.2
741	No	No	13	SURG	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC.	1.0308	2.8	3.1
742	No	No	13	SURG	Uterine & adnexa proc for non-malignancy w CC/MCC.	1.2422	3.5	4.6
743	No	No	13	SURG	Uterine & adnexa proc for non-malignancy w/o CC/MCC.	0.8672	2.1	2.3
744	No	No	13	SURG	D&C, conization, laparascopy & tubal interruption w CC/MCC.	1.1896	4.0	5.8
745	No	No	13	SURG	D&C, conization, laparascopy & tubal interruption w/o CC/MCC.	0.8660	2.1	2.5
746	No	No	13	SURG	Vagina, cervix & vulva procedures w CC/MCC.	1.0488	3.0	4.1
747	No	No	13	SURG	Vagina, cervix & vulva procedures w/o CC/MCC.	0.8499	1.7	1.9
748	No	No	13	SURG	Female reproductive system reconstructive procedures.	0.7916	1.5	1.8
749	No	No	13	SURG	Other female reproductive system O.R. procedures w CC/MCC.	2.2813	7.1	9.8
750	No	No	13	SURG	Other female reproductive system O.R. procedures w/o CC/MCC.	1.4993	2.6	3.3
754	No	No	13	MED	Malignancy, female reproductive system w MCC.	1.5596	6.4	8.9
755	No	No	13	MED	Malignancy, female reproductive system w CC.	1.1608	4.2	5.6

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
756	No	No	13	MED	Malignancy, female reproductive system w/o CC/MCC.	0.7702	2.5	3.3
757	No	No	13	MED	Infections, female reproductive system w MCC.	1.4328	6.8	8.9
758	No	No	13	MED	Infections, female reproductive system w CC.	1.1147	4.9	6.1
759	No	No	13	MED	Infections, female reproductive system w/o CC/MCC.	0.9609	3.7	4.6
760	No	No	13	MED	Menstrual & other female reproductive system disorders w CC/MCC.	0.6910	2.9	3.8
761	No	No	13	MED	Menstrual & other female reproductive system disorders w/o CC/MCC.	0.5569	2.0	2.5
765	No	No	14	SURG	Cesarean section w CC/MCC	0.9943	4.1	5.3
766	No	No	14	SURG	Cesarean section w/o CC/MCC	0.7664	3.0	3.2
767	No	No	14	SURG	Vaginal delivery w sterilization &/or D&C.	0.7246	2.5	2.9
768	No	No	14	SURG	Vaginal delivery w O.R. proc except steril &/or D&C.	1.7348	4.7	5.8
769	No	No	14	SURG	Postpartum & post abortion diagnoses w O.R. procedure.	1.9114	3.2	5.7
770	No	No	14	SURG	Abortion w D&C, aspiration curettage or hysterotomy.	0.7336	1.6	2.6
774	No	No	14	MED	Vaginal delivery w complicating diagnoses.	0.5914	2.6	3.2
775	No	No	14	MED	Vaginal delivery w/o complicating diagnoses.	0.4461	2.1	2.3
776	No	No	14	MED	Postpartum & post abortion diagnoses w/o O.R. procedure.	0.6460	2.6	3.5
777	No	No	14	MED	Ectopic pregnancy	0.7087	1.8	2.1
778	No	No	14	MED	Threatened abortion	0.3744	2.0	2.8
779	No	No	14	MED	Abortion w/o D&C	0.6013	1.7	2.6
780	No	No	14	MED	False labor	0.2845	1.3	2.7
781	No	No	14	MED	Other antepartum diagnoses w medical complications.	0.5689	2.7	3.9
782	No	No	14	MED	Other antepartum diagnoses w/o medical complications.	0.4297	1.7	2.8
789	No	No	15	MED	Neonates, died or transferred to another acute care facility.	1.4250	*	*
790	No	No	15	MED	Extreme immaturity or respiratory distress syndrome, neonate.	4.6990	*	*
791	No	No	15	MED	Prematurity w major problems	3.2093	*	*
792	No	No	15	MED	Prematurity w/o major problems	1.9364	*	*
793	No	No	15	MED	Full term neonate w major problems	3.2966	*	*
794	No	No	15	MED	Neonate w other significant problems	1.1668	*	*
795	No	No	15	MED	Normal newborn	0.1580	*	*
799	No	No	16	SURG	Splenectomy w MCC	3.9513	10.7	14.3
800	No	No	16	SURG	Splenectomy w CC	2.7617	6.4	8.2
801	No	No	16	SURG	Splenectomy w/o CC/MCC	2.3252	3.7	4.8
802	No	No	16	SURG	Other O.R. proc of the blood & blood forming organs w MCC.	2.7940	9.1	12.8
803	No	No	16	SURG	Other O.R. proc of the blood & blood forming organs w CC.	1.8259	4.7	6.5
804	No	No	16	SURG	Other O.R. proc of the blood & blood forming organs w/o CC/MCC.	1.4754	2.4	3.2
808	No	No	16	MED	Major hematol/immun diag exc sickle cell crisis & coagul w MCC.	1.6171	6.0	8.0
809	No	No	16	MED	Major hematol/immun diag exc sickle cell crisis & coagul w CC.	1.2031	3.9	5.0
810	No	No	16	MED	Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC.	1.0741	3.1	3.9
811	No	No	16	MED	Red blood cell disorders w MCC	1.0006	4.0	5.5
812	No	No	16	MED	Red blood cell disorders w/o MCC	0.7780	2.8	3.7
813	No	No	16	MED	Coagulation disorders	1.3426	3.8	5.2
814	No	No	16	MED	Reticuloendothelial & immunity disorders w MCC.	1.3226	5.3	7.2
815	No	No	16	MED	Reticuloendothelial & immunity disorders w CC.	1.0233	3.9	4.9

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
816	No	No	16	MED	Reticuloendothelial & immunity disorders w/o CC/MCC.	0.7990	2.7	3.4
820	No	No	17	SURG	Lymphoma & leukemia w major O.R. procedure w MCC.	4.4970	13.8	18.4
821	No	No	17	SURG	Lymphoma & leukemia w major O.R. procedure w CC.	2.6847	5.4	7.8
822	No	No	17	SURG	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC.	1.5989	2.7	3.7
823	No	No	17	SURG	Lymphoma & non-acute leukemia w other O.R. proc w MCC.	3.5188	12.0	15.4
824	No	No	17	SURG	Lymphoma & non-acute leukemia w other O.R. proc w CC.	2.5164	6.6	8.8
825	No	No	17	SURG	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC.	1.6201	3.3	4.7
826	No	No	17	SURG	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC.	3.9780	13.0	17.4
827	No	No	17	SURG	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC.	2.4230	5.7	7.5
828	No	No	17	SURG	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC.	1.5109	2.9	3.7
829	No	No	17	SURG	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC.	2.4894	6.9	10.5
830	No	No	17	SURG	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC.	1.6396	2.5	3.5
834	No	No	17	MED	Acute leukemia w/o major O.R. procedure w MCC.	3.6361	8.9	14.7
835	No	No	17	MED	Acute leukemia w/o major O.R. procedure w CC.	2.5626	5.3	8.2
836	No	No	17	MED	Acute leukemia w/o major O.R. procedure w/o CC/MCC.	2.1785	3.4	5.1
837	No	No	17	MED	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC.	4.7788	17.2	22.7
838	No	No	17	MED	Chemo w acute leukemia as sdx w CC or high dose chemo agent.	2.9919	6.2	9.0
839	No	No	17	MED	Chemo w acute leukemia as sdx w/o CC/MCC.	2.3980	4.9	6.1
840	Yes	No	17	MED	Lymphoma & non-acute leukemia w MCC.	2.1454	6.8	9.6
841	Yes	No	17	MED	Lymphoma & non-acute leukemia w CC.	1.6444	5.0	6.6
842	Yes	No	17	MED	Lymphoma & non-acute leukemia w/o CC/MCC.	1.2188	3.2	4.3
843	No	No	17	MED	Other myeloprolif dis or poorly diff neopl diag w MCC.	1.6341	6.3	8.7
844	No	No	17	MED	Other myeloprolif dis or poorly diff neopl diag w CC.	1.2403	4.5	6.0
845	No	No	17	MED	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC.	0.9664	3.3	4.3
846	No	No	17	MED	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC.	1.6523	5.8	8.5
847	No	No	17	MED	Chemotherapy w/o acute leukemia as secondary diagnosis w CC.	1.0296	2.7	3.3
848	No	No	17	MED	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC.	0.9116	2.3	2.9
849	No	No	17	MED	Radiotherapy	1.2663	4.3	6.0
853	Yes	No	18	SURG	Infectious & parasitic diseases w O.R. procedure w MCC.	5.1840	12.8	16.8
854	Yes	No	18	SURG	Infectious & parasitic diseases w O.R. procedure w CC.	3.9291	9.1	11.2
855	Yes	No	18	SURG	Infectious & parasitic diseases w O.R. procedure w/o CC/MCC.	3.3662	5.6	7.3
856	Yes	No	18	SURG	Postoperative or post-traumatic infections w O.R. proc w MCC.	3.9257	12.1	16.2
857	Yes	No	18	SURG	Postoperative or post-traumatic infections w O.R. proc w CC.	2.4919	6.8	8.9
858	Yes	No	18	SURG	Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC.	2.0996	4.7	6.0

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
862	Yes	No	18	MED	Postoperative & post-traumatic infections w MCC.	1.5454	6.2	8.3
863	Yes	No	18	MED	Postoperative & post-traumatic infections w/o MCC.	1.0560	4.2	5.2
864	No	No	18	MED	Fever of unknown origin	0.8240	3.2	4.1
865	No	No	18	MED	Viral illness w MCC	1.2074	4.9	6.8
866	No	No	18	MED	Viral illness w/o MCC	0.7527	2.8	3.5
867	Yes	No	18	MED	Other infectious & parasitic diseases diagnoses w MCC.	2.1971	7.2	9.9
868	Yes	No	18	MED	Other infectious & parasitic diseases diagnoses w CC.	1.5258	4.6	5.9
869	Yes	No	18	MED	Other infectious & parasitic diseases diagnoses w/o CC/MCC.	1.3611	3.5	4.4
870	Yes	No	18	MED	Septicemia w MV 96+ hours	5.7579	12.6	15.3
871	Yes	No	18	MED	Septicemia w/o MV 96+ hours w MCC	1.7484	5.6	7.7
872	Yes	No	18	MED	Septicemia w/o MV 96+ hours w/o MCC.	1.3783	4.7	5.8
876	No	No	19	SURG	O.R. procedure w principal diagnoses of mental illness.	2.4632	6.9	11.4
880	No	No	19	MED	Acute adjustment reaction & psychosocial dysfunction.	0.6085	2.4	3.2
881	No	No	19	MED	Depressive neuroses	0.5198	3.1	4.2
882	No	No	19	MED	Neuroses except depressive	0.5685	3.1	4.4
883	No	No	19	MED	Disorders of personality & impulse control.	0.8999	4.6	7.4
884	Yes	No	19	MED	Organic disturbances & mental retardation.	0.8431	4.0	5.4
885	No	No	19	MED	Psychoses	0.7783	5.5	7.6
886	No	No	19	MED	Behavioral & developmental disorders	0.6983	4.0	5.9
887	No	No	19	MED	Other mental disorder diagnoses	0.8341	3.1	4.6
894	No	No	20	MED	Alcohol/drug abuse or dependence, left ama.	0.3571	2.1	3.0
895	No	No	20	MED	Alcohol/drug abuse or dependence w rehabilitation therapy.	0.7557	8.2	10.5
896	Yes	No	20	MED	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC.	1.0419	4.8	6.6
897	Yes	No	20	MED	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC.	0.6145	3.3	4.1
901	No	No	21	SURG	Wound debridements for injuries w MCC.	2.8534	9.3	14.4
902	No	No	21	SURG	Wound debridements for injuries w CC.	1.8611	5.7	7.9
903	No	No	21	SURG	Wound debridements for injuries w/o CC/MCC.	1.4966	3.5	4.9
904	No	No	21	SURG	Skin grafts for injuries w CC/MCC	2.5246	7.2	12.2
905	No	No	21	SURG	Skin grafts for injuries w/o CC/MCC	1.5926	3.5	4.7
906	No	No	21	SURG	Hand procedures for injuries	0.9803	2.2	3.3
907	Yes	No	21	SURG	Other O.R. procedures for injuries w MCC.	3.1030	8.1	11.7
908	Yes	No	21	SURG	Other O.R. procedures for injuries w CC.	2.1865	5.0	6.9
909	Yes	No	21	SURG	Other O.R. procedures for injuries w/o CC/MCC.	1.4112	2.7	3.6
913	No	No	21	MED	Traumatic injury w MCC	1.0631	4.6	6.2
914	No	No	21	MED	Traumatic injury w/o MCC	0.6890	2.7	3.4
915	No	No	21	MED	Allergic reactions w MCC	0.8660	3.3	4.7
916	No	No	21	MED	Allergic reactions w/o MCC	0.4986	1.7	2.1
917	Yes	No	21	MED	Poisoning & toxic effects of drugs w MCC.	1.1717	3.7	5.2
918	Yes	No	21	MED	Poisoning & toxic effects of drugs w/o MCC.	0.6886	2.1	2.7
919	No	No	21	MED	Complications of treatment w MCC	1.2830	4.4	6.2
920	No	No	21	MED	Complications of treatment w CC	0.9797	3.2	4.3
921	No	No	21	MED	Complications of treatment w/o CC/MCC.	0.7101	2.3	2.9
922	No	No	21	MED	Other injury, poisoning & toxic effect diag w MCC.	1.1338	4.1	6.0

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
923	No	No	21	MED	Other injury, poisoning & toxic effect diag w/o MCC.	0.7071	2.4	3.3
927	No	No	22	SURG	Extensive burns or full thickness burns w MV 96+ hrs w skin graft.	12.3042	23.0	28.8
928	No	No	22	SURG	Full thickness burn w skin graft or inhal inj w CC/MCC.	4.3956	12.1	16.2
929	No	No	22	SURG	Full thickness burn w skin graft or inhal inj w/o CC/MCC.	2.3533	5.6	7.7
933	No	No	22	MED	Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft.	2.6626	2.7	5.9
934	No	No	22	MED	Full thickness burn w/o skin grft or inhal inj.	1.3745	4.7	6.8
935	No	No	22	MED	Non-extensive burns	1.1605	3.7	5.5
939	No	No	23	SURG	O.R. proc w diagnoses of other contact w health services w MCC.	2.1672	7.5	10.9
940	No	No	23	SURG	O.R. proc w diagnoses of other contact w health services w CC.	1.6823	4.4	6.4
941	No	No	23	SURG	O.R. proc w diagnoses of other contact w health services w/o CC/MCC.	1.3531	2.3	3.0
945	Yes	No	23	MED	Rehabilitation w CC/MCC	1.1005	8.4	10.3
946	Yes	No	23	MED	Rehabilitation w/o CC/MCC	1.0143	7.0	7.9
947	Yes	No	23	MED	Signs & symptoms w MCC	0.8767	3.8	5.0
948	Yes	No	23	MED	Signs & symptoms w/o MCC	0.6542	2.7	3.4
949	No	No	23	MED	Aftercare w CC/MCC	0.7323	2.5	4.1
950	No	No	23	MED	Aftercare w/o CC/MCC	0.5948	2.4	3.4
951	No	No	23	MED	Other factors influencing health status	0.6109	2.1	3.8
955	No	No	24	SURG	Craniotomy for multiple significant trauma.	5.1028	8.5	12.2
956	Yes	Yes	24	SURG	Limb reattachment, hip & femur proc for multiple significant trauma.	3.4854	7.6	9.5
957	No	No	24	SURG	Other O.R. procedures for multiple significant trauma w MCC.	5.7960	10.5	16.0
958	No	No	24	SURG	Other O.R. procedures for multiple significant trauma w CC.	4.4786	7.9	10.5
959	No	No	24	SURG	Other O.R. procedures for multiple significant trauma w/o CC/MCC.	3.6988	4.9	6.1
963	No	No	24	MED	Other multiple significant trauma w MCC.	2.2985	6.3	9.3
964	No	No	24	MED	Other multiple significant trauma w CC.	1.7015	5.0	6.3
965	No	No	24	MED	Other multiple significant trauma w/o CC/MCC.	1.4108	3.3	4.1
969	No	No	25	SURG	HIV w extensive O.R. procedure w MCC.	5.1395	13.5	18.7
970	No	No	25	SURG	HIV w extensive O.R. procedure w/o MCC.	3.6849	6.6	9.5
974	No	No	25	MED	HIV w major related condition w MCC	2.1382	7.4	10.4
975	No	No	25	MED	HIV w major related condition w CC	1.5918	5.3	7.3
976	No	No	25	MED	HIV w major related condition w/o CC/MCC.	1.3357	3.8	4.9
977	No	No	25	MED	HIV w or w/o other related condition	1.0387	3.8	5.3
981	Yes	No		SURG	Extensive O.R. procedure unrelated to principal diagnosis w MCC.	4.5168	11.9	15.3
982	Yes	No		SURG	Extensive O.R. procedure unrelated to principal diagnosis w CC.	3.5417	7.8	10.0
983	Yes	No		SURG	Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC.	2.9737	3.9	5.4
984	No	No		SURG	Prostatic O.R. procedure unrelated to principal diagnosis w MCC.	2.7217	11.7	14.6
985	No	No		SURG	Prostatic O.R. procedure unrelated to principal diagnosis w CC.	2.0865	7.4	9.7
986	No	No		SURG	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC.	1.6706	3.5	5.1
987	Yes	No		SURG	Non-extensive O.R. proc unrelated to principal diagnosis w MCC.	2.8500	9.9	13.2
988	Yes	No		SURG	Non-extensive O.R. proc unrelated to principal diagnosis w CC.	2.0134	5.9	8.0

TABLE 5.—LIST OF MEDICARE SEVERITY-DIAGNOSIS RELATED GROUPS (MS–DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—Continued

MS–DRG	FY 2008 final rule post-acute DRG	FY 2008 final rule special pay DRG	MDC	TYPE	MS–DRG title	Weights	Geometric mean LOS	Arithmetic mean LOS
989	Yes	No		SURG	Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC.	1.6310	2.9	4.1
998	No	No		**	Principal diagnosis invalid as discharge diagnosis.	N/A	*	*
999	No	No		**	Ungroupable	N/A	*	*

MS–DRGs 998 and 999 contain cases that could not be assigned to valid DRGs.

Note: If there is no value or asterisk in either the geometric mean length of stay or the arithmetic mean length of stay columns, the volume of cases is insufficient to obtain a meaningful computation of these statistics.

TABLE 6A.—NEW DIAGNOSIS CODES

Diagnosis code	Description	CC	MDC	MS–DRG
040.41	Infant botulism	Y	15	791 [1], 793 [1]
		CC	18	867, 868, 869
040.42	Wound botulism	Y	18	867, 868, 869
		CC		
058.10	Roseola infantum, unspecified	N	15	791 [1], 793 [1]
			18	865, 866
058.11	Roseola infantum due to human herpesvirus 6	N	15	791 [1], 793 [1]
			18	865, 866
058.12	Roseola infantum due to human herpesvirus 7	N	15	791 [1], 793 [1]
			18	865, 866
058.21	Human herpesvirus 6 encephalitis	Y	1	23,24,97, 98, 99
		MCC		
			15	791 [1], 793 [1]
			25	974, 975, 976
058.29	Other human herpesvirus encephalitis	Y	1	23, 24, 97, 98, 99
		MCC		
			15	791 [1], 793 [1]
			25	974, 975, 976
058.81	Human herpesvirus 6 infection	N	9	606, 607
058.82	Human herpesvirus 7 infection	N	9	606, 607
058.89	Other human herpesvirus infection	N	9	606, 607
079.83	Parvovirus B19	Y	18	865, 866
		CC		
200.30	Marginal zone lymphoma, unspecified site, extranodal and solid organ sites	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.31	Marginal zone lymphoma, lymph nodes of head, face, and neck	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.32	Marginal zone lymphoma, intrathoracic lymph nodes	Y	17	820, 821, 822,
		CC		823, 824, 825,840, 841, 842
			25	974, 975, 976
200.33	Marginal zone lymphoma, intraabdominal lymph nodes	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.34	Marginal zone lymphoma, lymph nodes of axilla and upper limb	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.35	Marginal zone lymphoma, lymph nodes of inguinal region and lower limb	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.36	Marginal zone lymphoma, intrapelvic lymph nodes	Y	17	820, 821, 822,
		CC		823, 824, 825, 840, 841, 842
			25	974, 975, 976

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	MS–DRG
200.37	Marginal zone lymphoma, spleen	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.38	Marginal zone lymphoma, lymph nodes of multiple sites	Y CC	17	820, 821, 822, 823, 824, 825,840, 841, 842
			25	974, 975, 976
200.40	Mantle cell lymphoma, unspecified site, extranodal and solid organ sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.41	Mantle cell lymphoma, lymph nodes of head, face, and neck	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.42	Mantle cell lymphoma, intrathoracic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.43	Mantle cell lymphoma, intra-abdominal lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.44	Mantle cell lymphoma, lymph nodes of axilla and upper limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.45	Mantle cell lymphoma, lymph nodes of inguinal region and lower limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.46	Mantle cell lymphoma, intrapelvic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841,842
			25	974, 975, 976
200.47	Mantle cell lymphoma, spleen	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.48	Mantle cell lymphoma, lymph nodes of multiple sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.50	Primary central nervous system lymphoma, unspecified site, extranodal and solid organ sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.51	Primary central nervous system lymphoma, lymph nodes of head, face, and neck	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.52	Primary central nervous system lymphoma, intrathoracic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.53	Primary central nervous system lymphoma, intra-abdominal lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.54	Primary central nervous system lymphoma, lymph nodes of axilla and upper limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.55	Primary central nervous system lymphoma, lymph nodes of inguinal region and lower limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	MS–DRG
200.56	Primary central nervous system lymphoma, intrapelvic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.57	Primary central nervous system lymphoma, spleen	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.58	Primary central nervous system lymphoma, lymph nodes of multiple sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.60	Anaplastic large cell lymphoma, unspecified site, extranodal and solid organ sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.61	Anaplastic large cell lymphoma, lymph nodes of head, face, and neck	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.62	Anaplastic large cell lymphoma, intrathoracic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.63	Anaplastic large cell lymphoma, intra-abdominal lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.64	Anaplastic large cell lymphoma, lymph nodes of axilla and upper limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.65	Anaplastic large cell lymphoma, lymph nodes of inguinal region and lower limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.66	Anaplastic large cell lymphoma, intrapelvic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.67	Anaplastic large cell lymphoma, spleen	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.68	Anaplastic large cell lymphoma, lymph nodes of multiple sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.70	Large cell lymphoma, unspecified site, extranodal and solid organ sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.71	Large cell lymphoma, lymph nodes of head, face, and neck	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841,842
			25	974, 975, 976
200.72	Large cell lymphoma, intrathoracic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.73	Large cell lymphoma, intra-abdominal lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841,842
			25	974, 975, 976
200.74	Large cell lymphoma, lymph nodes of axilla and upper limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841,842
			25	974, 975, 976
200.75	Large cell lymphoma, lymph nodes of inguinal region and lower limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	MS–DRG
			25	974, 975, 976
200.76	Large cell lymphoma, intrapelvic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.77	Large cell lymphoma, spleen	Y CC	17	820,821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
200.78	Large cell lymphoma, lymph nodes of multiple sites	Y CC	17	820,821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.70	Peripheral T cell lymphoma, unspecified site, extranodal and solid organ sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.71	Peripheral T cell lymphoma, lymph nodes of head, face, and neck	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.72	Peripheral T cell lymphoma, intrathoracic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.73	Peripheral T cell lymphoma, intra-abdominal lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.74	Peripheral T cell lymphoma, lymph nodes of axilla and upper limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.75	Peripheral T cell lymphoma, lymph nodes of inguinal region and lower limb	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.76	Peripheral T cell lymphoma, intrapelvic lymph nodes	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.77	Peripheral T cell lymphoma, spleen	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
202.78	Peripheral T cell lymphoma, lymph nodes of multiple sites	Y CC	17	820, 821, 822, 823, 824, 825, 840, 841, 842
			25	974, 975, 976
233.30	Carcinoma in situ, unspecified female genital organ	N	13	739, 740, 741, 744, 745, 754, 755, 756
233.31	Carcinoma in situ, vagina	N	13	739, 740, 741, 744, 745, 754, 755, 756
233.32	Carcinoma in situ, vulva	N	13	739, 740, 741, 744, 745, 754, 755, 756
233.39	Carcinoma in situ, other female genital organ	N	13	739, 740, 741, 744, 745, 754, 755, 756
255.41	Glucocorticoid deficiency	Y CC	10	643, 644, 645
255.42	Mineralocorticoid deficiency	Y CC	10	643, 644, 645
258.01	Multiple endocrine neoplasia [MEN] type I	N	10	643, 644, 645
258.02	Multiple endocrine neoplasia [MEN] type IIA	N	10	643, 644, 645
258.03	Multiple endocrine neoplasia [MEN] type IIB	N	10	643, 644, 645
284.81	Red cell aplasia (acquired) (adult) (with thymoma)	Y	16	808, 809, 810
		MCC	25	977
284.89	Other specified aplastic anemias	Y	16	808, 809, 810

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	MS–DRG
		MCC	25	977
288.66	Bandemia	N	16	814, 815, 816
315.34	Speech and language developmental delay due to hearing loss	N	19	886
331.5	Idiopathic normal pressure hydrocephalus (INPH)	Y	1	56, 57
		CC		
359.21	Myotonic muscular dystrophy	N	1	91, 92, 93
359.22	Myotonia congenita	N	1	91, 92, 93
359.23	Myotonic chondrodystrophy	N	1	91, 92, 93
359.24	Drug induced myotonia	N	1	91, 92, 93
359.29	Other specified myotonic disorder	N	1	91, 92, 93
364.81	Floppy iris syndrome	N	2	124, 125
364.89	Other disorders of iris and ciliary body	N	2	124, 125
388.45	Acquired auditory processing disorder	N	19	886
389.05	Conductive hearing loss, unilateral	N	3	154, 155, 156
389.06	Conductive hearing loss, bilateral	N	3	154, 155, 156
389.13	Neural hearing loss, unilateral	N	3	154, 155, 156
389.17	Sensory hearing loss, unilateral	N	3	154, 155, 156
389.20	Mixed hearing loss, unspecified	N	3	154, 155, 156
389.21	Mixed hearing loss, unilateral	N	3	154, 155, 156
389.22	Mixed hearing loss, bilateral	N	3	154, 155, 156
414.2	Chronic total occlusion of coronary artery	N	5	302, 303
415.12	Septic pulmonary embolism	Y	4	175,176
		MCC	15	791 [1], 793 [1]
423.3	Cardiac tamponade	Y	5	314, 315, 316
		CC		
440.4	Chronic total occlusion of artery of the extremities	N	5	299, 300, 301
449	Septic arterial embolism	Y	5	299, 300, 301
		CC	15	791 [1], 793 [1]
488	Influenza due to identified avian influenza virus	N	3	152, 153
525.71	Osseointegration failure of dental implant	N	PRE	11, 12, 13
			3	157, 158, 159
525.72	Post-osseointegration biological failure of dental implant	N	PRE	11, 12, 13
			3	157, 158, 159
525.73	Post-osseointegration mechanical failure of dental implant	N	PRE	11, 12, 13
			3	157, 158, 159
525.79	Other endosseous dental implant failure	N	PRE	11, 12, 13
			3	157, 158, 159
569.43	Anal sphincter tear (healed) (old)	N	6	393, 394, 395
624.01	Vulvar intraepithelial neoplasial [VIN I]	N	13	742, 743, 760, 761
624.02	Vulvar intraepithelial neoplasia II [VIN II]	N	13	742, 743, 760, 761
624.09	Other dystrophy of vulva	N	13	742, 743, 760, 761
664.60	Anal sphincter tear complicating delivery, not associated with third-degree perineal laceration, unspecified as to episode of care or not applicable.	N	14	765, 766, 767, 768, 774, 775
664.61	Anal sphincter tear complicating delivery, not associated with third-degree perineal laceration, delivered, with or without mention of antepartum condition.	Y	14	765, 766, 767,
		CC		768, 774,775
664.64	Anal sphincter tear complicating delivery, not associated with third-degree perineal laceration, postpartum condition or complication.	Y	14	769, 776
		CC		
733.45	Aseptic necrosis of bone, jaw	Y	8	553, 554
		CC		
787.20	Dysphagia, unspecified	N	6	391, 392
787.21	Dysphagia, oral phase	N	6	391, 392
787.22	Dysphagia, oropharyngeal phase	N	6	391, 392
787.23	Dysphagia, pharyngeal phase	N	6	391, 392
787.24	Dysphagia, pharyngoesophageal phase	N	6	391, 392
787.29	Other dysphagia	N	6	391, 392
789.51	Malignant ascites	Y	23	947, 948
		CC		
789.59	Other ascites	Y	23	947, 948
		CC		
999.31 *	Infection due to central venous catheter	Y	5	314, 315, 316
		CC		
999.39 *	Infection following other infusion, injection, transfusion, or vaccination	Y	15	791 [1], 793 [1]
		CC	18	856, 857, 858, 867, 868, 869
V12.53	Personal history of sudden cardiac arrest	N	23	951
V12.54	Personal history of transient ischemic attack (TIA), and cerebral infarction without residual deficits.	N	23	951
V13.22	Personal history of cervical dysplasia	N	17	843, 844, 845

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	MS–DRG
V16.52	Family history of malignant neoplasm,bladder	N	23	951
V17.41	Family history of sudden cardiac death (SCD)	N	23	951
V17.49	Family history of other cardiovascular diseases	N	23	951
V18.11	Family history of multiple endocrine neoplasia [MEN] syndrome	N	23	951
V18.19	Family history of other endocrine and metabolic diseases	N	23	951
V25.04	Counseling and instruction in natural family planning to avoid pregnancy	N	23	951
V26.41	Procreative counseling and advice using natural family planning	N	23	951
V26.49	Other procreative management, counseling and advice	N	23	951
V26.81	Encounter for assisted reproductive fertility procedure cycle	N	23	951
V26.89	Other specified procreative management	N	23	951
V49.85	Dual sensory impairment	N	23	951
V68.01	Disability examination	N	23	951
V68.09	Other issue of medical certificates	N	23	951
V72.12	Encounter for hearing conservation and treatment	N	15	795 [2]
			23	951
V73.81	Special screening examination, Human papillomavirus (HPV)	N	23	951
V84.81	Genetic susceptibility to multiple endocrine neoplasia [MEN]	N	23	951
V84.89	Genetic susceptibility to other disease	N	23	951

MCC—Major Complication or Comorbidity in MS–DRGs.

New codes 629.82, 629.83, 629.84 and V17.40 that were listed in the proposed rule have been deleted. They will not be implemented on October 1, 2007.

[1] Secondary diagnosis of major problem.

[2] On ''Only secondary diagnosis'' list.

* These diagnosis codes were discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting and were not finalized in time to include in the proposed rule. They will be implemented on October 1, 2007.

TABLE 6B.—NEW PROCEDURE CODES

Procedure code	Description	O.R.	MDC	MS–DRG
00.19	Disruption of blood brain barrier via infusion [BBBD]	N.		
00.94 *	Intra-operative neurophysiologic monitoring	N.		
01.10	Intracranial pressure monitoring	N.		
01.16	Intracranial oxygen monitoring	N.		
01.17	Brain temperature monitoring	N.		
07.83 *	Thoracoscopic partial excision of thymus	Y	1	40, 41, 42
			4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.84 *	Thoracoscopic total excision of thymus	Y	1	40, 41, 42
			4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.95 *	Thoracoscopic incision of thymus	Y	1	40, 41, 42
			4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.98 *	Other and unspecified thoracoscopic operations on thymus	Y	1	40, 41, 42
			4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
32.20 *	Thoracoscopic excision of lesion or tissue of lung	Y	4	163, 164, 165
			17	820, 821, 822, 826, 827, 828

TABLE 6B.—NEW PROCEDURE CODES—Continued

Procedure code	Description	O.R.	MDC	MS–DRG
			21	907, 908, 909
			24	957, 958, 959
32.30 *	Thoracoscopic segmental resection of lung	Y	4	163, 164, 165
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
32.39 *	Other and unspecified segmental resection of lung	Y	4	163, 164, 165
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
32.41	Thoracoscopic lobectomy of lung	Y	4	163, 164, 165
			21	907, 908, 909
			24	957, 958, 959
32.49	Other lobectomy of lung	Y	4	163, 164, 165
			21	907, 908, 909
			24	957, 958, 959
32.50 *	Thoracoscopic pneumonectomy	Y	4	163, 164, 165
			21	907, 908, 909
			24	957, 958, 959
32.59 *	Other and unspecified pneumonectomy	Y	4	163, 164, 165
			21	907, 908, 909
			24	957, 958, 959
33.20	Thoracoscopic lung biopsy	Y	4	166, 167, 168
			5	264
			8	515, 516, 517
			11	673, 674, 675
			17	823, 824, 825, 829, 830
34.06	Thoracoscopic drainage of pleural cavity	Y	4	166, 167, 168
34.20	Thoracoscopic pleural biopsy	Y	4	166, 167, 168
34.52	Thoracoscopic decortication of lung	Y	4	163, 164, 165
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
50.13 *	Transjugular liver biopsy	N.		
50.14 *	Laparoscopic liver biopsy	Y	6	356, 357, 358
			7	420, 421, 422
			9	579, 580, 581
			11	673, 674, 675
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
70.53	Repair of cystocele and rectocelewith graft or prosthesis	Y	6	329, 330, 331
			11	653, 654, 655
			13	748
70.54	Repair of cystocele with graft or prosthesis	Y	11	662, 663, 664
			13	748
70.55	Repair of rectocele with graft or prosthesis	Y	6	329, 330, 331
			13	748
70.63	Vaginal construction with graft or prosthesis	Y	13	748
70.64	Vaginal reconstruction with graft or prosthesis	Y	13	748
			21	907, 908, 909
			24	957, 958, 959
70.78	Vaginal suspension and fixation with graft or prosthesis	Y	11	662, 663, 664
			13	748
70.93	Other operations on cul-de-sac with graft or prosthesis	Y	13	746, 747
70.94	Insertion of biological graft	N	.....	
70.95	Insertion of synthetic graft or prosthesis	N	.....	
84.80 *	Insertion or replacement of interspinous process device(s)	Y	1	28, 29, 30
			8	490
			21	907, 908, 909
			24	957, 958, 959
84.81 *	Revision of interspinous process device(s)	Y	8	515, 516, 517
			21	907, 908, 909
			24	957, 958, 959
84.82 *	Insertion or replacement of pedicle-based dynamic stabilization device(s)	Y	1	28, 29, 30

TABLE 6B.—NEW PROCEDURE CODES—Continued

Procedure code	Description	O.R.	MDC	MS–DRG
			8	490
			21	907, 908, 909
			24	957, 958, 959
84.83 *	Revision of pedicle-based dynamic stabilization device(s)	Y	8	515, 516, 517
			21	907, 908, 909
			24	957, 958, 959
84.84 *	Insertion or replacement of facet replacement device(s)	Y	1	28, 29, 30
			8	490
			21	907, 908, 909
			24	957, 958, 959
84.85 *	Revision of facet replacement device(s)	Y	8	515, 516, 517
			21	907, 908, 909
			24	957, 958, 959
88.59	Intra-operative fluorescence vascular angiography	N.		
92.41 *	Intra-operative electron radiation therapy	N.		

* These procedure codes were discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting and were not finalized in time to include in the proposed rule. They will be implemented on October 1, 2007.

TABLE 6C.—INVALID DIAGNOSIS CODES

Diagnosis code	Description	CC	MDC	CMS DRG
233.3	Carcinoma in situ, other and unspecified female genital organs	N	13	354, 355, 363, 366, 367
255.4	Corticoadrenal insufficiency	Y	10	300, 301
258.0	Polyglandular activity in multiple endocrine adenomatosis	N	10	300, 301
284.8	Other specified aplastic anemias	Y	16	574
			25	490
359.2	Myotonic disorders	N	1	34, 35
364.8	Other disorders of iris and ciliary body	N	2	46, 47, 48
389.2	Mixed conductive and sensorineural hearing loss	N	3	73, 74
624.0	Dystrophy of vulva	N	13	358, 359, 369
787.2	Dysphagia	N	6	182, 183, 184
789.5	Ascites	Y	23	463, 464
999.3 *	Complications of medical care, not elsewhere classified, Other infection	Y	15	387 [1], 389 [1]
			18	423, 579
V17.4	Family history of other cardiovascular diseases	N	23	467
V18.1	Family history of other endocrine and metabolic diseases	N	23	467
V26.4	Procreative management,general counseling and advice	N	23	467
V26.8	Other specified procreative management	N	23	467
V68.0	Issue of medical certificates	N	23	467
V84.8	Genetic susceptibility to other disease	N	23	467

The DRG assignments listed are based on the current code assignment in the CMS DRGs.
[1] Secondary diagnosis of major problem.
* This diagnosis code was discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting and was not finalized in time to include in the proposed rule. It will be deleted on October 1, 2007.

TABLE 6D.—INVALID PROCEDURE CODES

Procedure code	Description	O.R.	MDC	CMS–DRG
32.3 *	Segmental resection of lung	Y	4	75
			21	442, 443
			24	486
32.4	Lobectomy of lung	Y	4	75
			21	442, 443
			24	486
32.5 *	Complete pneumonectomy	Y	4	75
			21	442, 443
			24	486
84.58 *	Implantation of interspinous process decompression device	Y	1	531, 532
			8	499, 500
			21	442, 443
			24	486

The DRG assignments listed are based on the current code assignment in the CMS DRGs.
* These procedure codes were discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting and were not finalized in time to include in the proposed rule. They will be deleted on October 1, 2007.

TABLE 6E.—REVISED DIAGNOSIS CODE TITLES

Diagnosis code	Description	CC	MDC	MS–DRG
005.1	Botulism food poisoning	Y	18	867, 868, 869
359.3	Periodic paralysis	N	1	91, 92, 93
389.14	Central hearing loss	N	3	154, 155, 156
389.18	Sensorineural hearing loss, bilateral	N	3	154, 155, 156
389.7	Deaf, nonspeaking, not elsewhere classifiable	N	3	154, 155, 156

TABLE 6F.—REVISED PROCEDURE CODE TITLES

Procedure code	Description	O.R.	MDC	MS–DRG
00.18*	Infusion of immunosuppressive antibody therapy	N		
00.74	Hip bearing surface, metal-on-polyethylene	N		
00.75	Hip bearing surface, metal-on-metal	N		
00.76	Hip bearing surface, ceramic-on-ceramic	N		
00.77	Hip bearing surface, ceramic-on-polyethylene	N		
07.81*	Other partial excision of thymus	Y	1	40, 41, 42
			4	163, 64, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.82*	Other total excision of thymus	Y	1	40, 41, 42
			4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.92*	Other incision of thymus	Y	4	163, 164, 165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
			21	907, 908, 909
			24	957, 958, 959
07.99*	Other and unspecified operations on thymus	Y	4	163, 164,165
			10	628, 629, 630
			16	802, 803, 804
			17	820, 821, 822, 826, 827, 828
34.24	Other pleural biopsy	N		
39.8	Operations on carotid body, carotid sinus and other vascular bodies	Y	1	37, 38, 39
			4	166, 167, 168
			5	252, 253, 254
53.41	Repair of umbilical hernia with graft or prosthesis	Y	6	353, 354, 355 987, 988, 989
53.61	Incisional hernia repair with graft or prosthesis	Y	6	353, 354, 355
			21	907, 908, 909
			24	957, 958, 959 987, 988, 989
53.69	Repair of other hernia of anterior abdominal wall with graft or prosthesis	Y	06	353, 354, 355 987, 988, 989
99.14	Injection or infusion of gamma globulin	N		

*These procedure codes were discussed at the March 22–23, 2007 ICD–9–CM Coordination and Maintenance Committee meeting and were not finalized in time to include in the proposed rule. They will be implemented on October 1, 2007.

BILLING CODE 4120–01–P



Federal Register

Wednesday,
August 22, 2007

Book 2 of 2 Books
Pages 47567–48218

Part II—Continued

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Parts 411, 412, 413, and 489
Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2008 Rates; Final Rule

TABLE 6G - ADDITIONS TO THE CC EXCLUSIONS LIST

CCs that are added to the list are in Table 6G-Additions to the CC Exclusions List. Each of the principal diagnoses is shown with an asterisk, and the revisions to the CC Exclusions List are provided in an indented column immediately following the affected principal diagnosis.

*0010	00589	0092	00865	32351	71123
0010	0085	*0029	00866	32352	71124
0011	0090	0020	00867	32361	71125
0019	0092	0021	00869	32362	71126
0050		0022	0090	32363	71127
0053	07422	0023	0092	32371	71128
0054	09884	0029	1230	32372	71129
00581	09885	0030	*0031	32381	71130
00589	1230	0040	0031	32382	71131
0090	3911	0050	0050	34120	71132
0092	*0021	0053	0053	34121	71133
*0011	0020	0054	0054	34122	71134
0010	0021	00581	00581	*00322	71135
0011	0022	00589	00589	00322	71136
0019	0023	0085	0090	0050	71137
0040	0029	0090	0092	0053	71138
0050	0050	0092	0223	0054	71139
0053	0053	1230	77189	00581	71140
0054	0054	*0030	*00320	00589	71141
00581	00581	0030	0050	0090	71142
00589	00589	0040	0053	0092	71143
0085	0090	0050	0054	*00323	71144
0090	0092	0052	00581	00323	71145
0092	*0022	0053	00589	0050	71146
1230	0020	0054	0090	0053	71147
*0019	0021	00581	0092	0054	71148
0010	0022	00589	*00321	00581	71149
0011	0023	0062	00321	00589	71150
0019	0029	0071	0050	0090	71151
0050	0050	0072	0053	0092	71152
0053	0053	0074	0054	09850	71153
0054	0054	0075	00581	09851	71154
00581	00581	0078	00589	09852	71155
00589	00589	0079	0090	09853	71156
0090	0090	00800	0092	09859	71157
0092	0092	00801	0470	71110	71158
*0020	*0023	00802	0471	71111	71159
0020	0020	00803	0478	71112	71170
0021	0021	00804	0479	71113	71171
0022	0022	00809	0490	71114	71172
0023	0023	0081	0491	71115	71173
0029	0029	0082	09181	71116	71174
0030	0050	0083	09882	71117	71175
0040	0053	0085	10081	71118	71176
0050	0054	00861	32301	71119	71177
0053	00581	00862	32302	71120	71178
0054	00589	00863	32341	71121	71179
00581	0090	00864	32342	71122	71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*00324
00324
0050
0053
0054
00581
00589
0090
0092
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*00329
00329
0050
0053
0054
00581

00589
0090
0092
*0038
0038
0050
0053
0054
00581
00589
0090
0092
*0039
0039
0050
0052
0053
0054
00581
00589
0090
0092
*0040
0040
0050
0053
0054
00581
00589
0090
0092
*0041
0050
0053
0054
00581
00589
0090
0092
*0042
0050
0053
0054

00581
00589
0090
0092
*0043
0050
0053
0054
00581
00589
0090

0092
*0048
0050
0053
0054
00581
00589
0090
0092
*0049
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
04041
04042
1230
*0050
0030
0040
0050
0051
0052
0053
0054

00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
04041
04042
1230
*0051
0030
0040
0050
0051
0052
0053
0054
00581
00589
0090
0092
04041
04042
1230
*0052
0030
0040
0050
0051
0052
0053
0054

00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
*0053
0050
0053
0054
00581
00589
0090
0092
*0054
0050
0053
0054
00581
00589
0090
0092
*00581
0050
0053
0054

00581
00589
0090
0092
*00589
0050
0053
0054
00581
00589
0090
0092
*0059
0050
0053
0054
00581
00589
0090
0092
*0060
0040
0050
0053
0054
00581
00589
0060
0061
0062
0068
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0061
0040
0050
0053
0054

00581
00589
0060
0061
0062
0068
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0062
0040
0050
0053
0054
00581
00589
0062
0068
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0063
0050

0053
0054
00581
00589
0064
0068
0090
0092
*0064
0050
0053
0054
00581
00589
0064
0068
0090
0092
*0065
0050
0053
0054
00581
00589
0065
0068
0090
0092
*0066
0050
0053
0054
00581
00589
0068
0090
0092
*0068
0050
0053
0054
00581
00589
0068
0090
0092
*0069
0040
0050
0053
0054
00581
00589
0062
0071

0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0070
0050
0053
0054
00581
00589
0090
0092
*0071
0040
0050
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0072
0040
0050

0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0073
0040
0050
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0074
0040
0050
0053
0054

00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865

00866
00867
00869
0090
0092
1230
*0075
0030
0040
0050
0052
0053
0054
00581
00589
0060
0061
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0078
0040
0050
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863
00864
00865
00866
00867

00869
0090
0092
1230
*00800
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00801
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00802
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00803
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00804
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00809
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0081
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0082
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0083
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862

00863
00864
00865
00866
00867
00869
0090
0092
1230
*00841
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00842
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00843
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00844
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00845
0030
0050
0051
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00846
0030
0050
0051
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
04041
04042
1230
*00847
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00849
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*0085
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804

00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00861
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00862
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00863
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00864
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00865
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00866
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0090
0092
1230
*00867
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
*00869
0030
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
*0088
0030
0040
0050
0052
0053
0054
00581
00589
0062
0071
0072
0074
0075
0078
0079
00800
00801

00802	0092	01094	01091	01085	01082
00803	1230	01095	01092	01086	01083
00804	*0091	01096	01093	01090	01084
00809	0050	01220	01094	01091	01085
0081	0053	01221	01095	01092	01086
0082	0054	01222	01096	01093	01090
0083	00581	01223	01220	01094	01091
0085	00589	01224	01221	01095	01092
00861	0090	01225	01222	01096	01093
00862	0091	01226	01223	01220	01094
00863	0092	01230	01224	01221	01095
00864	*0092	01231	01225	01222	01096
00865	0050	01232	01226	01223	01220
00866	0053	01233	01230	01224	01221
00867	0054	01234	01231	01225	01222
00869	00581	01235	01232	01226	01223
0090	00589	01236	01233	01230	01224
0092	0090	01280	01234	01231	01225
1230	0092	01281	01235	01232	01226
*0090	*0093	01282	01236	01233	01230
0030	0050	01283	01280	01234	01231
0040	0053	01284	01281	01235	01232
0050	0054	01285	01282	01236	01233
0052	00581	01286	01283	01280	01234
0053	00589	01700	01284	01281	01235
0054	0090	01701	01285	01282	01236
00581	0092	01702	01286	01283	01280
00589	0093	01703	01700	01284	01281
0062	*01000	01704	01701	01285	01282
0071	01000	01705	01702	01286	01283
0072	01001	01706	01703	01700	01284
0074	01002	*01001	01704	01701	01285
0075	01003	01000	01705	01702	01286
0078	01004	01001	01706	01703	01700
0079	01005	01002	*01002	01704	01701
00800	01006	01003	01000	01705	01702
00801	01010	01004	01001	01706	01703
00802	01011	01005	01002	*01003	01704
00803	01012	01006	01003	01000	01705
00804	01013	01010	01004	01001	01706
00809	01014	01011	01005	01002	*01004
0081	01015	01012	01006	01003	01000
0082	01016	01013	01010	01004	01001
0083	01080	01014	01011	01005	01002
0085	01081	01015	01012	01006	01003
00861	01082	01016	01013	01010	01004
00862	01083	01080	01014	01011	01005
00863	01084	01081	01015	01012	01006
00864	01085	01082	01016	01013	01010
00865	01086	01083	01080	01014	01011
00866	01090	01084	01081	01015	01012
00867	01091	01085	01082	01016	01013
00869	01092	01086	01083	01080	01014
0090	01093	01090	01084	01081	01015

01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01012
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081
01223	01220	01094	01091	01085	01082
01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225
01700	01284	01281	01235	01232	01226
01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01005	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01006	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01010	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01011	01704	01701
01012	01006	01003	01000	01705	01702

01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01013	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01014	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01015	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01016	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703
01014	01011	01005	01002	*01080	01704
01015	01012	01006	01003	01000	01705
01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01081
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081
01223	01220	01094	01091	01085	01082
01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225

01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225
01700	01284	01281	01235	01232	01226
01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01082	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01083	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01084	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01085	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703
01014	01011	01005	01002	*01086	01704
01015	01012	01006	01003	01000	01705
01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01090
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081

01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081
01223	01220	01094	01091	01085	01082
01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225
01700	01284	01281	01235	01232	01226
01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01091	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01092	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01093	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01094	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703
01014	01011	01005	01002	*01095	01704
01015	01012	01006	01003	01000	01705

01706	01703	01286	01230	01091	01011
*01096	01704	01700	01231	01092	01012
01000	01705	01701	01232	01093	01013
01001	01706	01702	01233	01094	01014
01002	*01100	01703	01234	01095	01015
01003	00322	01704	01235	01096	01016
01004	01000	01705	01236	01220	01080
01005	01001	01706	01280	01221	01081
01006	01002	0203	01281	01222	01082
01010	01003	0221	01282	01223	01083
01011	01004	0730	01283	01224	01084
01012	01005	4800	01284	01225	01085
01013	01006	4801	01285	01226	01086
01014	01010	4802	01286	01230	01090
01015	01011	4808	01700	01231	01091
01016	01012	4809	01701	01232	01092
01080	01013	5183	01702	01233	01093
01081	01014	*01101	01703	01234	01094
01082	01015	00322	01704	01235	01095
01083	01016	01000	01705	01236	01096
01084	01080	01001	01706	01280	01220
01085	01081	01002	0203	01281	01221
01086	01082	01003	0221	01282	01222
01090	01083	01004	0730	01283	01223
01091	01084	01005	4800	01284	01224
01092	01085	01006	4801	01285	01225
01093	01086	01010	4802	01286	01226
01094	01090	01011	4808	01700	01230
01095	01091	01012	4809	01701	01231
01096	01092	01013	5183	01702	01232
01220	01093	01014	*01102	01703	01233
01221	01094	01015	00322	01704	01234
01222	01095	01016	01000		01235
01223	01096	01080	01001	01705	01236
01224	01220	01081	01002	01706	01280
01225	01221	01082	01003	0203	01281
01226	01222	01083	01004	0221	01282
01230	01223	01084	01005	0730	
01231	01224	01085	01006	4800	01283
01232	01225	01086	01010	4801	01284
01233	01226	01090	01011	4802	01285
01234	01230	01091	01012	4808	01286
01235	01231	01092	01013	4809	01700
01236	01232	01093	01014	5183	01701
01280	01233	01094	01015	*01103	01702
01281	01234	01095	01016	00322	01703
01282	01235	01096	01080	01000	01704
01283	01236	01220	01081	01001	01705
01284	01280	01221	01082	01002	01706
01285	01281	01222	01083	01003	0203
01286	01282	01223	01084	01004	0221
01700	01283	01224	01085	01005	0730
01701	01284	01225	01086	01006	4800
01702	01285	01226	01090	01010	4801

4802
4808
4809
5183
*01104
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01105
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01106
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01110
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01111
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282

01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01112
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222

01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01113
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083

01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01114
00322
01000
01001
01002
01003
01004

01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283

4800
4801
4802
4808
4809
5183
*01115
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283

01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01116
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224

01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01122	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01123	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01124
5183	01702	01233	01094	01015	00322
*01120	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004
01003	0221	01282	01223	01084	01005
01004	0730	01283	01224	01085	01006
01005	4800	01284	01225	01086	01010
01006	4801	01285	01226	01090	01011
01010	4802	01286	01230	01091	01012
01011	4808	01700	01231	01092	01013
01012	4809	01701	01232	01093	01014
01013	5183	01702	01233	01094	01015
01014	*01121	01703	01234	01095	01016
01015	00322	01704	01235	01096	01080
01016	01000	01705	01236	01220	01081
01080	01001	01706	01280	01221	01082
01081	01002	0203	01281	01222	01083
01082	01003	0221	01282	01223	01084
01083	01004	0730	01283	01224	01085
01084	01005	4800	01284	01225	01086
01085	01006	4801	01285	01226	01090

01091	01012	4809	01701	01232	01093
01092	01013	5183	01702	01233	01094
01093	01014	*01126	01703	01234	01095
01094	01015	00322	01704	01235	01096
01095	01016	01000	01705	01236	01220
01096	01080	01001	01706	01280	01221
01220	01081	01002	0203	01281	01222
01221	01082	01003	0221	01282	01223
01222	01083	01004	0730	01283	01224
01223	01084	01005	4800	01284	01225
01224	01085	01006	4801	01285	01226
01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01130	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01131	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01132
5183	01702	01233	01094	01015	00322
*01125	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004
01003	0221	01282	01223	01084	01005
01004	0730	01283	01224	01085	01006
01005	4800	01284	01225	01086	01010
01006	4801	01285	01226	01090	01011
01010	4802	01286	01230	01091	01012
01011	4808	01700	01231	01092	01013

01014	*01133	01703	01234	01095	01016
01015	00322	01704	01235	01096	01080
01016	01000	01705	01236	01220	01081
01080	01001	01706	01280	01221	01082
01081	01002	0203	01281	01222	01083
01082	01003	0221	01282	01223	01084
01083	01004	0730	01283	01224	01085
01084	01005	4800	01284	01225	01086
01085	01006	4801	01285	01226	01090
01086	01010	4802	01286	01230	01091
01090	01011	4808	01700	01231	01092
01091	01012	4809	01701	01232	01093
01092	01013	5183	01702	01233	01094
01093	01014	*01134	01703	01234	01095
01094	01015	00322	01704	01235	01096
01095	01016	01000	01705	01236	01220
01096	01080	01001	01706	01280	01221
01220	01081	01002	0203	01281	01222
01221	01082	01003	0221	01282	01223
01222	01083	01004	0730	01283	01224
01223	01084	01005	4800	01284	01225
01224	01085	01006	4801	01285	01226
01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01135	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01136	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01140
5183	01702	01233	01094	01015	00322

01000	01705	01236	01220	01081	01001
01001	01706	01280	01221	01082	01002
01002	0203	01281	01222	01083	01003
01003	0221	01282	01223	01084	01004
01004	0730	01283	01224	01085	01005
01005	4800	01284	01225	01086	01006
01006	4801	01285	01226	01090	01010
01010	4802	01286	01230	01091	01011
01011	4808	01700	01231	01092	01012
01012	4809	01701	01232	01093	01013
01013	5183	01702	01233	01094	01014
01014	*01141	01703	01234	01095	01015
01015	00322	01704	01235	01096	01016
01016	01000	01705	01236	01220	01080
01080	01001	01706	01280	01221	01081
01081	01002	0203	01281	01222	01082
01082	01003	0221	01282	01223	01083
01083	01004	0730	01283	01224	01084
01084	01005	4800	01284	01225	01085
01085	01006	4801	01285	01226	01086
01086	01010	4802	01286	01230	01090
01090	01011	4808	01700	01231	01091
01091	01012	4809	01701	01232	01092
01092	01013	5183	01702	01233	01093
01093	01014	*01142	01703	01234	01094
01094	01015	00322	01704	01235	01095
01095	01016	01000	01705	01236	01096
01096	01080	01001	01706	01280	01220
01220	01081	01002	0203	01281	01221
01221	01082	01003	0221	01282	01222
01222	01083	01004	0730	01283	01223
01223	01084	01005	4800	01284	01224
01224	01085	01006	4801	01285	01225
01225	01086	01010	4802	01286	01226
01226	01090	01011	4808		01230
01230	01091	01012	4809	01700	01231
01231	01092	01013	5183	01701	01232
01232	01093	01014	*01143	01702	01233
01233	01094	01015	00322	01703	01234
01234	01095	01016	01000	01704	
01235	01096	01080	01001	01705	01235
01236	01220	01081	01002	01706	01236
01280	01221	01082	01003	0203	01280
01281	01222	01083	01004	0221	01281
01282	01223	01084	01005	0730	01282
01283	01224	01085	01006	4800	01283
01284	01225	01086	01010	4801	01284
01285	01226	01090	01011	4802	01285
01286	01230	01091	01012	4808	01286
01700	01231	01092	01013	4809	01700
01701	01232	01093	01014	5183	01701
01702	01233	01094	01015	*01144	01702
01703	01234	01095	01016	00322	01703
01704	01235	01096	01080	01000	01704

01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01145
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01146
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01150
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01151
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01152
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232

01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01156	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01160
5183	01702	01233	01094	01015	00322
*01153	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004
01003	0221	01282	01223	01084	01005
01004	0730	01283	01224	01085	01006
01005	4800	01284	01225	01086	01010
01006	4801	01285	01226	01090	01011
01010	4802	01286	01230	01091	01012
01011	4808	01700	01231	01092	01013
01012	4809	01701	01232	01093	01014
01013	5183	01702	01233	01094	01015
01014	*01154	01703	01234	01095	01016
01015	00322	01704	01235	01096	01080
01016	01000	01705	01236	01220	01081
01080	01001	01706	01280	01221	01082
01081	01002	0203	01281	01222	01083
01082	01003	0221	01282	01223	01084
01083	01004	0730	01283	01224	01085
01084	01005	4800	01284	01225	01086
01085	01006	4801	01285	01226	01090
01086	01010	4802	01286	01230	01091
01090	01011	4808	01700	01231	01092
01091	01012	4809	01701	01232	01093
01092	01013	5183	01702	01233	01094
01093	01014	*01155	01703	01234	01095

01096	01080	01001	01706	01280	01221
01220	01081	01002	0203	01281	01222
01221	01082	01003	0221	01282	01223
01222	01083	01004	0730	01283	01224
01223	01084	01005	4800	01284	01225
01224	01085	01006	4801	01285	01226
01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01163	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01164	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01165
5183	01702	01233	01094	01015	00322
*01161	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004
01003	0221	01282	01223	01084	01005
01004	0730	01283	01224	01085	01006
01005	4800	01284	01225	01086	01010
01006	4801	01285	01226	01090	01011
01010	4802	01286	01230	01091	01012
01011	4808	01700	01231	01092	01013
01012	4809	01701	01232	01093	01014
01013	5183	01702	01233	01094	01015
01014	*01162	01703	01234	01095	01016
01015	00322	01704	01235	01096	01080
01016	01000	01705	01236	01220	01081

01082	01003	0221	01282	01223	01084
01083	01004	0730	01283	01224	01085
01084	01005	4800	01284	01225	01086
01085	01006	4801	01285	01226	01090
01086	01010	4802	01286	01230	01091
01090	01011	4808	01700	01231	01092
01091	01012	4809	01701	01232	01093
01092	01013	5183	01702	01233	01094
01093	01014	*01170	01703	01234	01095
01094	01015	00322	01704	01235	01096
01095	01016	01000	01705	01236	01220
01096	01080	01001	01706	01280	01221
01220	01081	01002	0203	01281	01222
01221	01082	01003	0221	01282	01223
01222	01083	01004	0730	01283	01224
01223	01084	01005	4800	01284	01225
01224	01085	01006	4801	01285	01226
01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01171	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284
01283	01224	01085	01006	4801	01285
01284	01225	01086	01010	4802	01286
01285	01226	01090	01011	4808	01700
01286	01230	01091	01012	4809	01701
01700	01231	01092	01013	5183	01702
01701	01232	01093	01014	*01172	01703
01702	01233	01094	01015	00322	01704
01703	01234	01095	01016	01000	01705
01704	01235	01096	01080	01001	01706
01705	01236	01220	01081	01002	0203
01706	01280	01221	01082	01003	0221
0203	01281	01222	01083	01004	0730
0221	01282	01223	01084	01005	4800
0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01173
5183	01702	01233	01094	01015	00322
*01166	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004

01005	0730	01283	01223	01082	01002
01006	4800	01284	01224	01083	01003
01010	4801	01285	01225	01084	01004
01011	4802	01286	01226	01085	01005
01012	4808	01700	01230	01086	01006
01013	4809	01701	01231	01090	01010
01014	5183	01702	01232	01091	01011
01015	*01174	01703	01233	01092	01012
01016	00322	01704	01234	01093	01013
01080	01000	01705	01235	01094	01014
01081	01001	01706	01236	01095	01015
01082	01002	0203	01280	01096	01016
01083	01003	0204	01281	01220	01080
01084	01004	0221	01282	01221	01081
01085	01005	0730	01283	01222	01082
01086	01006	4800	01284	01223	01083
01090	01010	4801	01285	01224	01084
01091	01011	4802	01286	01225	01085
01092	01012	4808	01700	01226	01086
01093	01013	4809	01701	01230	01090
01094	01014	5183	01702	01231	01091
01095	01015	*01175	01703	01232	01092
01096	01016	00322	01704	01233	01093
01220	01080	01000	01705	01234	01094
01221	01081	01001	01706	01235	01095
01222	01082	01002	0203	01236	01096
01223	01083	01003	0204	01280	01220
01224	01084	01004	0221	01281	01221
01225	01085	01005	0730	01282	01222
01226	01086	01006	4800	01283	01223
01230	01090	01010	4801	01284	01224
01231	01091	01011	4802	01285	01225
01232	01092	01012	4808	01286	01226
01233	01093	01013	4809	01700	01230
01234	01094	01014	5183	01701	01231
01235	01095	01015	*01176	01702	01232
01236	01096	01016	00322	01703	01233
01280	01220	01080	01000	01704	01234
01281	01221	01081		01705	01235
01282	01222	01082	01001	01706	01236
01283	01223	01083	01002	0203	01280
01284	01224	01084	01003	0204	01281
01285	01225	01085	01004	0221	01282
01286	01226	01086	01005	0730	01283
01700	01230	01090	01006	4800	01284
01701	01231	01091	01010	4801	01285
01702	01232	01092	01011	4802	
01703	01233	01093	01012	4808	01286
01704	01234	01094	01013	4809	01700
01705	01235	01095	01014	5183	01701
01706	01236	01096	01015	*01180	01702
0203	01280	01220	01016	00322	01703
0204	01281	01221	01080	01000	01704
0221	01282	01222	01081	01001	01705

01706	01236	01096	01016	00322	01704
0203	01280	01220	01080	01000	01705
0204	01281	01221	01081	01001	01706
0221	01282	01222	01082	01002	0203
0730	01283	01223	01083	01003	0204
4800	01284	01224	01084	01004	0221
4801	01285	01225	01085	01005	0730
4802	01286	01226	01086	01006	4800
4808	01700	01230	01090	01010	4801
4809	01701	01231	01091	01011	4802
5183	01702	01232	01092	01012	4808
*01181	01703	01233	01093	01013	4809
00322	01704	01234	01094	01014	5183
01000	01705	01235	01095	01015	*01185
01001	01706	01236	01096	01016	00322
01002	0203	01280	01220	01080	01000
01003	0204	01281	01221	01081	01001
01004	0221	01282	01222	01082	01002
01005	0730	01283	01223	01083	01003
01006	4800	01284	01224	01084	01004
01010	4801	01285	01225	01085	01005
01011	4802	01286	01226	01086	01006
01012	4808	01700	01230	01090	01010
01013	4809	01701	01231	01091	01011
01014	5183	01702	01232	01092	01012
01015	*01182	01703	01233	01093	01013
01016	00322	01704	01234	01094	01014
01080	01000	01705	01235	01095	01015
01081	01001	01706	01236	01096	01016
01082	01002	0203	01280	01220	01080
01083	01003	0204	01281	01221	01081
01084	01004	0221	01282	01222	01082
01085	01005	0730	01283	01223	01083
01086	01006	4800	01284	01224	01084
01090	01010	4801	01285	01225	01085
01091	01011	4802	01286	01226	01086
01092	01012	4808	01700	01230	01090
01093	01013	4809	01701	01231	01091
01094	01014	5183	01702	01232	01092
01095	01015	*01183	01703	01233	01093
01096	01016	00322	01704	01234	01094
01220	01080	01000	01705	01235	01095
01221	01081	01001	01706	01236	
01222	01082	01002	0203	01280	01096
01223	01083	01003	0204	01281	01220
01224	01084	01004	0221	01282	01221
01225	01085	01005	0730	01283	01222
01226	01086	01006	4800	01284	01223
01230	01090	01010	4801	01285	01224
01231	01091	01011	4802	01286	01225
01232	01092	01012	4808	01700	01226
01233	01093	01013	4809	01701	01230
01234	01094	01014	5183	01702	01231
01235	01095	01015	*01184	01703	01232

01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0204
0221
0730
4800
4801
4802
4808
4809
5183
*01186
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092

01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0204
0221
0730
4800
4801
4802
4808
4809
5183
*01190
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012

01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0204
0221
0730
4800
4801
4802
4808

4809
5183
*01191
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700

01701
01702
01703
01704
01705
01706
0203
0204
0221
0730
4800
4801
4802
4808
4809
5183
*01192
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230

01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0204
0221
0730
4800
4801
4802
4808
4809
5183
*01193
00322
01000
01001
01002
01003
01004
01005

01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086

01090	01010	4801	01284	01225	01085
01091	01011	4802	01285	01226	01086
01092	01012	4808	01286		01090
01093	01013	4809	01700	01230	01091
01094	01014	5183	01701	01231	01092
01095	01015	*01195	01702	01232	01093
01096	01016	00322	01703	01233	01094
01220	01080	01000	01704	01234	
01221	01081	01001	01705	01235	01095
01222	01082	01002	01706	01236	01096
01223	01083	01003	0203	01280	01220
01224	01084	01004	0221	01281	01221
01225	01085	01005	0730	01282	01222
01226	01086	01006	4800	01283	01223
01230	01090	01010	4801	01284	01224
01231	01091	01011	4802	01285	01225
01232	01092	01012	4808	01286	01226
01233	01093	01013	4809	01700	01230
01234	01094	01014	5183	01701	01231
01235	01095	01015	*01196	01702	01232
01236	01096	01016	00322	01703	01233
01280	01220	01080	01000	01704	01234
01281	01221	01081	01001	01705	01235
01282	01222	01082	01002	01706	01236
01283	01223	01083	01003	0203	01280
01284	01224	01084	01004	0221	01281
01285	01225	01085	01005	0730	01282
01286	01226	01086	01006	4800	01283
01700	01230	01090	01010	4801	01284
01701	01231	01091	01011	4802	01285
01702	01232	01092	01012	4808	01286
01703	01233	01093	01013	4809	01700
01704	01234	01094	01014	5183	01701
01705	01235	01095	01015	*01200	01702
01706	01236	01096	01016	00322	01703
0203	01280	01220	01080	01000	01704
0204	01281	01221	01081	01001	01705
0221	01282	01222	01082	01002	01706
0730	01283	01223	01083	01003	0203
4800	01284	01224	01084	01004	0221
4801	01285	01225	01085	01005	0730
4802	01286	01226	01086	01006	4800
4808	01700	01230	01090	01010	4801
4809	01701	01231	01091	01011	4802
5183	01702	01232	01092	01012	4808
*01194	01703	01233	01093	01013	4809
00322		01234	01094	01014	5183
01000	01704	01235	01095	01015	*01201
01001	01705	01236	01096	01016	00322
01002	01706	01280	01220	01080	01000
01003	0203	01281	01221	01081	01001
01004	0221		01222	01082	01002
01005	0730	01282	01223	01083	01003
01006	4800	01283	01224	01084	01004

01005	0730	01282	01222	01083	01004
01006	4800	01283	01223	01084	01005
01010	4801	01284	01224	01085	01006
01011	4802	01285	01225	01086	01010
01012	4808	01286	01226	01090	01011
01013	4809	01700	01230	01091	01012
01014	5183	01701	01231	01092	01013
01015	*01202	01702	01232	01093	01014
01016	00322	01703	01233	01094	01015
01080	01000	01704	01234	01095	01016
01081	01001	01705	01235	01096	01080
01082	01002	01706	01236	01220	01081
	01003	0203	01280	01221	01082
01083	01004	0221	01281	01222	01083
01084	01005	0730	01282	01223	01084
01085	01006	4800	01283	01224	01085
01086	01010	4801	01284	01225	01086
01090		4802	01285	01226	01090
01091	01011	4808	01286	01230	01091
01092	01012	4809	01700	01231	01092
01093	01013	5183	01701	01232	01093
01094	01014	*01203	01702	01233	01094
01095	01015		01703	01234	01095
01096	01016	00322	01704	01235	01096
01220	01080	01000	01705	01236	01220
01221	01081	01001	01706	01280	01221
01222	01082	01002	0203	01281	01222
01223	01083	01003	0221	01282	01223
01224	01084	01004	0730	01283	01224
01225	01085	01005	4800	01284	01225
01226	01086	01006	4801	01285	01226
01230	01090	01010	4802	01286	01230
01231	01091	01011	4808	01700	01231
01232	01092	01012	4809	01701	01232
01233	01093	01013	5183	01702	01233
01234	01094	01014	*01204	01703	01234
01235	01095	01015	00322	01704	01235
01236	01096	01016	01000	01705	01236
01280	01220	01080	01001	01706	01280
01281	01221	01081	01002	0203	01281
01282	01222	01082	01003	0221	01282
01283	01223	01083	01004	0730	01283
01284	01224	01084	01005	4800	01284
01285	01225	01085	01006	4801	01285
01286	01226	01086	01010	4802	01286
01700	01230	01090	01011	4808	01700
01701	01231	01091	01012	4809	01701
01702	01232	01092	01013	5183	01702
01703	01233	01093	01014	*01205	01703
01704	01234	01094	01015	00322	01704
01705	01235	01095	01016	01000	01705
01706	01236	01096	01080	01001	01706
0203	01280	01220	01081	01002	0203
0221	01281	01221	01082	01003	0221

0730	01283	01224	01085	01006	4801
4800	01284	01225	01086	01010	4802
4801	01285	01226	01090	01011	4808
4802	01286	01230	01091	01012	4809
4808	01700	01231	01092	01013	5183
4809	01701	01232	01093	01014	*01213
5183	01702	01233	01094	01015	00322
*01206	01703	01234	01095	01016	01000
00322	01704	01235	01096	01080	01001
01000	01705	01236	01220	01081	01002
01001	01706	01280	01221	01082	01003
01002	0203	01281	01222	01083	01004
01003	0221	01282	01223	01084	01005
01004	0730	01283	01224	01085	01006
01005	4800	01284	01225	01086	01010
01006	4801	01285	01226	01090	01011
01010	4802	01286	01230	01091	01012
01011	4808	01700	01231	01092	01013
01012	4809	01701	01232	01093	01014
01013	5183	01702	01233	01094	01015
01014	*01210	01703	01234	01095	01016
01015	00322	01704	01235	01096	01080
01016	01000	01705	01236	01220	01081
01080	01001	01706	01280	01221	01082
01081	01002	0203	01281	01222	01083
01082	01003	0221	01282	01223	01084
01083	01004	0730	01283	01224	01085
01084	01005	4800	01284	01225	01086
01085	01006	4801	01285	01226	01090
01086	01010	4802	01286	01230	01091
01090	01011	4808	01700	01231	01092
01091	01012	4809	01701	01232	01093
01092	01013	5183	01702	01233	01094
01093	01014	*01211	01703	01234	01095
01094	01015	00322	01704	01235	01096
01095	01016	01000	01705	01236	01220
01096	01080	01001	01706	01280	01221
01220	01081	01002	0203	01281	01222
01221	01082	01003	0221	01282	01223
01222	01083	01004	0730	01283	01224
01223	01084	01005	4800	01284	01225
01224	01085	01006	4801	01285	01226
01225	01086	01010	4802	01286	01230
01226	01090	01011	4808	01700	01231
01230	01091	01012	4809	01701	01232
01231	01092	01013	5183	01702	01233
01232	01093	01014	*01212	01703	01234
01233	01094	01015	00322	01704	01235
01234	01095	01016	01000	01705	01236
01235	01096	01080	01001	01706	01280
01236	01220	01081	01002	0203	01281
01280	01221	01082	01003	0221	01282
01281	01222	01083	01004	0730	01283
01282	01223	01084	01005	4800	01284

01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01214
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225

01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01215
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086

01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802
4808
4809
5183
*01216
00322
01000
01001
01002
01003
01004
01005
01006
01010

01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
4800
4801
4802

4808
4809
5183
*01220
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700

01701
01702
01703
01704
01705
01706
46401
46451
*01221
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282

01283	01235	01230	01222	01094	01086
01284	01236	01231	01223	01095	01090
01285	01280	01232	01224	01096	01091
01286	01281	01233	01225	01220	01092
01700	01282	01234	01226	01221	01093
01701	01283	01235	01230	01222	01094
01702	01284	01236	01231	01223	01095
01703	01285	01280	01232	01224	01096
01704	01286	01281	01233	01225	01220
01705	01700	01282	01234	01226	01221
01706	01701	01283	01235	01230	01222
46401	01702	01284	01236	01231	01223
46451	01703	01285	01280	01232	01224
*01222	01704	01286	01281	01233	01225
01000	01705	01700	01282	01234	01226
01001	01706	01701	01283	01235	01230
01002	46401	01702	01284	01236	01231
01003	46451	01703	01285	01280	01232
01004	*01223	01704	01286	01281	01233
01005	01000	01705	01700	01282	01234
01006	01001	01706	01701	01283	01235
01010	01002	46401	01702	01284	01236
01011	01003	46451	01703	01285	01280
01012	01004	*01224	01704	01286	01281
01013	01005	01000	01705	01700	01282
01014	01006	01001	01706	01701	01283
01015	01010	01002	46401	01702	01284
01016	01011	01003	46451	01703	01285
01080	01012	01004	*01225	01704	01286
01081	01013	01005	01000	01705	01700
01082	01014	01006	01001	01706	01701
01083	01015	01010	01002	46401	01702
01084	01016	01011	01003	46451	01703
01085	01080	01012	01004	*01226	01704
01086	01081	01013	01005	01000	01705
01090	01082	01014	01006	01001	01706
01091	01083	01015	01010	01002	46401
01092	01084	01016	01011	01003	46451
01093	01085	01080	01012	01004	*01230
01094	01086	01081	01013	01005	01000
01095	01090	01082	01014	01006	01001
01096	01091	01083	01015	01010	01002
01220	01092	01084	01016	01011	01003
01221	01093	01085	01080	01012	01004
01222	01094	01086	01081	01013	01005
01223	01095	01090	01082	01014	01006
01224	01096	01091	01083	01015	01010
01225	01220	01092	01084	01016	01011
01226	01221	01093	01085	01080	01012
01230	01222	01094	01086	01081	01013
01231	01223	01095	01090	01082	01014
01232	01224	01096	01091	01083	01015
01233	01225	01220	01092	01084	01016
01234	01226	01221	01093	01085	01080

01081	01013	01005	01000	01705	01700
01082	01014	01006	01001	01706	01701
01083	01015	01010	01002	46401	01702
01084	01016	01011	01003	46451	01703
01085	01080	01012	01004	*01234	01704
01086	01081	01013	01005	01000	01705
01090	01082	01014	01006	01001	01706
01091	01083	01015	01010	01002	46401
01092	01084	01016	01011	01003	46451
01093	01085	01080	01012	01004	*01235
01094	01086	01081	01013	01005	01000
01095	01090	01082	01014	01006	01001
01096	01091	01083	01015	01010	01002
01220	01092	01084	01016	01011	01003
01221	01093	01085	01080	01012	01004
01222	01094	01086	01081	01013	01005
01223	01095	01090	01082	01014	01006
01224	01096	01091	01083	01015	01010
01225	01220	01092	01084	01016	01011
01226	01221	01093	01085	01080	01012
01230	01222	01094	01086	01081	01013
01231	01223	01095	01090	01082	01014
01232	01224	01096	01091	01083	01015
01233	01225	01220	01092	01084	01016
01234	01226	01221	01093	01085	01080
01235	01230	01222	01094	01086	01081
01236	01231	01223	01095	01090	01082
01280	01232	01224	01096	01091	01083
01281	01233	01225	01220	01092	01084
01282	01234	01226	01221	01093	01085
01283	01235	01230	01222	01094	01086
01284	01236	01231	01223	01095	01090
01285	01280	01232	01224	01096	01091
01286	01281	01233	01225	01220	01092
01700	01282	01234	01226	01221	01093
01701	01283	01235	01230	01222	01094
01702	01284	01236	01231	01223	01095
01703	01285	01280	01232	01224	01096
01704	01286	01281	01233	01225	01220
01705	01700	01282	01234	01226	01221
01706	01701	01283	01235	01230	01222
46401	01702	01284	01236	01231	01223
46451	01703	01285	01280	01232	01224
*01231	01704	01286	01281	01233	01225
01000	01705	01700	01282	01234	01226
01001	01706	01701	01283	01235	01230
01002	46401	01702	01284	01236	01231
01003	46451	01703	01285	01280	01232
01004	*01232	01704	01286	01281	01233
01005	01000	01705	01700	01282	01234
01006	01001	01706	01701	01283	01235
01010	01002	46401	01702	01284	01236
01011	01003	46451	01703	01285	01280
01012	01004	*01233	01704	01286	01281

01282	01234	01225	01084	01003	0221
01283	01235	01226	01085	01004	0730
01284	01236	01230	01086	01005	46401
01285	01280	01231	01090	01006	46451
01286	01281	01232	01091	01010	4800
01700	01282	01233	01092	01011	4801
01701	01283	01234	01093	01012	4802
01702	01284	01235	01094	01013	4808
01703	01285	01236	01095	01014	4809
01704	01286	01280	01096	01015	5183
01705	01700	01281	01220	01016	*01283
01706	01701	01282	01221	01080	00322
46401	01702	01283	01222	01081	01000
46451	01703	01284	01223	01082	01001
*01236	01704	01285	01224	01083	01002
01000	01705	01286	01225	01084	01003
01001	01706	01700	01226	01085	01004
01002	46401	01701	01230	01086	01005
01003	46451	01702	01231	01090	01006
01004	*01280	01703	01232	01091	01010
01005	00322	01704	01233	01092	01011
01006	01000	01705	01234	01093	01012
01010	01001	01706	01235	01094	01013
01011	01002	0203	01236	01095	01014
01012	01003	0221	01280	01096	01015
01013	01004	0730	01281	01220	01016
01014	01005	46401	01282	01221	01080
01015	01006	46451	01283	01222	01081
01016	01010	4800	01284	01223	01082
01080	01011	4801	01285	01224	01083
01081	01012	4802	01286	01225	01084
01082	01013	4808	01700	01226	01085
01083	01014	4809	01701	01230	01086
01084	01015	5183	01702	01231	01090
01085	01016	*01281	01703	01232	01091
01086	01080	00322	01704	01233	01092
01090	01081	01000	01705	01234	01093
01091	01082	01001	01706	01235	01094
01092	01083	01002	0203	01236	01095
01093	01084	01003	0221	01280	01096
01094	01085	01004	0730	01281	01220
01095	01086	01005	46401	01282	01221
01096	01090	01006	46451	01283	01222
01220	01091	01010	4800	01284	01223
01221	01092	01011	4801	01285	01224
01222	01093	01012	4802	01286	01225
01223	01094	01013	4808	01700	01226
01224	01095	01014	4809	01701	01230
01225	01096	01015	5183	01702	01231
01226	01220	01016	*01282	01703	01232
01230	01221	01080	00322	01704	01233
01231	01222	01081	01000	01705	01234
01232	01223	01082	01001	01706	01235
01233	01224	01083	01002	0203	01236

01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
46401
46451
4800
4801
4802
4808
4809
5183
*01284
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095

01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
46401
46451
4800
4801
4802
4808
4809
5183
*01285
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014

01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
46401
46451
4800
4801
4802
4808
4809

5183
*01286
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701

01702
01703
01704
01705
01706
0203
0221
0730
46401
46451
4800
4801
4802
4808
4809
5183
*01300
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230

01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701

01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01301
00321
01000
01001
01002
01003
01004
01005

01006	0490	01223	01002	0470	01096
01010	0491	01224	01003	0471	01220
01011	09181	01225	01004	0478	01221
01012	09882	01226	01005	0479	01222
01013	10081	01230	01006	0490	01223
01014	32301	01231	01010	0491	01224
01015	32302	01232	01011	09181	01225
01016	32341	01233	01012	09882	01226
01080	32342	01234	01013	10081	
01081	32351	01235	01014	32301	01230
01082	32352	01236	01015	32302	01231
01083	32361	01280	01016	32341	01232
01084	32362	01281	01080	32342	01233
01085	32363	01282	01081	32351	01234
01086	32371	01283	01082	32352	01235
01090	32372	01284	01083	32361	01236
01091	32381	01285	01084	32362	01280
01092	32382	01286	01085	32363	01281
01093	34120	01700	01086	32371	01282
01094	34121	01701	01090	32372	01283
01095	34122	01702	01091	32381	01284
01096	*01302	01703	01092	32382	01285
01220	00321	01704	01093	34120	01286
01221	01000	01705	01094	34121	01700
01222	01001	01706	01095	34122	01701
01223	01002	0470	01096	*01304	01702
01224	01003	0471	01220	00321	01703
01225	01004	0478	01221	01000	01704
01226	01005	0479	01222	01001	01705
01230	01006	0490	01223	01002	01706
01231	01010	0491	01224	01003	0470
01232	01011	09181	01225	01004	0471
01233	01012	09882	01226	01005	0478
01234	01013	10081	01230	01006	0479
01235	01014	32301	01231	01010	0490
01236	01015	32302	01232	01011	0491
01280	01016	32341	01233	01012	09181
01281	01080	32342	01234	01013	09882
01282	01081	32351	01235	01014	10081
01283	01082	32352	01236	01015	32301
01284	01083	32361	01280	01016	32302
01285	01084	32362	01281	01080	32341
01286	01085	32363	01282	01081	32342
01700	01086	32371	01283	01082	32351
01701	01090	32372	01284	01083	32352
01702	01091	32381	01285	01084	32361
01703	01092	32382	01286	01085	32362
01704	01093	34120	01700	01086	32363
01705	01094	34121	01701	01090	32371
01706	01095	34122	01702	01091	32372
0470	01096	*01303	01703	01092	32381
0471	01220	00321	01704	01093	32382
0478	01221	01000	01705	01094	34120
0479	01222	01001	01706	01095	34121

34122
*01305
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01306
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01310
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
*01311
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352

32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01312
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01313
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01314
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01315
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491

09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01316
00321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*01320
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01321
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706

01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01324	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01325	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01326	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01330	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703
01014	01011	01005	01002	*01331	01704
01015	01012	01006	01003	01000	01705
01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01332
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081
01223	01220	01094	01091	01085	01082
01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223

01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225
01700	01284	01281	01235	01232	01226
01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01333	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01334	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01335	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01336	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703
01014	01011	01005	01002	*01340	01704
01015	01012	01006	01003	01000	01705
01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01341
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016

01080	01014	01011	01005	01002	*01346
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01220	01094	01091	01085	01082	01016
01221	01095	01092	01086	01083	01080
01222	01096	01093	01090	01084	01081
01223	01220	01094	01091	01085	01082
01224	01221	01095	01092	01086	01083
01225	01222	01096	01093	01090	01084
01226	01223	01220	01094	01091	01085
01230	01224	01221	01095	01092	01086
01231	01225	01222	01096	01093	01090
01232	01226	01223	01220	01094	01091
01233	01230	01224	01221	01095	01092
01234	01231	01225	01222	01096	01093
01235	01232	01226	01223	01220	01094
01236	01233	01230	01224	01221	01095
01280	01234	01231	01225	01222	01096
01281	01235	01232	01226	01223	01220
01282	01236	01233	01230	01224	01221
01283	01280	01234	01231	01225	01222
01284	01281	01235	01232	01226	01223
01285	01282	01236	01233	01230	01224
01286	01283	01280	01234	01231	01225
01700	01284	01281	01235	01232	01226
01701	01285	01282	01236	01233	01230
01702	01286	01283	01280	01234	01231
01703	01700	01284	01281	01235	01232
01704	01701	01285	01282	01236	01233
01705	01702	01286	01283	01280	01234
01706	01703	01700	01284	01281	01235
*01342	01704	01701	01285	01282	01236
01000	01705	01702	01286	01283	01280
01001	01706	01703	01700	01284	01281
01002	*01343	01704	01701	01285	01282
01003	01000	01705	01702	01286	01283
01004	01001	01706	01703	01700	01284
01005	01002	*01344	01704	01701	01285
01006	01003	01000	01705	01702	01286
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01345	01704	01701
01012	01006	01003	01000	01705	01702
01013	01010	01004	01001	01706	01703

01704
01705
01706
*01350
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700

01701
01702
01703
01704
01705
01706
*01351
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284

01285
01286
01700
01701
01702
01703
01704
01705
01706
*01352
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281

01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01353
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235

01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01354
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232

01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01355
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226

01230	01224	01221	0869	01226	3232
01231	01225	01222	124	01230	32341
01232	01226	01223	32301	01231	32342
01233	01230	01224	32302	01232	32351
01234	01231	01225	3231	01233	32352
01235	01232	01226	3232	01234	32361
01236	01233	01230	32341	01235	32362
01280	01234	01231	32342	01236	32363
01281	01235	01232	32351	01280	32371
01282	01236	01233	32352	01281	32372
01283	01280	01234	32361	01282	32381
01284	01281	01235	32362	01283	32382
01285	01282	01236	32363	01284	3239
01286	01283	01280	32371	01285	7712
01700	01284	01281	32372	01286	*01362
01701	01285	01282	32381	01700	01000
01702	01286	01283	32382	01701	01001
01703	01700	01284	3239	01702	01002
01704	01701	01285	7712	01703	01003
01705	01702	01286	*01361	01704	01004
01706	01703	01700	01000	01705	01005
*01356	01704	01701	01001	01706	01006
01000	01705	01702	01002	0461	01010
01001	01706	01703	01003	0463	01011
01002	*01360	01704	01004	048	01012
01003	01000	01705	01005	0498	01013
01004	01001	01706	01006	0499	01014
01005	01002	0461	01010	0620	01015
01006	01003	0463	01011	0621	01016
01010	01004	048	01012	0622	01080
01011	01005	0498	01013	0623	01081
01012	01006	0499	01014	0624	01082
01013	01010	0620	01015	0625	01083
01014	01011	0621	01016	0628	01084
01015	01012	0622	01080	0629	01085
01016	01013	0623	01081	0630	01086
01080	01014	0624	01082	0631	01090
01081	01015	0625	01083	0632	01091
01082	01016	0628	01084	0638	01092
01083	01080	0629	01085	0639	01093
01084	01081	0630	01086	064	01094
01085	01082	0631	01090	0662	01095
01086	01083	0632	01091	0663	01096
01090	01084	0638	01092	06640	01220
01091	01085	0639	01093	06641	01221
01092	01086	064	01094	06642	01222
01093	01090	0662	01095	06649	01223
01094	01091	0663	01096	0737	01224
01095	01092	06640	01220	0819	01225
01096	01093	06641	01221	0869	01226
01220	01094	06642	01222	124	01230
01221	01095	06649	01223	32301	01231
01222	01096	0737	01224	32302	01232
01223	01220	0819	01225	3231	01233

01234	32361	01282	32381	01700	01000
01235	32362	01283	32382	01701	01001
01236	32363	01284	3239	01702	01002
01280	32371	01285	7712	01703	01003
01281	32372	01286	*01364	01704	01004
01282	32381	01700	01000	01705	01005
01283	32382	01701	01001	01706	01006
01284	3239	01702	01002	0461	01010
01285	7712	01703	01003	0463	01011
01286	*01363	01704	01004	048	01012
01700	01000	01705	01005	0498	01013
01701	01001	01706	01006	0499	01014
01702	01002	0461	01010	0620	01015
01703	01003	0463	01011	0621	01016
01704	01004	048	01012	0622	01080
01705	01005	0498	01013	0623	01081
01706	01006	0499	01014	0624	01082
0461	01010	0620	01015	0625	01083
0463	01011	0621	01016	0628	01084
048	01012	0622	01080	0629	01085
0498	01013	0623	01081	0630	01086
0499	01014	0624	01082	0631	01090
0620	01015	0625	01083	0632	01091
0621	01016	0628	01084	0638	01092
0622	01080	0629	01085	0639	01093
0623	01081	0630	01086	064	01094
0624	01082	0631	01090	0662	01095
0625	01083	0632	01091	0663	01096
0628	01084	0638	01092	06640	01220
0629	01085	0639	01093	06641	01221
0630	01086	064	01094	06642	01222
0631	01090	0662	01095	06649	01223
0632	01091	0663	01096	0737	01224
0638	01092	06640	01220	0819	01225
0639	01093	06641	01221	0869	01226
064	01094	06642	01222	124	01230
0662	01095	06649	01223	32301	01231
0663	01096	0737	01224	32302	01232
06640	01220	0819	01225	3231	01233
06641	01221	0869	01226	3232	01234
06642	01222	124	01230	32341	01235
06649	01223	32301	01231	32342	01236
0737	01224	32302	01232	32351	01280
0819	01225	3231	01233	32352	01281
0869	01226	3232	01234	32361	01282
124	01230	32341	01235	32362	01283
32301	01231	32342	01236	32363	01284
32302	01232	32351	01280	32371	01285
3231	01233	32352	01281	32372	01286
3232	01234	32361	01282	32381	01700
32341	01235	32362	01283	32382	01701
32342	01236	32363	01284	3239	01702
32351	01280	32371	01285	7712	01703
32352	01281	32372	01286	*01365	

01704
01705
01706
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*01366
01000
01001
01002

01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706

0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*01380
01000
01001
01002
01003
01004
01005
01006

01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01381
01000
01001
01002

01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706

*01382
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702

01703	01286	01282	01235	01231	01224
01704	01700	01283	01236	01232	01225
01705	01701	01284	01280	01233	01226
01706	01702	01285	01281	01234	01230
*01383	01703	01286	01282	01235	01231
01000	01704	01700	01283	01236	01232
01001	01705	01701	01284	01280	01233
01002	01706	01702	01285	01281	01234
01003	*01384	01703	01286	01282	01235
01004	01000	01704	01700	01283	01236
01005	01001	01705	01701	01284	01280
01006	01002	01706	01702	01285	01281
01010	01003	*01385	01703	01286	01282
01011	01004	01000	01704	01700	01283
01012	01005	01001	01705	01701	01284
01013	01006	01002	01706	01702	01285
01014	01010	01003	*01386	01703	01286
01015	01011	01004	01000	01704	01700
01016	01012	01005	01001	01705	01701
01080	01013	01006	01002	01706	01702
01081	01014	01010	01003	*01390	01703
01082	01015	01011	01004	01000	01704
01083	01016	01012	01005	01001	01705
01084	01080	01013	01006	01002	01706
01085	01081	01014	01010	01003	*01391
01086	01082	01015	01011	01004	01000
01090	01083	01016	01012	01005	01001
01091	01084	01080	01013	01006	01002
01092	01085	01081	01014	01010	01003
01093	01086	01082	01015	01011	01004
01094	01090	01083	01016	01012	01005
	01091	01084	01080	01013	01006
01095	01092	01085	01081	01014	01010
01096	01093	01086	01082	01015	01011
01220	01094	01090	01083	01016	01012
01221		01091	01084	01080	01013
01222	01095	01092	01085	01081	01014
01223	01096	01093	01086	01082	01015
01224	01220	01094	01090	01083	01016
01225	01221		01091	01084	01080
01226	01222	01095	01092	01085	01081
01230	01223	01096	01093	01086	01082
01231	01224	01220	01094	01090	01083
01232	01225	01221		01091	01084
01233	01226	01222	01095	01092	01085
01234	01230	01223	01096	01093	01086
01235	01231	01224	01220	01094	01090
01236	01232	01225	01221		01091
01280	01233	01226	01222	01095	01092
01281	01234	01230	01223	01096	01093
01282	01235	01231	01224	01220	01094
01283	01236	01232	01225	01221	
01284	01280	01233	01226	01222	01095
01285	01281	01234	01230	01223	01096

01220	01094	01090	01083	01016	01012
01221		01091	01084	01080	01013
01222	01095	01092	01085	01081	01014
01223	01096	01093	01086	01082	01015
01224	01220	01094	01090	01083	01016
01225	01221		01091	01084	01080
01226	01222	01095	01092	01085	01081
01230	01223	01096	01093	01086	01082
01231	01224	01220	01094	01090	01083
01232	01225	01221		01091	01084
01233	01226	01222	01095	01092	01085
01234	01230	01223	01096	01093	01086
01235	01231	01224	01220	01094	01090
01236	01232	01225	01221		01091
01280	01233	01226	01222	01095	01092
01281	01234	01230	01223	01096	01093
01282	01235	01231	01224	01220	01094
01283	01236	01232	01225	01221	
01284	01280	01233	01226	01222	01095
01285	01281	01234	01230	01223	01096
01286	01282	01235	01231	01224	01220
01700	01283	01236	01232	01225	01221
01701	01284	01280	01233	01226	01222
01702	01285	01281	01234	01230	01223
01703	01286	01282	01235	01231	01224
01704	01700	01283	01236	01232	01225
01705	01701	01284	01280	01233	01226
01706	01702	01285	01281	01234	01230
*01392	01703	01286	01282	01235	01231
01000	01704	01700	01283	01236	01232
01001	01705	01701	01284	01280	01233
01002	01706	01702	01285	01281	01234
01003	*01393	01703	01286	01282	01235
01004	01000	01704	01700	01283	01236
01005	01001	01705	01701	01284	01280
01006	01002	01706	01702	01285	01281
01010	01003	*01394	01703	01286	01282
01011	01004	01000	01704	01700	01283
01012	01005	01001	01705	01701	01284
01013	01006	01002	01706	01702	01285
01014	01010	01003	*01395	01703	01286
01015	01011	01004	01000	01704	01700
01016	01012	01005	01001	01705	01701
01080	01013	01006	01002	01706	01702
01081	01014	01010	01003	*01396	01703
01082	01015	01011	01004	01000	01704
01083	01016	01012	01005	01001	01705
01084	01080	01013	01006	01002	01706
01085	01081	01014	01010	01003	*01400
01086	01082	01015	01011	01004	01000
01090	01083	01016	01012	01005	01001
01091	01084	01080	01013	01006	01002
01092	01085	01081	01014	01010	01003
01093	01086	01082	01015	01011	01004

01005	09886	01702	01282	01232	01222
01006	09956	01703	01283	01233	01223
01010	*01401	01704	01284	01234	01224
01011	01000	01705	01285	01235	01225
01012	01001	01706	01286	01236	01226
01013	01002	03283	01700	01280	01230
01014	01003	0952	01701	01281	01231
01015	01004	09886	01702	01282	01232
01016	01005	09956	01703	01283	01233
01080	01006	*01402	01704	01284	01234
01081	01010	01000	01705	01285	01235
01082	01011	01001	01706	01286	01236
01083	01012	01002	03283	01700	01280
01084	01013	01003	0952	01701	01281
01085	01014	01004	09886	01702	01282
01086	01015	01005	09956	01703	01283
01090	01016	01006	*01403	01704	01284
01091	01080	01010	01000	01705	01285
01092	01081	01011	01001	01706	01286
01093	01082	01012	01002	03283	01700
01094	01083	01013	01003	0952	01701
	01084	01014	01004	09886	01702
01095	01085	01015	01005	09956	01703
01096	01086	01016	01006	*01404	01704
01220	01090	01080	01010	01000	01705
01221	01091	01081	01011	01001	01706
01222	01092	01082	01012	01002	03283
01223	01093	01083	01013	01003	0952
01224	01094	01084	01014	01004	09886
01225	01095	01085	01015	01005	09956
01226	01096	01086	01016	01006	*01405
01230	01220	01090	01080	01010	01000
01231	01221	01091	01081	01011	01001
01232	01222	01092	01082	01012	01002
01233	01223	01093	01083	01013	01003
01234	01224	01094	01084	01014	01004
01235	01225	01095	01085	01015	01005
01236	01226	01096	01086	01016	01006
01280	01230	01220	01090	01080	01010
01281	01231	01221	01091	01081	01011
01282	01232	01222	01092	01082	01012
01283	01233	01223	01093	01083	01013
01284	01234	01224	01094	01084	01014
01285	01235	01225	01095	01085	01015
01286	01236	01226	01096	01086	01016
01700	01280	01230	01220	01090	01080
01701	01281	01231	01221	01091	01081
01702	01282	01232	01222	01092	01082
01703	01283	01233	01223	01093	01083
01704	01284	01234	01224	01094	01084
01705	01285	01235	01225	01095	01085
01706	01286	01236	01226	01096	01086
03283	01700	01280	01230	01220	01090
0952	01701	01281	01231	01221	01091

01092	01081	00867	01703	01233	01093
01093	01082	00869	01704	01234	01094
01094	01083	01000	01705	01235	01095
01095	01084	01001	01706	01236	01096
01096	01085	01002	1230	01280	01220
01220	01086	01003	*01481	01281	01221
01221	01090	01004	0040	01282	01222
01222	01091	01005	0085	01283	01223
01223	01092	01006	00861	01284	01224
01224	01093	01010	00862	01285	01225
01225	01094	01011	00863	01286	01226
01226	01095	01012	00864	01700	01230
	01096	01013	00865	01701	01231
01230	01220	01014	00866	01702	01232
01231	01221	01015	00867	01703	01233
01232	01222	01016	00869	01704	01234
01233	01223	01080	01000	01705	01235
01234	01224	01081	01001	01706	01236
01235	01225	01082	01002	1230	01280
01236	01226	01083	01003	*01482	01281
01280	01230	01084	01004	0040	01282
01281	01231	01085	01005	0085	01283
01282	01232	01086	01006	00861	01284
01283	01233	01090	01010	00862	01285
01284	01234	01091	01011	00863	01286
01285	01235	01092	01012	00864	01700
01286	01236	01093	01013	00865	01701
01700	01280	01094	01014	00866	01702
01701	01281	01095	01015	00867	01703
01702	01282	01096	01016	00869	
01703	01283	01220	01080	01000	01704
01704	01284	01221	01081	01001	01705
01705	01285	01222	01082	01002	01706
01706	01286	01223	01083	01003	1230
03283	01700	01224	01084	01004	*01483
0952	01701	01225	01085	01005	0040
09886	01702	01226	01086	01006	0085
09956	01703	01230	01090	01010	00861
*01406	01704	01231	01091	01011	00862
01000	01705	01232	01092	01012	00863
01001	01706	01233	01093	01013	00864
01002	03283	01234	01094	01014	00865
01003	0952	01235	01095	01015	00866
01004	09886	01236	01096	01016	00867
01005	09956	01280	01220	01080	00869
01006	*01480	01281	01221	01081	01000
01010	0040	01282	01222	01082	01001
01011	0085	01283	01223	01083	01002
01012	00861	01284	01224	01084	01003
01013	00862	01285	01225	01085	01004
01014	00863	01286	01226	01086	01005
01015	00864	01700	01230	01090	01006
01016	00865	01701	01231	01091	01010
01080	00866	01702	01232	01092	01011

01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
1230
*01484
0040
0085
00861
00862
00863

00864
00865
00866
00867
00869
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01020
01021
01022
01023
01024
01025
01026
01030
01031
01032
01033
01034
01035
01036
01080
01081
01082
01083
01084
01085
01086

01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286

01700
01701
01702
01703
01704
01705
01706
1230
*01485
0040
0085
00861
00862
00863
00864
00865
00866
00867
00869
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01020
01021
01022
01023
01024
01025

01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
1230
*01486
0040
0085
00861
00862
00863
00864
00865
00866
00867
00869
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085

01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
1230
*01500
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081

01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01500
01501
01502
01503
01504
01505
01506
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01501
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015

01016	01013	01010	01004	01001	01706
01080	01014	01011	01005	01002	*01506
01081	01015	01012	01006	01003	01000
01082	01016	01013	01010	01004	01001
01083	01080	01014	01011	01005	01002
01084	01081	01015	01012	01006	01003
01085	01082	01016	01013	01010	01004
01086	01083	01080	01014	01011	01005
01090	01084	01081	01015	01012	01006
01091	01085	01082	01016	01013	01010
01092	01086	01083	01080	01014	01011
01093	01090	01084	01081	01015	01012
01094	01091	01085	01082	01016	01013
01095	01092	01086	01083	01080	01014
01096	01093	01090	01084	01081	01015
01500	01094	01091	01085	01082	01016
01501	01095	01092	01086	01083	01080
01502	01096	01093	01090	01084	01081
01503	01500	01094	01091	01085	01082
01504	01501	01095	01092	01086	01083
01505	01502	01096	01093	01090	01084
01506	01503	01500	01094	01091	01085
01570	01504	01501	01095	01092	01086
01571	01505	01502	01096	01093	01090
01572	01506	01503	01500	01094	01091
01573	01570	01504	01501	01095	01092
01574	01571	01505	01502	01096	01093
01575	01572	01506	01503	01500	01094
01576	01573	01570	01504	01501	01095
01590	01574	01571	01505	01502	01096
01591	01575	01572	01506	01503	01500
01592	01576	01573	01570	01504	01501
01593	01590	01574	01571	01505	01502
01594	01591	01575	01572	01506	01503
01595	01592	01576	01573	01570	01504
01596	01593	01590	01574	01571	01505
01700	01594	01591	01575	01572	01506
01701	01595	01592	01576	01573	01570
01702	01596	01593	01590	01574	01571
01703	01700	01594	01591	01575	01572
01704	01701	01595	01592	01576	01573
01705	01702	01596	01593	01590	01574
01706	01703	01700	01594	01591	01575
*01502	01704	01701	01595	01592	01576
01000	01705	01702	01596	01593	01590
01001	01706	01703	01700	01594	01591
01002	*01503	01704	01701	01595	01592
01003	01000	01705	01702	01596	01593
01004	01001	01706	01703	01700	01594
01005	01002	*01504	01704	01701	01595
01006	01003	01000	01705	01702	01596
01010	01004	01001	01706	01703	01700
01011	01005	01002	*01505	01704	01701
01012	01006	01003	01000	01705	01702

01703
01704
01705
01706
*01510
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576

01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01511
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553

01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01512
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510

01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01513
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084

01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01514
01000
01001
01002
01003
01004
01005
01006
01010
01011

01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706

*01515
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01516
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01510
01511
01512
01513
01514
01515
01516
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01520
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01520
01521
01522
01523
01524
01525
01526
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01521
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01520
01521
01522
01523
01524
01525
01526
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
*01522
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01520
01521
01522
01523
01524
*01523
01000
01001
01002

01003	01701	01575	01552	01096	01082
01004	01702	01576	01553	01520	01083
01005	01703	01590	01554	01521	01084
01006	01704	01591	01555	01522	01085
01010	01705	01592	01556	01523	01086
01011	01706	01593	01570	01524	01090
01012	*01524	01594	01571	01525	01091
01013	01000	01595	01572	01526	01092
01014	01001	01596	01573	01550	01093
01015	01002	01700	01574	01551	01094
01016	01003	01701	01575	01552	01095
01080	01004	01702	01576	01553	01096
01081	01005	01703	01590	01554	01550
01082	01006	01704	01591	01555	01551
01083	01010	01705	01592	01556	01552
01084	01011	01706	01593	01570	01553
01085	01012	*01525	01594	01571	01554
01086	01013	01000	01595	01572	01555
01090	01014	01001	01596	01573	01556
01091	01015	01002	01700	01574	01570
01092	01016	01003	01701	01575	01571
01093	01080	01004	01702	01576	01572
01094	01081	01005	01703	01590	01573
01095	01082	01006	01704	01591	01574
01096	01083	01010	01705	01592	01575
01520	01084	01011	01706	01593	01576
01521	01085	01012	*01526	01594	01590
01522	01086	01013	01000	01595	01591
01523	01090	01014	01001	01596	01592
01524	01091	01015	01002	01700	01593
01525	01092	01016	01003	01701	01594
01526	01093	01080	01004	01702	01595
01550	01094	01081	01005	01703	01596
01551	01095	01082	01006	01704	01700
01552	01096	01083	01010	01705	01701
01553	01520	01084	01011	01706	01702
01554	01521	01085	01012	*01550	01703
01555	01522	01086	01013	00324	01704
01556	01523	01090	01014	01000	01705
01570	01524	01091	01015	01001	01706
01571	01525	01092	01016	01002	37602
01572	01526	01093	01080	01003	37603
01573	01550	01094	01081	01004	73011
01574	01551	01095	01082	01005	73012
01575	01552	01096	01083	01006	73013
01576	01553	01520	01084	01010	73014
01590	01554	01521	01085	01011	73015
01591	01555	01522	01086	01012	73016
01592	01556	01523	01090	01013	73017
01593	01570	01524	01091	01014	73018
01594	01571	01525	01092	01015	73019
01595	01572	01526	01093	01016	73021
01596	01573	01550	01094	01080	73022
01700	01574	01551	01095	01081	73023

73024
73025
73026
73027
73028
73029
*01551
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01552
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01553
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01554
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01550
01551
01552
01553
01554
01555
01556
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01555
00324
01000
01001

01002	01706	01552	01010	01002	38300
01003	37602	01553	01011	01003	38302
01004	37603	01554	01012	01004	*01562
01005	73011	01555	01013	01005	01000
01006	73012	01556	01014	01006	01001
01010	73013	01570	01015	01010	01002
01011	73014	01571	01016	01011	01003
01012	73015	01572	01080	01012	01004
01013	73016	01573	01081	01013	01005
01014	73017	01574	01082	01014	01006
01015	73018	01575	01083	01015	01010
01016	73019	01576	01084	01016	01011
01080	73021	01590	01085	01080	01012
01081	73022	01591	01086	01081	01013
01082	73023	01592	01090	01082	01014
01083	73024	01593	01091	01083	01015
01084	73025	01594	01092	01084	01016
01085	73026	01595	01093	01085	01080
01086	73027	01596	01094	01086	01081
01090	73028	01700	01095	01090	01082
01091	73029	01701	01096	01091	01083
01092	*01556	01702	01560	01092	01084
01093	00324	01703	01561	01093	01085
01094	01000	01704	01562	01094	01086
01095	01001	01705	01563	01095	01090
01096	01002	01706	01564	01096	01091
01550	01003	37602	01565	01560	01092
01551	01004	37603	01566	01561	01093
01552	01005	73011	01570	01562	01094
01553	01006	73012	01571	01563	01095
01554	01010	73013	01572	01564	01096
	01011	73014	01573	01565	01560
01555	01012	73015	01574	01566	01561
01556	01013	73016	01575	01570	01562
01570	01014	73017	01576	01571	01563
01571		73018	01590	01572	01564
01572	01015	73019	01591	01573	01565
01573	01016	73021	01592	01574	01566
01574	01080	73022	01593	01575	01570
01575	01081	73023	01594	01576	01571
01576	01082	73024	01595	01590	01572
01590	01083	73025	01596	01591	01573
01591	01084	73026	01700	01592	01574
01592	01085	73027	01701	01593	01575
01593	01086	73028	01702	01594	01576
01594	01090	73029	01703	01595	01590
01595	01091	*01560	01704	01596	01591
01596	01092	01000	01705	01700	01592
01700	01093	01001	01706	01701	01593
01701	01094	01002	38300	01702	01594
01702	01095	01003	38302	01703	01595
01703	01096	01004	*01561	01704	01596
01704	01550	01005	01000	01705	01700
01705	01551	01006	01001	01706	01701

01702
01703
01704
01705
01706
38300
38302
*01563
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01560
01561
01562
01563
01564
01565
01566
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593

01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01564
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01560
01561
01562
01563
01564
01565
01566
01570
01571
01572
01573
01574
01575

01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01565
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01560
01561
01562
01563
01564
01565
01566
01570

01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01566
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01560
01561
01562

01563
01564
01565
01566
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01570
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093

01094
01095
01096
01560
01561
01562
01563
01564
01565
01566
01570
01571
01572
01573
01574
01575
01576
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01571
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086

01090	01083	01016	01012	01005	01001
01091	01084	01080	01013	01006	01002
01092	01085	01081	01014	01010	01003
01093	01086	01082	01015	01011	01004
01094	01090	01083	01016	01012	01005
01095	01091	01084	01080	01013	01006
01096	01092	01085	01081	01014	01010
01571	01093	01086	01082	01015	01011
01700	01094	01090	01083	01016	01012
01701	01095	01091	01084	01080	01013
01702	01096	01092	01085	01081	01014
01703	01572	01093	01086	01082	01015
01704	01700	01094	01090	01083	01016
01705	01701	01095	01091	01084	01080
01706	01702	01096	01092	01085	01081
37602	01703	01573	01093	01086	01082
37603	01704	01700	01094	01090	01083
73011	01705	01701	01095	01091	01084
73012	01706	01702	01096	01092	01085
73013	37602	01703	01574	01093	01086
73014	37603	01704	01700	01094	01090
73015	73011	01705	01701	01095	01091
73016	73012	01706	01702	01096	01092
73017	73013	37602	01703	01575	01093
73018	73014	37603	01704	01700	01094
73019	73015	73011	01705	01701	01095
73021	73016	73012	01706	01702	01096
73022	73017	73013	37602	01703	01576
73023	73018	73014	37603	01704	01700
73024	73019	73015	73011	01705	01701
73025	73021	73016	73012	01706	01702
73026	73022	73017	73013	37602	01703
73027	73023	73018	73014	37603	01704
73028	73024	73019	73015	73011	01705
73029	73025	73021	73016	73012	01706
*01572	73026	73022	73017	73013	37602
00324	73027	73023	73018	73014	37603
01000	73028	73024	73019	73015	73011
01001	73029	73025	73021	73016	73012
01002	*01573	73026	73022	73017	73013
01003	00324	73027	73023	73018	73014
01004	01000	73028	73024	73019	73015
01005	01001	73029	73025	73021	73016
01006	01002	*01574	73026	73022	73017
01010	01003	00324	73027	73023	73018
01011	01004	01000	73028	73024	73019
01012	01005	01001	73029	73025	73021
01013	01006	01002	*01575	73026	73022
01014	01010	01003	00324	73027	73023
01015	01011	01004	01000	73028	73024
01016	01012	01005	01001	73029	73025
01080	01013	01006	01002	*01576	73026
01081	01014	01010	01003	00324	73027
01082	01015	01011	01004	01000	73028

73029
*01580
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01581
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01582
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01583
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01584
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155

71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01585
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01586
00323
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01580
01581
01582
01583
01584
01585
01586
01590
01591
01592
01593
01594
01595
01596
01700
01701
01702
01703
01704
01705
01706
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*01590
00323
00324
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015

01016	71127	71191	01093	71138	73012
01080	71128	71192	01094	71139	73013
01081	71129	71193	01095	71140	73014
01082	71130	71194	01096	71141	73015
01083	71131	71195	01590	71142	73016
01084	71132	71196	01591	71143	73017
01085	71133	71197	01592	71144	73018
01086	71134	71198	01593	71145	73019
01090	71135	71199	01594	71146	73021
01091	71136	73011	01595	71147	73022
01092	71137	73012	01596	71148	73023
01093	71138	73013	01700	71149	73024
01094	71139	73014	01701		73025
01095	71140	73015	01702	71150	73026
01096	71141	73016	01703	71151	73027
01590	71142	73017	01704	71152	73028
01591	71143	73018	01705	71153	73029
01592	71144	73019	01706	71154	*01592
01593	71145	73021	09161	71155	00323
01594	71146	73022	09850	71156	00324
01595	71147	73023	09851	71157	01000
01596	71148	73024	09852	71158	01001
01700	71149	73025	09853	71159	01002
01701	71150	73026	09859	71170	01003
01702	71151	73027	37602	71171	01004
01703	71152	73028	37603	71172	01005
01704	71153	73029	71110	71173	01006
01705	71154	*01591	71111	71174	01010
01706	71155	00323	71112	71175	01011
09161	71156	00324	71113	71176	01012
09850	71157	01000	71114	71177	01013
09851	71158	01001	71115	71178	01014
09852	71159	01002	71116	71179	01015
09853	71170	01003	71117	71180	01016
09859	71171	01004	71118	71181	01080
37602	71172	01005	71119	71182	01081
37603	71173	01006	71120	71183	01082
71110	71174	01010	71121	71184	01083
71111	71175	01011	71122	71185	01084
71112	71176	01012	71123	71186	01085
71113	71177	01013	71124	71187	01086
71114	71178	01014	71125	71188	01090
71115	71179	01015	71126	71189	01091
71116	71180	01016	71127	71190	01092
71117	71181	01080	71128	71191	01093
71118	71182	01081	71129	71192	01094
71119	71183	01082	71130	71193	01095
71120	71184	01083	71131	71194	01096
71121	71185	01084	71132	71195	01590
71122	71186	01085	71133	71196	01591
71123	71187	01086	71134	71197	01592
71124	71188	01090	71135	71198	01593
71125	71189	01091	71136	71199	01594
71126	71190	01092	71137	73011	01595

01596	71148	73024	09852	71159	01002
01700	71149	73025	09853	71170	01003
01701	71150	73026	09859	71171	01004
01702	71151	73027	37602	71172	01005
01703	71152	73028	37603	71173	01006
01704	71153	73029	71110	71174	01010
01705	71154	*01593	71111	71175	01011
01706	71155	00323	71112	71176	01012
09161	71156	00324	71113	71177	01013
09850	71157	01000	71114	71178	01014
09851	71158	01001	71115	71179	01015
09852	71159	01002	71116	71180	01016
09853	71170	01003	71117	71181	01080
09859	71171	01004	71118	71182	01081
37602	71172	01005	71119	71183	01082
37603	71173	01006	71120	71184	01083
71110	71174	01010	71121	71185	01084
71111	71175	01011	71122	71186	01085
71112	71176	01012	71123	71187	01086
71113	71177	01013	71124	71188	01090
71114	71178	01014	71125	71189	01091
71115	71179	01015	71126	71190	01092
71116	71180	01016	71127	71191	01093
71117	71181	01080	71128	71192	01094
71118	71182	01081	71129	71193	01095
71119	71183	01082	71130	71194	01096
71120	71184	01083	71131	71195	01590
71121	71185	01084	71132	71196	01592
71122	71186	01085	71133	71197	01593
71123	71187	01086	71134	71198	01594
71124	71188	01090	71135	71199	01595
71125	71189	01091	71136	73011	01596
71126	71190	01092	71137	73012	01700
71127	71191	01093	71138	73013	01701
71128	71192	01094	71139	73014	01702
71129	71193	01095	71140	73015	01703
71130	71194	01096	71141	73016	01704
71131	71195	01590	71142	73017	01705
71132	71196	01591	71143	73018	01706
71133	71197	01592	71144	73019	09161
71134	71198	01593	71145	73021	09850
71135	71199	01594	71146	73022	09851
71136	73011	01595	71147	73023	09852
71137	73012	01596	71148	73024	09853
71138	73013	01700	71149	73025	09859
71139	73014	01701	71150	73026	37602
71140	73015	01702	71151	73027	37603
71141	73016	01703	71152	73028	71110
71142	73017	01704	71153	73029	71111
71143	73018	01705	71154	*01594	71112
71144	73019	01706	71155	00323	71113
71145	73021	09161	71156	00324	71114
71146	73022	09850	71157	01000	71115
71147	73023	09851	71158	01001	71116

71117	71180	01016	71127	71191	01093
71118	71181	01080	71128	71192	01094
71119	71182	01081	71129	71193	01095
71120	71183	01082	71130	71194	01096
71121	71184	01083	71131	71195	01590
71122	71185	01084	71132	71196	01591
71123	71186	01085	71133	71197	01592
71124	71187	01086	71134	71198	01593
	71188	01090	71135	71199	01594
71125	71189	01091	71136	73011	01595
71126	71190	01092	71137	73012	01596
71127	71191	01093	71138	73013	01700
71128	71192	01094	71139	73014	01701
71129	71193	01095	71140	73015	01702
71130	71194	01096	71141	73016	01703
71131	71195	01590	71142	73017	01704
71132	71196	01591	71143	73018	01705
71133	71197	01592	71144	73019	01706
71134	71198	01593	71145	73021	09161
71135	71199	01594	71146	73022	09850
71136	73011	01595	71147	73023	09851
71137	73012	01596	71148	73024	09852
71138	73013	01700	71149	73025	09853
71139	73014	01701	71150	73026	09859
71140	73015	01702	71151	73027	37602
71141	73016	01703	71152	73028	37603
71142	73017	01704	71153	73029	71110
71143	73018	01705	71154	*01596	71111
71144	73019	01706	71155	00323	71112
71145	73021	09161	71156	00324	71113
71146	73022	09850	71157	01000	71114
71147	73023	09851	71158	01001	71115
71148	73024	09852	71159	01002	71116
71149	73025	09853	71170	01003	71117
71150	73026	09859	71171	01004	71118
71151	73027	37602	71172	01005	71119
71152	73028	37603	71173	01006	71120
71153	73029	71110	71174	01010	71121
71154	*01595	71111	71175	01011	71122
71155	00323	71112	71176	01012	71123
71156	00324	71113	71177	01013	71124
71157	01000	71114	71178	01014	71125
71158	01001	71115	71179	01015	71126
71159	01002	71116	71180	01016	71127
71170	01003	71117	71181	01080	71128
71171	01004	71118	71182	01081	71129
71172	01005	71119	71183	01082	71130
71173	01006	71120	71184	01083	71131
71174	01010	71121	71185	01084	71132
71175	01011	71122	71186	01085	71133
71176	01012	71123	71187	01086	71134
71177	01013	71124	71188	01090	71135
71178	01014	71125	71189	01091	71136
71179	01015	71126	71190	01092	71137

71138	73013	27411	5822	58289	5831
71139		5820	5824	5829	5832
71140	73014	5821	58281	5830	5881
71141	73015	5822	58289	5831	58881
71142	73016	5824	5829	5832	59001
71143	73017	58281	5830	5881	*01604
71144	73018	58289	5831	58881	01000
71145	73019	5829	5832	59001	01001
71146	73021	5830	5881	*01603	01002
71147	73022	5831	58881	01000	01003
71148	73023	5832	59001	01001	01004
71149	73024	5881	*01602	01002	01005
71150	73025	58881	01000	01003	01006
71151	73026	59001	01001	01004	01010
71152	73027	*01601	01002	01005	01011
71153	73028	01000	01003	01006	01012
71154	73029	01001	01004	01010	01013
71155	*01600	01002	01005	01011	01014
71156	01000	01003	01006	01012	01015
71157	01001	01004	01010	01013	01016
71158	01002	01005	01011	01014	01080
71159	01003	01006	01012	01015	01081
71170	01004	01010	01013	01016	01082
71171	01005	01011	01014	01080	01083
71172	01006	01012	01015	01081	01084
71173	01010	01013	01016	01082	01085
71174	01011	01014	01080	01083	01086
71175	01012	01015	01081	01084	01090
71176	01013	01016	01082	01085	01091
71177	01014	01080	01083	01086	01092
71178	01015	01081	01084	01090	01093
71179	01016	01082	01085	01091	01094
71180	01080	01083	01086	01092	01095
71181	01081	01084	01090	01093	01096
71182	01082	01085	01091	01094	01700
71183	01083	01086	01092	01095	01701
71184	01084	01090	01093	01096	01702
71185	01085	01091	01094	01700	01703
71186	01086	01092	01095	01701	01704
71187	01090	01093	01096	01702	01705
71188	01091	01094	01700	01703	01706
71189	01092	01095	01701	01704	0786
71190	01093	01096	01702	01705	27411
71191	01094	01700	01703	01706	5820
71192	01095	01701	01704	0786	5821
71193	01096	01702	01705	27411	5822
71194	01700	01703	01706	5820	5824
71195	01701	01704	0786	5821	58281
71196	01702	01705	27411	5822	58289
71197	01703	01706	5820	5824	5829
71198	01704	0786	5821	58281	5830
71199	01705	27411	5822	58289	5831
73011	01706	5820	5824	5829	5832
73012	0786	5821	58281	5830	5881

58881
59001
*01605
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01606
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01610
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01611
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01612
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01613
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01614
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01615
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01616
01000
01001

01002	01086	01002	01086	01002	01086
01003	01090	01003	01090	01003	01090
01004	01091	01004	01091	01004	01091
01005	01092	01005	01092	01005	01092
01006	01093	01006	01093	01006	01093
01010	01094	01010	01094	01010	01094
01011	01095	01011	01095	01011	01095
01012	01096	01012	01096	01012	01096
01013	01700	01013	01700	01013	01700
01014	01701	01014	01701	01014	01701
01015	01702	01015	01702	01015	01702
01016	01703	01016	01703	01016	01703
01080	01704	01080	01704	01080	01704
01081	01705	01081	01705	01081	01705
01082	01706	01082	01706	01082	01706
01083	*01621	01083	*01624	01083	*01630
01084	01000	01084	01000	01084	01000
01085	01001	01085	01001	01085	01001
01086	01002	01086	01002	01086	01002
01090	01003	01090	01003	01090	01003
01091	01004	01091	01004	01091	01004
01092	01005	01092	01005	01092	01005
01093	01006	01093	01006	01093	01006
01094	01010	01094	01010	01094	01010
01095	01011	01095	01011	01095	01011
01096	01012	01096	01012	01096	01012
01700	01013	01700	01013	01700	01013
01701	01014	01701	01014	01701	01014
01702	01015	01702	01015	01702	01015
01703	01016	01703	01016	01703	01016
01704	01080	01704	01080	01704	01080
01705	01081	01705	01081	01705	
01706	01082	01706	01082	01706	01081
*01620	01083	*01623	01083	*01626	01082
01000	01084	01000	01084	01000	01083
01001	01085	01001	01085	01001	01084
01002	01086	01002	01086	01002	01085
01003	01090	01003	01090	01003	01086
01004	01091	01004	01091	01004	01090
01005	01092	01005	01092	01005	01091
01006	01093	01006	01093	01006	01092
01010	01094	01010	01094	01010	01093
01011	01095	01011	01095	01011	01094
01012	01096	01012	01096	01012	01095
01013	01700	01013	01700	01013	01096
01014	01701	01014	01701	01014	01700
01015	01702	01015	01702	01015	01701
01016	01703	01016	01703	01016	01702
01080	01704	01080	01704	01080	01703
01081	01705	01081	01705	01081	01704
01082	01706	01082	01706	01082	01705
01083	*01622	01083	*01625	01083	01706
01084	01000	01084	01000	01084	0786
01085	01001	01085	01001	01085	27411

5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01631
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01632
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01633
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01634
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01635
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01636
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*01640
01000
01001
01002

01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01641
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01642
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01643
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01644
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01645
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01646
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01650
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01651
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01652
01000

01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01653
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01654
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01655
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01656
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01660
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01661
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01662
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01663
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705

01706
6147
*01664
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01665
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01666
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01670
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01671
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01672
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01673
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01674
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6147
*01675
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092

01093	01004	01006	01011	01012	01013
01094	01005	01010	01012	01013	
01095	01006	01011	01013	01014	01014
01096	01010	01012	01014	01015	01015
01700	01011	01013	01015	01016	01016
01701	01012	01014	01016	01080	01080
01702	01013	01015	01080	01081	01081
01703	01014	01016	01081	01082	01082
01704	01015	01080	01082	01083	01083
01705	01016	01081	01083	01084	01084
01706	01080	01082	01084	01085	01085
6147	01081	01083	01085	01086	01086
*01676	01082	01084	01086	01090	01090
01000	01083	01085	01090	01091	01091
01001	01084	01086	01091	01092	01092
01002	01085	01090	01092	01093	01093
01003	01086	01091	01093	01094	01094
01004	01090	01092	01094	01095	01095
01005	01091	01093	01095	01096	01096
01006	01092	01094		01700	01700
01010	01093	01095	01096	01701	01701
01011	01094	01096	01700	01702	01702
01012	01095	01700	01701	01703	01703
01013	01096	01701	01702	01704	01704
01014	01700	01702	01703	01705	01705
01015	01701	01703	01704	01706	01706
01016	01702	01704	01705	0786	0786
01080	01703	01705	01706	27411	27411
01081	01704	01706	0786	5820	5820
01082	01705	0786	27411	5821	5821
01083	01706	27411	5820	5822	5822
01084	0786	5820	5821	5824	5824
01085	27411	5821	5822	58281	58281
01086	5820	5822	5824	58289	58289
01090	5821	5824	58281	5829	5829
01091	5822	58281	58289	5830	5830
01092	5824	58289	5829	5831	5831
01093	58281	5829	5830	5832	5832
01094	58289	5830	5831	5881	5881
01095	5829	5831	5832	58881	58881
01096	5830	5832	5881	59001	59001
01700	5831	5881	58881	6147	6147
01701	5832	58881	59001	*01694	*01695
01702	5881	59001	6147	01000	01000
01703	58881	6147	*01693	01001	01001
01704	59001	*01692	01000	01002	01002
01705	6147	01000	01001	01003	01003
01706	*01691	01001	01002	01004	01004
6147	01000	01002	01003	01005	01005
*01690	01001	01003	01004	01006	01006
01000	01002	01004	01005	01010	01010
01001	01003	01005	01006	01011	01011
01002	01004	01006	01010	01012	01012
01003	01005	01010	01011		01013

01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
*01696
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015

01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01700
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703

01704
01705
01706
6824
*01701
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015

01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01702
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013

01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01703
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013

01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01704
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096

01700
01701
01702
01703
01704
01705
01706
6824
*01705
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01706
01000
01001
01002
01003
01004
01005
01006
01010

01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
6824
*01710
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093

01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01711
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01712
01000
01001
01002
01003
01004
01005
01006

01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01713
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093

01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01714
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01715
01000
01001
01002
01003
01004
01005
01006

01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01716
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014

01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092

01093
01094
01095
01096
01700
01701
01702
01703
01704
*01720
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704

01705
01706
*01721
01000
01001
01002
01003
01004

01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01722
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091

01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01723
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01724
01000
01001
01002
01003
01004

01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01725
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091

01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01726
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01730
01000
01001
01002
01003
01004

01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483
0950
*01731

01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085

01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483
0950
*01732
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483

0950
*01733
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483
0950
*01734
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483
0950
*01735
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
09483
0950
*01736
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01740
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01741
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01742
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01743
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01744
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082

01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01745
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
38300
38302
*01746
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01750
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01751
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01752
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01753
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01754
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01755
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
*01756
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012

01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01760
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01761
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01762
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01763
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01764
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01765
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01766
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
25541
25542
*01770
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700

01701
01702
01703
01704
01705
01706
*01771
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01772
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01773
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01774
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01775
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01776
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01780
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01781
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01782
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013

01700
01701
01702
01703
01704
01705
01706
*01783
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01784
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01785
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01786
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
*01790
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
0786
09850
09851
09852
09853
09859
25541
25542
27411
37602
37603
38300
38302
46451
4800
4801
4802
4808
4809
5183
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
6824
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028

73029
*01791
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
0786
09850
09851
09852
09853
09859
25541
25542
27411
37602
37603
38300
38302
46451
4800
4801
4802
4808
4809
5183
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
6824
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01792
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
0786
09850
09851
09852
09853
09859
25541
25542
27411
37602
37603
38300
38302
46451
4800
4801
4802
4808
4809
5183
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
6824
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193

71194
71195
71196
71197
71198
71199
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01793
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
0786
09850
09851
09852
09853
09859
25541
25542
27411
37602
37603
38300
38302
46451
4800
4801
4802
4808
4809
5183
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
6824
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*01794
00322
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01700
01701
01702
01703
01704
01705
01706
0203
0221
0730
0786
09850
09851
09852
09853
09859
25541
25542
27411
37602
37603
38300
38302
46451
4800
4801
4802
4808
4809
5183
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
6824
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170

71171	01005	5821	71149	73025	37602
71172	01006	5822	71150	73026	37603
71173	01010	5824	71151	73027	38300
71174	01011	58281	71152	73028	38302
71175	01012	58289	71153	73029	46451
71176	01013	5829	71154	*01796	4800
71177	01014	5830	71155	00322	4801
71178	01015	5831	71156	01000	
71179	01016	5832	71157	01001	4802
71180	01080	5881	71158	01002	4808
71181	01081	58881	71159	01003	4809
71182	01082	59001	71170	01004	5183
71183	01083	6147	71171	01005	5820
71184	01084	6824	71172	01006	5821
71185	01085	71110	71173	01010	5822
71186	01086	71111	71174	01011	5824
71187	01090	71112	71175	01012	58281
71188	01091	71113	71176	01013	58289
71189	01092	71114	71177	01014	5829
71190	01093	71115	71178	01015	5830
71191	01094	71116	71179	01016	5831
71192	01095	71117	71180	01080	5832
71193	01096	71118	71181	01081	5881
71194	01700	71119	71182	01082	58881
71195	01701	71120	71183	01083	59001
71196	01702		71184	01084	6147
71197	01703	71121	71185	01085	6824
71198	01704	71122	71186	01086	71110
71199	01705	71123	71187	01090	71111
73011	01706	71124	71188	01091	71112
73012	0203	71125	71189	01092	71113
73013	0221	71126	71190	01093	71114
73014	0730	71127	71191	01094	71115
73015	0786	71128	71192	01095	71116
73016	09850	71129	71193	01096	71117
73017	09851	71130	71194	01700	71118
73018	09852	71131	71195	01701	71119
73019	09853	71132	71196	01702	71120
73021	09859	71133	71197	01703	71121
73022	25541	71134	71198	01704	71122
73023	25542	71135	71199	01705	71123
73024	27411	71136	73011	01706	71124
73025	37602	71137	73012	0203	71125
73026	37603	71138	73013	0221	71126
73027	38300	71139	73014	0730	71127
73028	38302	71140	73015	0786	71128
73029	46451	71141	73016	09850	71129
01795	4800	71142	73017	09851	71130
00322	4801	71143	73018	09852	71131
01000	4802	71144	73019	09853	71132
01001	4808	71145	73021	09859	71133
01002	4809	71146	73022	25541	71134
01003	5183	71147	73023	25542	71135
01004	5820	71148	73024	27411	71136

71137	73011	01226	01222	01095	01092
71138	73012	01230	01223	01096	01093
71139	73013	01231	01224	01220	01094
71140	73014	01232	01225	01221	
71141	73015	01233	01226	01222	01095
71142	73016	01234	01230	01223	01096
71143	73017	01235	01231	01224	01220
71144	73018	01236	01232	01225	01221
71145	73019	01280	01233	01226	01222
71146	73021	01281	01234	01230	01223
71147	73022	01282	01235	01231	01224
71148	73023	01283	01236	01232	01225
71149	73024	01284	01280	01233	01226
71150	73025	01285	01281	01234	01230
71151	73026	01286	01282	01235	01231
71152	73027	01700	01283	01236	01232
71153	73028	01701	01284	01280	01233
71154	73029	01702	01285	01281	01234
71155	*01800	01703	01286	01282	01235
71156	01000	01704	01700	01283	01236
71157	01001	01705	01701	01284	01280
71158	01002	01706	01702	01285	01281
71159	01003	*01801	01703	01286	01282
71170	01004	01000	01704	01700	01283
71171	01005	01001	01705	01701	01284
71172	01006	01002	01706	01702	01285
71173	01010	01003	*01802	01703	01286
71174	01011	01004	01000	01704	01700
71175	01012	01005	01001	01705	01701
71176	01013	01006	01002	01706	01702
71177	01014	01010	01003	*01803	01703
71178	01015	01011	01004	01000	01704
71179	01016	01012	01005	01001	01705
71180	01080	01013	01006	01002	01706
71181	01081	01014	01010	01003	*01804
71182	01082	01015	01011	01004	01000
71183	01083	01016	01012	01005	01001
71184	01084	01080	01013	01006	01002
71185	01085	01081	01014	01010	01003
71186	01086	01082	01015	01011	01004
71187	01090	01083	01016	01012	01005
	01091	01084	01080	01013	01006
71188	01092	01085	01081	01014	01010
71189	01093	01086	01082	01015	01011
71190	01094	01090	01083	01016	01012
71191		01091	01084	01080	01013
71192	01095	01092	01085	01081	01014
71193	01096	01093	01086	01082	01015
71194	01220	01094	01090	01083	01016
71195	01221		01091	01084	01080
71196	01222	01095	01092	01085	01081
71197	01223	01096	01093	01086	01082
71198	01224	01220	01094	01090	01083
71199	01225	01221		01091	01084

01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01805
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080

01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01806
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013

01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01880
01000
01001
01002
01003
01004
01005
01006

01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01881
01000
01001
01002

01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706

*01882
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702

01703
01704
01705
01706
*01883
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285

01286
01700
01701
01702
01703
01704
01705
01706
*01884
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281

01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01885
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234

01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01886
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230

01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01890
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223

01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01891
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096

01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01892
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093

01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01893
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086

01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01894
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015
01016
01080
01081
01082

01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01895
01000
01001
01002
01003
01004
01005
01006
01010
01011
01012
01013
01014
01015

01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094

01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*01896
01000
01001
01002
01003
01004
01005
01006
01010
01011

01012
01013
01014
01015
01016
01080
01081
01082
01083
01084
01085
01086
01090
01091
01092
01093
01094
01095
01096
01220
01221
01222
01223
01224
01225
01226
01230
01231
01232
01233
01234
01235
01236
01280
01281
01282
01283
01284
01285
01286
01700
01701
01702
01703
01704
01705
01706
*0200
0200
0201
0202
0203
*0201

0200
0201
0202
0203
*0202
0031
0200
0201
0202
0203
0223
77189
*0203
00322
0200
0201
0202
0203
0221
0730
4800
4801
4802
4808
4809
5183
*0204
00322
0200
0201
0202
0203
0221
0730
4800
4801
4802
4808
4809
5183
*0205
00322
0200
0201
0202
0203
0205
0221
0730
4800
4801
4802
4808
4809
5183
*0208
0200
0201
0202
0203
0208
*0209
0200
0201
0202
0203
0209
*0210
0210
0218
0219
*0211
0211
0218
0219
*0212
0218
0219
*0213
00322
0203
0213
0218
0219
0221
0730
4800
4801
4802
4808
4809
5183
*0218
0218
0219
*0219
0218
0219
*0220
0220
0229
*0221
00322
0203
0221
0229
0730
4800
4801
4802
4808
4809
5183
*0222
0222
0229
*0223
0031
0223
0229
77189
*0228
0228
0229
*0229
0229
*0230
0238
0239
*0231
0238
0239
*0232
0238
0239
*0233
0238
0239
*0238
0238
0239
*0239
0238
0239
*024
024
*025
025
*0260
0260
0261
0269
*0261
0260
0261
0269
*0269
0260
0261
0269
*0270
0270
0272
0278
0279
*0271
0270
0272
0278
0279
*0272
0270
0272
0278
0279
*0278
0270
0272
0278
0279
*0279
0270
0272
0278
0279
*0300
0300
*0301
0301
*0302
0302
*0303
0303
*0308
0308
*0309
0309
*0310
00322
0203
0221
0311
0312
0318
0319
0730
4800
4801
4802
4808
4809
5183
*0311
0311
0312
0318
0319
*0312
0311
0312
0318
0319
*0318
0311
0312
0318
0319
*0319
0311
0312
0318
0319
*0320
0320
0321
0322
0323
03281
03284
03285
03289
0329
*03281
0320
0321
0322
0323
03281
03284
03285
03289
0329
*03282
0320
0321
0322
0323
03281
03283
03284
03285
03289
0329
*03283
0320
0321
0322
0323
03281
03283
03284
03285
03289
0329
0952
*0322
09886
09956
0320
0321
0322
0323
03281
03284
03285
03289
0329
*03284
0320
0321
0322
0323
03281
03284
03285
03289
0329
*03285
0320
0321
0322
0323
03281
03284

03284
03285
03289
0329
*03289
0320
0321
0322
0323
03281
03284
03285
03289
0329
*0329
0320
0321
0322
0323
03281
03284
03285
03289
0329
*0330
0330
0331
0338
0339
*0331
0330
0331
0338
0339
*0338
0330
0331
0338
0339
*0339
0330
0331
0338
0339
*0340
0341
*0341
0341
*035
0341
*0360
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0362
0031
0223
77189
*03642
07422
09884
09885
3911
*03682
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*0380
0031
0223
77189
*03810
0031
0223
77189
*03811
0031
0223
77189
*03819
0031
0223
77189
*0382
0031
0223
77189
*0383
0031
0223
77189
*03840
0031
0223
77189
*03841
0031
0223
77189
*03842
0031
0223
77189
*03843
0031
0223
77189
*03844
0031
0223
77189
*03849
0031
0223
77189
*0388
0031
0223
77189
*0389
0031
0223
77189
*0390
0390
0398
0399
*0391
00322
0203
0221
0391
0398
0399
0730
4800
4801
4802
4808
4809
5183
*0392
0392
0398
0399
*0393
0393
0398
0399
*0394
0394
0398
0399
*0398
0390
0391
0392
0393
0394
0398
0399
*0399
0390
0391
0392
0393
0394
0398
0399
*0402
0402
*04041
0030
0040
0050
0051
0052
0053
0054
00581
00589
00841
00842
00843
00844
00845
00846
00847
00849
0090
0092
04041
04042
1230
*04042
0030
0040
0050
0051
0052
0053
0054
00581
00589
00841
00842
00843
00844
00845
00846
00847
00849
0090
0092
04041
04042
1230
*04081

04081
*04082
6824
*04089
0031
0223
04081
6824
77189
*04100
0031
0223
6824
77189
*04101
0031
0223
6824
77189
*04102
0031
0223
6824
77189
*04103
0031
0223
6824
77189
*04104
0031
0223
6824
77189
*04105
0031
0223
6824
77189
*04109
0031
0223
6824
77189
*04110
0031
0223
6824
77189
*04111
0031
0223
6824
77189

*04119
0031
0223
6824
77189
*0412
0031
0223
6824
77189
*0413
0031
0223
6824
77189
*0414
0031
0223
6824
77189
*0415
0031
0223
6824
77189
*0416
0031
0223
6824
77189
*0417
0031
0223
6824
77189
*04181
0031
0223
6824
77189
*04182
0031
0223
6824
77189
*04183
0031
0223
6824
77189
*04184
0031
0223
6824
77189

*04185
0031
0223
6824
77189
*04186
0223
6824
77189
*04189
0031
0223
6824
77189
*0419
0031
0223
6824
77182
77189
*042
07953
*04500
04500
04501
04502
04503
04510
04511
04512
04513
*04501
04500
04501
04502
04503
04510
04511
04512
04513
*04502
04500
04501
04502
04503
04510
04511
04512
04513
*04503
04500
04501
04502

04503
04510
04511
04512
04513
*04510
04500
04501
04502
04503
04510
04511
04512
04513
*04511
04500
04501
04502
04503
04510
04511
04512
04513

*04512
04500
04501
04502
04503
04510
04511
04512
04513
*04513
04500
04501
04502
04503
04510
04511
04512
04513
*0460
0460
0461
0463
0468
0469
*0461
0460
0461
0463
0468
0469

*0462
0460
0461
0463
0468
0469
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0463
0460
0461
0463

0468
0469
*0468
0460
0461
0463
0468
0469
048

0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0469

0460
0461
0463
0468
0469
*0470
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0471
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0478
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0479
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*048
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0490
00321
0461
0463
0470
0471
0478
0479
048
0490
0491
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
09181
09882
10081
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0491
00321
0470
0471
0478
0479
0490
0491
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0498
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
09181
09882
10081
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0499
0499
*0500
0500
0501
0502
0509
*0501
0500
0501
0502
0509
*0502
0500
0501
0502
0509
*0509
0500
0501
0502
0509
*0510
0500
0501
0502
0509
*0511

0500
0501
0502
0509
*0512
0500
0501
0502
0509
*0519
0500
0501
0502
0509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
*0520
0461
0463
048
0498
0499
0500
0501
0502
0509
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0521
0500
0501
0502
0509
*0522
0461
0463
048
0498
0499
0500
0501
0502
0509
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
3231
3232
3239
7712
*0527
0500
0501
0502
0509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
*0528
0500
0501
0502
0509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
*0529
0500
0501
0502
0509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
*0530
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05310
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05311
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05312
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05313
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05319
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05320
05320
05321
05322
05329
*05321
05320
05321
05322
05329
*05322
05320
05321
05322
05329
*05329
05320
05321
05322
05329
*05371
05371
*05379
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0538
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122

32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0539
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0542
0542
*0543
0461
0463
048
0498
0499
05821
05829
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*05440
05440
05441
05442
05443
05444
05449
*05441
05440
05441
05442
05443
05444
05449
*05442
05440
05441
05442
05443
05444
05449
*05443
05440
05441
05442
05443
05444
05449
*05444
05440
05441
05442
05443
05444
05449
*05449
05440
05441
05442
05443
05444
05449
*0545
0031
0223
77189
*05472
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05474
0461
0463
048
0498
0499
05821
05829
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
3231
3232
3239
7712
*05479
05440
05441
05442
05443
05444
05449
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0548
05440
05441
05442
05443
05444
05449
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0549
05440
05441
05442
05443
05444
05449
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*05601
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*05671
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127

71128	71191	32372	0463	0623	0632
71129	71192	32381	048	0624	0638
71130	71193	32382	0498	0625	0639
71131	71194	3239	0499	0628	064
71132	71195	7712	0620	0629	0662
71133	71196	*0579	0621	0630	0663
71134	71197	0461	0622	0631	06640
71135	71198	0463	0623	0632	06641
71136	71199	048	0624	0638	06642
71137	*0570	0498	0625	0639	06649
71138	0570	0499	0628	064	0737
71139	07983	0620	0629	0662	0819
71140	*0578	0621	0630	0663	0869
71141	0461	0622	0631	06640	124
71142	0463	0623	0632	06641	32301
71143	048	0624	0638	06642	32302
71144	0498	0625	0639	06649	3231
71145	0499	0628	064	0737	3232
71146	0620	0629	0662	0819	32341
71147	0621	0630	0663	0869	32342
71148	0622	0631	06640	124	32351
71149	0623	0632	06641	32301	32352
71150	0624	0638	06642	32302	32361
71151	0625	0639	06649	3231	32362
71152	0628	064	0737	3232	32363
71153	0629	0662	0819	32341	32371
71154	0630	0663	0869	32342	32372
71155	0631	06640	124	32351	32381
71156	0632	06641	32301	32352	32382
71157	0638	06642	32302	32361	3239
71158	0639	06649	3231	32362	7712
71159	064	0737	3232	32363	*05821
71170	0662	0819	32341	32371	0461
71171	0663	0869	32342	32372	0463
71172	06640	124	32351	32381	048
	06641	32301	32352	32382	0498
71173	06642	32302	32361	3239	0499
71174	06649	3231	32362	7712	05379
71175	0737	3232	32363	*05812	0538
71176	0819	32341	32371	0461	0543
71177	0869	32342	32372	0463	05821
71178	124	32351	32381	048	05829
71179	32301	32352	32382	0498	0620
71180	32302	32361	3239	0499	0621
71181	3231	32362	7712	0620	0622
71182	3232	32363	*05811	0621	0623
71183	32341	32371	0461	0622	0624
71184	32342	32372	0463	0623	0625
71185	32351	32381	048	0624	0628
71186	32352	32382	0498	0625	0629
71187	32361	3239	0499	0628	0630
71188	32362	7712	0620	0629	0631
71189	32363	*05810	0621	0630	0632
71190	32371	0461	0622	0631	0638

0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
34982
7712
*05829
0461
0463
048
0498
0499
05379
0538
0543
05821
05829
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
34982
7712
*05881
0530
05310
05311
05312
05313
05314
05319
05379
0538
0543
05440
05441
05442
05443
05444
05449
0545
05471
05472
05474
05479
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
*05882
0530
05310
05311
05312
05313
05314
05319
05379
0538
0543
05440
05441
05442
05443
05444
05449
0545
05471
05472
05474
05479
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*05889
0530
05310
05311
05312
05313
05314
05319
05379
0538
0543
05440
05441
05442
05443
05444
05449
0545
05471
05472
05474
05479
05821
05829
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0600
0600
0601
0609
*0601
0600
0601
0609
*0609
0600
0601
0609
*061
061
*0620
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0621
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0622
0461
0463
048
0498
0499
0620
0621
0622
0623
0624

0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0623
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0624
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0625
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0628
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0629
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0630
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0631
0461
0463
048

0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0632
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0638
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0639
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*064
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0650
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0651
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0652
*0653
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0654
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0658

0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0659
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0660
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0661

0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0662
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669

0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0663
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641

06642
06649
0668
0669
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*06640
0468
048
0490
0498
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662

0663
0668
0669
0737
0819
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3411
7712
*06641
0468
048
0490
0498
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663

0668
0669
0737
0819
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3411
7712
*06642
0468
048
0490
0498
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663

0668
0669
0737
0819
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3411
7712
*06649
0468
048
0490
0498
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
0668

0669
0737
0819
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3411
7712
*0668
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641
06642
06649
0668
0669
*0669
0650
0651
0652
0653
0654
0658
0659
0660
0661
0662
0663
06640
06641

06642
06649
0668
0669
*0700
0700
0701
*0701
0700
0701
*07020
0700
0701
*07021
0700
0701
*07022
0700
0701
*07023
0700
0701
*07030
0700
0701
*07031
0700
0701
*07032
0700
0701
*07033
0700
0701
*07041
0700
0701
*07042
0700
0701
*07043
0700
0701
*07044
0700
0701
*07049
0700
0701
*07051
0700
0701
*07052
0700

0701
*07053
0700
0701
*07054
0700
0701
*07059
0700
0701
*0706
0700
0701
*07070
0700
0701
07981
*07071
0700
0701
07981
*0709
0700
0701
*071
071
*0721
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0722

0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0730
00322
0203
0221
0730
0737
0738
0739

4800
4801
4802
4808
4809
5183
*0737
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0738

0730
0737
0738
0739
*0739
0730
0737
0738
0739
*07420
03282
07420
07423
09885
3912
*07421
07421
09883
3910
393
4233
4238
4239
*07422
03282
07420
07422
07423
09884
09885
3911
3912
*07423
03282
07420
07423
09885
3912
*075
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0869
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*0783
0783
0869
3239
7712
*0785
0785
0787
07981
*0786
0785
0786
0787
07981
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*0787
0785
0787
07981
*07881
0787
07981
*07882
0787
07981
*07888
00321
0470
0471
0478
0479
0490
0491
0700
0701
0787
07981
09181
09882
10081
*07889
00321
0470
0471
0478
0479
0490
0491
0700
0701
0785
0787
07981
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0790
0785
0787
07981
*0791
0785
0787
07981
*0792
0785
0787
07981
*0793
0785
0787
07981
*0794
0785
0787
07981
*07950
0785
0787
07952
07953
07981
*07951
0787
07951
07952
07953
07981
*07952
0787
07951
07952
07953
07981
*07953
0787
07951
07952
07953
07981
*07959
0785
0787
07951
07952
07953
07981
*0796
0787
07981
*07981
00321
0470
0471
0478
0479
0490
0491
0700
0701
0785
0787
07951
07952
07953
07981
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*07982
0468
048
0490
0498
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
0737
0783
0785
0786
0787
07951
07952
07953
0819
0846
124
29012
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3411
7712
*07983
0570
07983
*07988
00321
0470
0471
0478
0479
0490
0491
0700
0701
0787
07951
07952
07953

07981
09181
09882
10081
*07989
00321
0470
0471
0478
0479
0490
0491
0700
0701
0785
0787
07951
07952
07953
07981
09181
09882
10081
*07998
00321
0470
0471
0478
0479
0490
0491
0700
0701
0787
07951
07952
07953
07981
09181
09882
10081
*07999
00321
0461
0470
0471
0478
0479
048
0490
0491
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0700
0701
0737
0785
0787
07951
07952
07953
07981
0819
0869
09181
09882
10081
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
34120
34121
34122
7712
*080
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0810
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0811
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0812
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
*0819
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865

0869
0870
0871
0879
0880
08881
08882
124
3231
3232
3239
7712
*0820
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0821
080
0810
0832
0811
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0822
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0823
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08240
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08241
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0828
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08249
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882

*0829
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0830
07422
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0831
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0832
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0838
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0839
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0832
0838
0839
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
124
3231
3232
3239
7712
*0840
0819
0840
0841
0842
0843
0844
0845
0846
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0841
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0842
0840

0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0843
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0844
0840
0841
0842
0843
0844
0845
0846
0847
0848

0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0845
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0846
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849

0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
3232
3239
7712
*0847
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0848
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849

0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0849
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
08882
*0850
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829

0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0851
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828

0829
0830
0831
0840
0841
0842
0843
0844

0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0852
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852

0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0853
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0854
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0855
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0859
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0860
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0861
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0862
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853

0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0863
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
*0864
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0865
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0840
0841
0842
0843
0844
0845
0846
0847
0848
0849
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
*0869
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0870
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0871
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0879
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0880
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828

0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08881
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08882
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*08889
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
0853
0854
0855
0859
0861
0862
0863
0864
0865
0869
0870
0871
0879
0880
08881
08882
*0889
080
0810
0811
0812
0819
0820
0821
0822
0823
08240
08241
08249
0828
0829
0830
0831
0841
0850
0851
0852
*0900
03283
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
09181
09182
09189
0917
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0901
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0902
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956

*0903
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09040
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09041
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09041
0461
0463
048
0498
0499
0620
0621
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09042
00321
0470
0471
0478
0479
0490
0491
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09049
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0905
0900
0902
0903

0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0906
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0907
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0909
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0910
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0911
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0912
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954

0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0913
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0914
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09150
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09151
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09152
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09161
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09162

0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09169
0900
0902
0903
0905
0913
0914
09150
09151
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0917
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09181
00321
0470
0471
0478
0479
0490
0491
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*09182
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09189
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889

09956
*0919
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0920
0900
0902
0903
0905
0913
0914
0919
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0929
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0930
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0931
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09320
07422
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
3911
*09321
07422
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482

09483	09485	0950	0951	0953	09486
09484	09486	0951	0952	0954	0950
09485	0950	0952	0953	0955	0951
09486	0951	0953	0954	0956	0952
0950	0952	0954	0955	0957	0953
0951	0953	0955	0956	0958	0954
0952	0954	0956	0957	0959	0955
0953	0955		0958	09840	0956
0954	0956	0957	0959	09841	0957
0955	0957	0958	09840	09842	0958
0956	0958	0959	09841	09843	0959
0957	0959	09840	09842	09849	09840
0958	09840	09841	09843	09850	09841
0959	09841	09842	09849	09851	09842
09840	09842	09843	09850	09852	09843
09841	09843	09849	09851	09853	09849
09842	09849	09850	09852	09859	09850
09843	09850	09851	09853	09882	09851
09849	09851	09852	09859	09883	09852
09850	09852	09853	09882	09884	09853
09851	09853	09859	09883	09885	09859
09852	09859	09882	09884	09886	09882
09853	09882	09883	09885	09889	09883
09859	09883	09884	09886	09956	09884
09882	09884	09885	09889	3910	09885
09883	09885	09886	09956	393	09886
09884	09886	09889	3911	4233	09889
09885	09889	09956	*09381	4238	09956
09886	09956	3911	07421	4239	3912
09889	3911	*09324	0900	*09382	*09389
09956	*09323	07422	0902	03282	0900
3911	07422	0900	0903	07420	0902
*09322	0900	0902	0905	07423	0903
07422	0902	0903	0913	0900	0905
0900	0903	0905	0914	0902	0913
0902	0905	0913	09150	0903	0914
0903	0913	0914	09151	0905	09150
0905	0914	09150	09152	0913	09151
0913	09150	09151	09161	0914	09152
0914	09151	09152	09162	09150	09161
09150	09152	09161	09169	09151	09162
09151	09161	09162	0917	09152	09169
09152	09162	09169	09181	09161	0917
09161	09169	0917	09182	09162	09181
09162	0917	09181	09189	09169	09182
09169	09181	09182	0919	0917	09189
0917	09182	09189	09482	09181	0919
09181	09189	0919	09483	09182	09482
09182	0919	09482	09484	09189	09483
09189	09482	09483	09485	0919	09484
0919	09483	09484	09486	09482	09485
09482	09484	09485	0950	09483	09486
09483	09485	09486	0951	09484	0950
09484	09486	0950	0952	09485	

0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0939
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0940
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
*0941
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0942
00321
0470
0471
0478
0479
0490
0491
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*0943
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09481
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064

0662	09885	0959	09843	09852	09883
0663	09886	09840	09849	09853	09884
06640	09889	09841	09850	09859	09885
06641	09956	09842	09851	09882	09886
06642	124	09843	09852	09883	09889
06649	32301	09849	09853	09884	09956
0737	32302	09850	09859	09885	*09486
0819	3231	09851	09882	09886	0900
0869	3232	09852	09883	09889	0902
0900	32341	09853	09884	09956	0903
0902	32342	09859	09885	*09485	0905
0903	32351	09882	09886	0900	0913
0905	32352	09883	09889	0902	0914
0913	32361	09884	09956	0903	09150
0914	32362	09885	*09484	0905	09151
09150	32363	09886	0900	0913	09152
09151	32371	09889	0902	0914	09161
09152	32372	09956	0903	09150	09162
09161	32381	*09483	0905	09151	09169
09162	32382	0900	0913	09152	0917
09169	3239	0902	0914	09161	09181
0917	7712	0903	09150	09162	09182
09181	*09482	0905	09151	09169	09189
09182	0900	0913	09152	0917	0919
09189	0902	0914	09161	09181	09482
0919	0903	09150	09162	09182	09483
09482	0905	09151	09169	09189	09484
09483	0913	09152	0917	0919	09485
09484	0914	09161	09181	09482	09486
09485	09150	09162	09182	09483	0950
09486	09151	09169	09189	09484	0951
0950	09152	0917	0919	09485	0952
0951	09161	09181	09482	09486	0953
0952	09162	09182	09483	0950	0954
0953	09169	09189	09484	0951	0955
0954	0917	0919	09485	0952	0956
0955	09181	09482	09486	0953	0957
0956	09182	09483	0950	0954	
0957	09189	09484	0951	0955	0958
0958	0919	09485	0952	0956	0959
0959	09482	09486	0953	0957	09840
09840	09483	0950	0954	0958	09841
09841	09484	0951	0955	0959	09842
09842	09485	0952	0956	09840	09843
09843	09486	0953	0957	09841	09849
09849	0950	0954	0958	09842	09850
09850	0951	0955	0959	09843	09851
09851	0952	0956	09840	09849	09852
09852	0953	0957	09841	09850	09853
09853	0954	0958	09842	09851	09859
09859	0955	0959	09843	09852	09882
09882	0956	09840	09849	09853	09883
09883	0957	09841	09850	09859	09884
09884	0958	09842	09851	09882	09885

09886
09889
09956
*09487
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0949
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0950
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0951
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0952
03283
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09183
09189
0919
09482
09483
09484
09485
09486
0950
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0953
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0954
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0955
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0956
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0957
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0958
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0959
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09840
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09841
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09842
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09843
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09849
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09850
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09851
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09852
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09853
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09859
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09882
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09883
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09884
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09885
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09886
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09889
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09956
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956

09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0954
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0955
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0956
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0957
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0958
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0959
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853

09859
09882
09883
09884
09885
09886
09889
09956
*096
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0970
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0971
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0979
0900
0902
0903
0905
0913
0914
09150
09151
09152
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0980
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09810
0786
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09811
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001

0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09812
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09813
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09814
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09815
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
6147
*09816
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
6147
*09817
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
6147
*09819
0786
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885

09886
09889
09956
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*0982
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883

09884
09885
09886
09889
09956
*09830
0786
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
27411
5820
5821
5822
5824
58281

58289
5829
5830
5831
5832
5881
58881
59001
*09831
0786
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
27411
5820
5821

5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*09832
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09833

0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09834
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484

09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
*09835
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959

09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
6147
*09836
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
6147
*09837
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09840
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09839
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09881
09882
09883
09884
09885
09886
09889
09956
*09841
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09881
09882
09883
09884
09885
09886
09889
09956
*09842
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09881
09882
09883
09884
09885
09886
09889
09956
*09843
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09881
09882
09883
09884
09885
09886
09889
09956
*09849
0902
09161
09162
09169

0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09881
09882
09883
09884
09885
09886
09889
09956
*09850
00323
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*09851
00323
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*09852
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885

09886
09889
09956
*09853
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*0986
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09881
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
*09882
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840

09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09883
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09884
07422
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09885
03283
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09889
00321
00323
0470
0471
0478
0479
0490
0491
0786
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
10081
27411
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173

71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*0990
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0991
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0992
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0993
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09940
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09941
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
*09949
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
*09950
0902
09161

09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09951
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09952
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09953
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09954
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09955
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*09956
03283
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
*09959
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954

09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0998
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
09851
09852
09853
09859
09882
09883
09884
09885
09886
09889
09956
*0999
0902
09161
09162
09169
0917
09181
09182
09189
0919
09482
09483
09484
09485
09486
0950
0951
0952
0953
0954
0955
0956
0957
0958
0959
09840
09841
09842
09843
09849
09850
*1000
1000
10081
10089
1009
*10081
00321
0470
0471
0478
0479
0490
0491
09181
09882
1000
10081
10089
1009
*1009
1000
10081
10089
1009
*101
101
*1026
09161
*1122
0786
1122
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
*1124
1122
11289
*1125
1122
11289
*11281
07422
09884
09885
1122
11289
*11282
1122
11289
*11283
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
1122
11289
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*11284
1122
11289
*11285
0040
0085
00861
00862
00863
00864
00865
00866
00867
00869
1122
11289
1230
*11289
1122
11289
*1129
1122
11289
*1140
1141
1144
1145
11509
*1141
1141
1144
1145
11509
*1142
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
1141
1144
1145
11509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*1143
1141
1144
1145
11509
*1144
1141
1144
1145
11509
*1145
1141
1144
1145
11509
*1149
1141
1144
1145
11509
*11500
1144
1145
11509
*11501
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
1144
1145
11509
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121

34122
*11502
09483
1144
1145
11509
*11503
1144
1145
11509
*11504
1144
1145
11509
*11505
00322
0203
0221
0730
1144
1145
11509
4800
4801
4802
4808
4809
5183
*11509
1144
1145
11509
*11510
1144
1145
*11511
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
1144
1145
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*11512
09483
1144
1145
*11513
1144
1145
*11514
1144
1145
*11515
00322
0203
0221
0730
1144
1145
4800
4801
4802
4808
4809
5183
*11519
1144
1145
*11590
1144
1145
*11591
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
1144
1145
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*11592
1144
1145
*11593
1144
1145
*11594
07422
09884
09885
1144
1145
3911
*11595
00322
0203
0221
0730
1144
1145
4800
4801
4802
4808
4809
5183
*11599
1144
1145
*1160
07422
09884
09885
*1175
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
3231
3232
3239
7712
*1178
1178
1179
*1179
1178
1179
*1200
1200
1201
1202
1203
1208
1209
*1201
1200
1201
1202
1203
1208
1209
*1202
1200
1201
1202
1203
1208
1209
*1203
1200
1201
1202
1203
1208
1209
*1208
1200
1201
1202
1203
1208
1209
*1209
1200
1201
1202
1203
1208
1209
*1210
1210
1211
1212
1213
1214
1215
*1211
1210
1211
1212
1213
1214
1215
*1212
1210
1211
1212
1213
1214
1215
*1213
1210
1211
1212
1213
1214
1215
*1220
1220
*1221
1213
1214
1215
1216
1218
*1214
1210
1211
1212
1213
1214
1215
1216
1218
*1215
1210
1211
1212
1213
1214
1215
1216
1218
*1216
1210
1211
1212
1213
1214
1215
1216
1218
*1218
1210
1211
1212
1213
1214
1215
1216
1218
*1219
1210
1211
1212
1213
1214
1215
1216
1218
*1220
1220
*1221

00322
0203
0221
0730
1221
4800
4801
4802
4808
4809
5183
*1222
1222
*1223
1223
*1224
1224
*1225
1225
*1226
1226
*1227
1227
*1228
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
*1229
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
*1230
1230
1231
1232
1233
1234
1235
1236
1238
*1231
1230
1231
1232
1233
1234
1235
1236
1238
*1232
1230
1231
1232
1233
1234
1235
1236
1238
*1233
1230
1231
1232
1233
1234
1235
1236
1238
*1234
1230
1231
1232
1233
1234
1235
1236
1238
*1235
1230
1231
1232
1233
1234
1235
1236
1238
*1236
1230
1231
1232
1233
1234
1235
1236
1238
*1238
1230
1231
1232
1233
1234
1235
1236
1238
*1239
1230
1231
1232
1233
1234
1235
1236
1238
*124
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
3231
3232
3239
7712
*1250
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1251
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1252
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1253
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1254
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1255
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1256
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1257
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1259
1250
1251
1252
1253
1254
1255
1256
1257
1259
*1260
1260
1261
1262
1263
1268
1269
*1261
1260
1261
1262
1263
1268
1269
*1262
1260
1261
1262
1263
1268
1269
*1263
1260
1261
1262
1263
1268
1269
*1268
1260
1261
1262
1263
1268
1269
*1269
1260
1261
1262
1263
1268
1269
*1270
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1271
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1272
1270
1271
1272
1273
1274
1275
1276
1277
1278

1279
*1273
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1274
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1275
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1276
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1277
1270
1271
1272
1273
1274
1275
1276

1277
1278
1279
*1278
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1279
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
*1280
1277
1278
1279
*1281
1277
1278
1279
*1288
1277
1278
1279
*129
0040
0062
0071
0072
0074
0075
0078
0079
0085
00861
00862
00863

00864
00865
00866
00867
00869
1230
1277
1278
1279
*1300
00321
0461
0463
0470
0471
0478
0479
048
0490
0491
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
09181
09882
10081
124
32301
32302
3231
3232
32341

32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
34120
34121
34122
7712
*1304
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*1309
1309
*13100
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
*1318
0786
27411
5820
5821
5822
5824
58281

58289
5829
5830
5831
5832
5881
58881
59001
6147
*1319
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
6147
*1360
1362
1364
1365
*1361
1362
1364
1365
*1362
1362
1364
1365
*1363
00322
0203
0221
0730
1362
1364
1365
*1364

1362
1364
1365
*1365
1362
1364
1365
*1368
1362
1364
1365
*1369
1362
1364
1365
*1398
0031
00321
0223
0470
0471
0478
0479
0490
0491
05821
05829
0700
0701
0902
09169
0917
09181
09189
0919
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
77189

*1580
1580
1588
1589
*1588
1588
1589
*1589
1588
1589
*1620
1620
*1622
1620
*1623
1620
*1624
1620
*1625
1620
*1628
1620
*1629
1620
*1658
1620
*1659
1620
*1700
1700
1709
*1701
1701
1709
*1702
1702
1709
*1703
1703
1709
*1704
1704
1709
*1705
1705
1709
*1706
1706
1709
*1707
1707
1709
*1708
1708
1709
*1709
1700
1701
1702
1703
1704
1705
1706
1707
1708
*1760
1760
1768
1769
*1761
1761
1768
1769
*1762
1762
1768
1769
*1763
1763
1768
1769
*1764
1620
1768
1769
*1765
1768
1769
*1768
1760
1761
1762
1763
1768
1769
*1769
1760
1761
1762
1763
1768
1769
*179
1769
*1800
1769
*1801
1769
*1808
1769
*1809
1769
*181
1769
*1820
1769
*1821
1769
*1828
1769
*1830
1769
1830
*1832
1769
1830
*1833
1769
1830
*1834
1769
1830
*1835
1769
1830
*1838
1769
1830
*1839
1769
1830
*1840
1769
*1841
1769
*1842
1769
*1843
1769
*1844
1769
*1848
1769
*1849
1769
*185
1769
*1860
1769
*1869
1769
*1871
1769
*1872
1769
*1873
1769
*1874
1769
*1875
1769
*1876
1769
*1877
1769
*1878
1769
*1879
1769
*1880
1769
*1881
1769
*1882
1769
*1883
1769
*1884
1769
*1885
1769
*1886
1769
*1887
1769
*1888
1769
*1889
1769
*1890
1769
*1891
1769
*1892
1769
*1893
1769
1893
1894
*1894
1769
1893
1894
*1898
1769
1893
1894
*1899
1769
1893
1894
1898
1899
*1900
1769
*1901
1769
*1902
1769
*1903
1769
*1904
1769
*1905
1769
*1906
1769
*1907
1769
*1908
1769
*1909
1769
*1910
1769
1929
*1911
1769
1929
*1912
1769
1929
*1913
1769
1929
*1914
1898
1899
*1915
1769
1929
*1916
1769
1929
*1917
1769
1929
*1918
1769
1929
*1919
1769
1929
*1920
1769
1929
*1921
1769
1929
*1922
1769
1929
*1923
1769
1929
*1928
1769
1929
*1929
1769
1929
*1940
1940
1948
1949
*1941
1941
1948
1949
*1943
1943
1948
1949
*1944
1944
1948
1949
*1945
1945
1946

1948
1949
*1946
1946
1948
1949
*1948
1941
1945
1946
1948
1949
*1949
1940
1941
1945
1946
1948
1949
*1950
1769
*1951
1620
1769
*1952
1769
1940
*1953
1769
1830
1898
1899
*1954
1769
*1955
1769
*1958
1620
1769
1929
1940
*1960
1769
*1961
1769
*1962
1769
*1963
1769
*1965
1769
*1966
1769
*1968
1769
*1969
1769
*1970
1620
1769
*1971
1620
1769
*1972
1620
1769
*1973
1620
1769
*1974
1769
*1975
1769
*1976
1769
*1977
1769
*1978
1769
*1980
1769
1898
1899
*1981
1769
1898
1899
*1982
1769
*1983
1769
1929
*1984
1769
1929
*1985
1769
*1986
1769
1830
*1987
1769
1940
*19881
1769
*19882
1769
1893
1894
*19889
1769
*1990
1620
1769
1830
1929
1940
*1991
1620
1769
1829
1940
*20030
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20200
20210
20220
20230
20240
20250
20260
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20031
20030
20031
20038
20040
20041
20048
20050
20051
20058
20060
20061
20068
20070
20071
20078
20201
20211
20221
20231
20241
20251
20261
20270
20271
20278
20280
20281
20288
*20032
20030
20032
20038
20040
20042
20048
20050
20052
20058
20060
20062
20068
20070
20072
20078
20202
20212
20222
20232
20242
20252
20262
20270
20272
20278
20280
20282
20288
*20033
20030
20033
20038
20040
20043
20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20203
20213
20223
20233
20243
20253
20263
20270
20273
20278
20280
20283
20288
*20034
20030
20034
20038
20040
20044
20048
20050
20054
20058
20060
20064
20068
20070
20074
20078
20204
20214
20224
20234
20244
20254
20264
20270
20274
20278
20280
20284
20288
*20035
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20036
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280
20286
20288
*20037
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20067
20068
20070
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
20288
*20038
20030
20038
20038
20040
20048
20048
20050
20058
20058
20060
20068
20068
20070
20078
20078
20208
20218
20228
20238
20248
20258
20268
20270
20278
20278
20280
20288
20288
*20039
20030
20039
20038
20040
20049
20048
20050
20059
20058
20060
20069
20068
20070
20079
20078
20209
20219
20229
20239
20249
20259
20269
20270
20279
20278
20280
20289
20288
*20040
20030
20040
20038
20040
20050
20048
20050
20060
20058
20060
20070
20068
20070
20080
20078
20210
20220
20230
20240
20250
20260
20270
20270
20280
20278
20280
20290
20288
*20041
20030
20041
20038
20040
20051
20048
20050
20061
20058
20060
20071
20068
20070
20081
20078
20211
20221
20231
20241
20251
20261
20271
20270
20281
20278
20280
20291
20288
*20042
20030
20042
20038
20040
20052
20048
20050
20062
20058
20060
20072
20068
20070
20082
20078
20212
20222
20232
20242
20252
20262
20272
20270
20282
20278
20280
20292
20288
*20043
20030
20043
20038
20040
20053
20048
20050
20063
20058
20060
20073
20068
20070
20083
20078
20213
20223
20233
20243
20253
20263
20273
20270
20283
20278
20280
20293
20288
*20044
20030
20044
20038
20040
20054
20048
20050
20064
20058
20060
20074
20068
20070
20084
20078
20214
20224
20234
20244
20254
20264
20274
20270
20284
20278
20280
20294
20288
*20045
20030
20045
20038
20040
20055
20048
20050
20065
20058
20060
20075
20068
20070
20085
20078
20215
20225
20235
20245
20255
20265
20275
20270
20285
20278
20280
20295
20288
*20046
20030
20046
20038
20040
20056
20048
20050
20066
20058
20060
20076
20068
20070
20086
20078
20216
20226
20236
20246
20256
20266
20276
20270
20286
20278
20280
20296
20288
*20047
20030
20047
20038
20040
20057
20048
20050
20067
20058
20060
20077
20068
20070
20087
20078
20217
20227
20237
20247
20257
20267
20277
20270
20287
20278
20280
20297
20288
*20048
20030
20048
20038
20040
20058
20048
20050
20068
20058
20060
20078
20068
20070
20088
20078
20218
20228
20238
20248
20258
20268
20278
20270
20288
20278
20280
20298
20288
*20049
20030
20049
20038
20040
20059
20048
20050
20069
20058
20060
20079
20068
20070
20089
20078
20219
20229
20239
20249
20259
20269
20279
20270
20289
20278
20280
20299
20288
*20050
20030
20050
20038
20040
20060
20048
20050
20070
20058
20060
20080
20068
20070
20090
20078
20220
20230
20240
20250
20260
20270
20280
20270
20290
20278
20280
20300
20288
*20051
20030
20051
20038
20040
20061
20048
20050
20071
20058
20060
20081
20068
20070
20091
20078
20221
20231
20241
20251
20261
20271
20281
20270
20291
20278
20280
20301
20288
*20052
20030
20052
20038
20040
20062
20048
20050
20072
20058
20060
20082
20068
20070
20092
20078
20222
20232
20242
20252
20262
20272
20282
20270
20292
20278
20280
20302
20288
*20053
20030
20053
20038
20040
20063
20048
20050
20073
20058
20060
20083
20068
20070
20093
20078
20223
20233
20243
20253
20263
20273
20283
20270
20293
20278
20280
20303
20288
*20054
20030
20054
20038
20040
20064
20048
20050
20074
20058
20060
20084
20068
20070
20094
20078
20224
20234
20244
20254
20264
20274
20284
20270
20294
20278
20280
20304
20288
*20055
20030
20055
20038
20040
20065
20048
20050
20075
20058
20060
20085
20068
20070
20095
20078
20225
20235
20245
20255
20265
20275
20285
20270
20295
20278
20280
20305
20288
*20056
20030
20056
20038
20040
20066
20048
20050
20076
20058
20060
20086
20068
20070
20096
20078
20226
20236
20246
20256
20266
20276
20286
20270
20296
20278
20280
20306
20288
*20057
20030
20057
20038
20040
20067
20048
20050
20077
20058
20060
20087
20068
20070
20097
20078
20227
20237
20247
20257
20267
20277
20287
20270
20297
20278
20280
20307
20288
*20058
20030
20058
20038
20040
20068
20048
20050
20078
20058
20060
20088
20068
20070
20098
20078
20228
20238
20248
20258
20268
20278
20288
20270
20298
20278
20280
20308
20288
*20059
20030
20059
20038
20040
20069
20048
20050
20079
20058
20060
20089
20068
20070
20099
20078
20229
20239
20249
20259
20269
20279
20289
20270
20299
20278
20280
20309
20288
*20060
20030
20060
20038
20040
20070
20048
20050
20080
20058
20060
20090
20068
20070
20100
20078
20230
20240
20250
20260
20270
20280
20290
20270
20300
20278
20280
20310
20288
*20061
20030
20061
20038
20040
20071
20048
20050
20081
20058
20060
20091
20068
20070
20101
20078
20231
20241
20251
20261
20271
20281
20291
20270
20301
20278
20280
20311
20288
*20062
20030
20062
20038
20040
20072
20048
20050
20082
20058
20060
20092
20068
20070
20102
20078
20232
20242
20252
20262
20272
20282
20292
20270
20302
20278
20280
20312
20288
*20063
20030
20063
20038
20040
20073
20048
20050
20083
20058
20060
20093
20068
20070
20103
20078
20233
20243
20253
20263
20273
20283
20293
20270
20303
20278
20280
20313
20288
*20064
20030
20064
20038
20040
20074
20048
20050
20084
20058
20060
20094
20068
20070
20104
20078
20234
20244
20254
20264
20274
20284
20294
20270
20304
20278
20280
20314
20288
*20065
20030
20065
20038
20040
20075
20048
20050
20085
20058
20060
20095
20068
20070
20105
20078
20235
20245
20255
20265
20275
20285
20295
20270
20305
20278
20280
20315
20288
*20066
20030
20066
20038
20040
20076
20048
20050
20086
20058
20060
20096
20068
20070
20106
20078
20236
20246
20256
20266
20276
20286
20296
20270
20306
20278
20280
20316
20288
*20067
20030
20067
20038
20040
20077
20048
20050
20087
20058
20060
20097
20068
20070
20107
20078
20237
20247
20257
20267
20277
20287
20297
20270
20307
20278
20280
20317
20288
*20068
20030
20068
20038
20040
20078
20048
20050
20088
20058
20060
20098
20068
20070
20108
20078
20238
20248
20258
20268
20278
20288
20298
20270
20308
20278
20280
20318
20288
*20069
20030
20069
20038
20040
20079
20048
20050
20089
20058
20060
20099
20068
20070
20109
20078
20239
20249
20259
20269
20279
20289
20299
20270
20309
20278
20280
20319
20288
*20070
20030
20070
20038
20040
20080
20048
20050
20090
20058
20060
20100
20068
20070
20110
20078
20240
20250
20260
20270
20280
20290
20300
20270
20310
20278
20280
20320
20288
*20071
20030
20071
20038
20040
20081
20048
20050
20091
20058
20060
20101
20068
20070
20111
20078
20241
20251
20261
20271
20281
20291
20301
20270
20311
20278
20280
20321
20288
*20072
20030
20072
20038
20040
20082
20048
20050
20092
20058
20060
20102
20068
20070
20112
20078
20242
20252
20262
20272
20282
20292
20302
20270
20312
20278
20280
20322
20288
*20073
20030
20073
20038
20040
20083
20048
20050
20093
20058
20060
20103
20068
20070
20113
20078
20243
20253
20263
20273
20283
20293
20303
20270
20313
20278
20280
20323
20288
*20074
20030
20074
20038
20040
20084
20048
20050
20094
20058
20060
20104
20068
20070
20114
20078
20244
20254
20264
20274
20284
20294
20304
20270
20314
20278
20280
20324
20288
*20075
20030
20075
20038
20040
20085
20048
20050
20095
20058
20060
20105
20068
20070
20115
20078
20245
20255
20265
20275
20285
20295
20305
20270
20315
20278
20280
20325
20288
*20076
20030
20076
20038
20040
20086
20048
20050
20096
20058
20060
20106
20068
20070
20116
20078
20246
20256
20266
20276
20286
20296
20306
20270
20316
20278
20280
20326
20288
*20077
20030
20077
20038
20040
20087
20048
20050
20097
20058
20060
20107
20068
20070
20117
20078
20247
20257
20267
20277
20287
20297
20307
20270
20317
20278
20280
20327
20288
*20078
20030
20078
20038
20040
20088
20048
20050
20098
20058
20060
20108
20068
20070
20118
20078
20248
20258
20268
20278
20288
20298
20308
20270
20318
20278
20280
20328
20288
*20079
20030
20079
20038
20040
20089
20048
20050
20099
20058
20060
20109
20068
20070
20119
20078
20249
20259
20269
20279
20289
20299
20309
20270
20319
20278
20280
20329
20288
*20080
20030
20080
20038
20040
20090
20048
20050
20100
20058
20060
20110
20068
20070
20120
20078
20250
20260
20270
20280
20290
20300
20310
20270
20320
20278
20280
20330
20288
*20081
20030
20081
20038
20040
20091
20048
20050
20101
20058
20060
20111
20068
20070
20121
20078
20251
20261
20271
20281
20291
20301
20311
20270
20321
20278
20280
20331
20288
*20082
20030
20082
20038
20040
20092
20048
20050
20102
20058
20060
20112
20068
20070
20122
20078
20252
20262
20272
20282
20292
20302
20312
20270
20322
20278
20280
20332
20288
*20083
20030
20083
20038
20040
20093
20048
20050
20103
20058
20060
20113
20068
20070
20123
20078
20253
20263
20273
20283
20293
20303
20313
20270
20323
20278
20280
20333
20288
*20084
20030
20084
20038
20040
20094
20048
20050
20104
20058
20060
20114
20068
20070
20124
20078
20254
20264
20274
20284
20294
20304
20314
20270
20324
20278
20280
20334
20288
*20085
20030
20085
20038
20040
20095
20048
20050
20105
20058
20060
20115
20068
20070
20125
20078
20255
20265
20275
20285
20295
20305
20315
20270
20325
20278
20280
20335
20288
*20086
20030
20086
20038
20040
20096
20048
20050
20106
20058
20060
20116
20068
20070
20126
20078
20256
20266
20276
20286
20296
20306
20316
20270
20326
20278
20280
20336
20288
*20087
20030
20087
20038
20040
20097
20048
20050
20107
20058
20060
20117
20068
20070
20127
20078
20257
20267
20277
20287
20297
20307
20317
20270
20327
20278
20280
20337
20288
*20088
20030
20088
20038
20040
20098
20048
20050
20108
20058
20060
20118
20068
20070
20128
20078
20258
20268
20278
20288
20298
20308
20318
20270
20328
20278
20280
20338
20288
*20089
20030
20089
20038
20040
20099
20048
20050
20109
20058
20060
20119
20068
20070
20129
20078
20259
20269
20279
20289
20299
20309
20319
20270
20329
20278
20280
20339
20288
*20090
20030
20090
20038
20040
20100
20048
20050
20110
20058
20060
20120
20068
20070
20130
20078
20260
20270
20280
20290
20300
20310
20320
20270
20330
20278
20280
20340
20288
*20091
20030
20091
20038
20040
20101
20048
20050
20111
20058
20060
20121
20068
20070
20131
20078
20261
20271
20281
20291
20301
20311
20321
20270
20331
20278
20280
20341
20288
*20092
20030
20092
20038
20040
20102
20048
20050
20112
20058
20060
20122
20068
20070
20132
20078
20262
20272
20282
20292
20302
20312
20322
20270
20332
20278
20280
20342
20288
*20093
20030
20093
20038
20040
20103
20048
20050
20113
20058
20060
20123
20068
20070
20133
20078
20263
20273
20283
20293
20303
20313
20323
20270
20333
20278
20280
20343
20288
*20094
20030
20094
20038
20040
20104
20048
20050
20114
20058
20060
20124
20068
20070
20134
20078
20264
20274
20284
20294
20304
20314
20324
20270
20334
20278
20280
20344
20288
*20095
20030
20095
20038
20040
20105
20048
20050
20115
20058
20060
20125
20068
20070
20135
20078
20265
20275
20285
20295
20305
20315
20325
20270
20335
20278
20280
20345
20288
*20096
20030
20096
20038
20040
20106
20048
20050
20116
20058
20060
20126
20068
20070
20136
20078
20266
20276
20286
20296
20306
20316
20326
20270
20336
20278
20280
20346
20288
*20097
20030
20097
20038
20040
20107
20048
20050
20117
20058
20060
20127
20068
20070
20137
20078
20267
20277
20287
20297
20307
20317
20327
20270
20337
20278
20280
20347
20288
*20098
20030
20098
20038
20040
20108
20048
20050
20118
20058
20060
20128
20068
20070
20138
20078
20268
20278
20288
20298
20308
20318
20328
20270
20338
20278
20280
20348
20288
*20099
20030
20099
20038
20040
20109
20048
20050
20119
20058
20060
20129
20068
20070
20139
20078
20269
20279
20289
20299
20309
20319
20329
20270
20339
20278
20280
20349
20288
*20100
20030
20100
20038
20040
20110
20048
20050
20120
20058
20060
20130
20068
20070
20140
20078
20270
20280
20290
20300
20310
20320
20330
20270
20340
20278
20280
20350
20288

20078	20067	20067	20048	20030	20278
20205	20068	20068	20050	20031	20280
20215	20070	20070	20051	20038	20282
20225	20077	20071	20052	20040	20288
20235	20078	20072	20053	20041	*20043
20245	20207	20073	20054	20048	20030
20255	20217	20074	20055	20050	20033
20265	20227	20075	20056	20051	20038
20270	20237	20076	20057	20058	20040
20275	20247	20077	20058	20060	20043
20278	20257	20078	20060	20061	20048
20280	20267	20208	20061	20068	20050
20285	20270	20218	20062	20070	20053
20288	20277	20228	20063	20071	20058
*20036	20278	20238	20064	20078	20060
20030	20280	20248	20065	20201	20063
20036	20287	20258	20066	20211	20068
20038	20288	20268	20067	20221	20070
20040	*20038	20270	20068	20231	20073
20046	20030	20271	20070	20241	20078
20048	20031	20272	20071	20251	20203
20050		20273	20072	20261	20213
20056	20032	20274	20073	20270	20223
20058	20033	20275	20074	20271	20233
20060	20034	20276	20075	20278	20243
20066	20035	20277	20076	20280	20253
20068	20036	20278	20077	20281	20263
20070	20037	20280	20078	20288	20270
20076	20038	20281	20200	*20042	20273
20078	20040	20282	20210	20030	20278
20206	20041	20283	20220	20032	20280
20216	20042	20284	20230		20283
20226	20043	20285	20240	20038	20288
20236	20044	20286	20250	20040	*20044
20246	20045	20287	20260	20042	20030
20256	20046	20288	20270	20048	20034
20266	20047	*20040	20271	20050	20038
20270	20048	20030	20272	20052	20040
20276	20050	20031	20273	20058	20044
20278	20051	20032	20274	20060	20048
20280	20052	20033	20275	20062	20050
20286	20053	20034	20276	20068	20054
20288	20054	20035	20277	20070	20058
*20037	20055	20036	20278	20072	20060
20030	20056	20037	20280	20078	20064
20037	20057	20038	20281	20202	20068
20038	20058	20040	20282	20212	20070
20040	20060	20041	20283	20222	20074
20047	20061	20042	20284	20232	20078
20048	20062	20043	20285	20242	20204
20050	20063	20044	20286	20252	20214
20057	20064	20045	20287	20262	20224
20058	20065	20046	20288	20270	20234
20060	20066	20047	*20041	20272	20244

20254
20264
20270
20274
20278
20280
20284
20288
*20045
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20046
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280
20286
20288
*20047
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20067
20068
20070
20071
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
20288
*20048
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20050
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20200
20210
20220
20230
20240
20250
20260
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20051
20030
20031
20038
20040
20041
20048
20050
20051
20058
20060
20061
20068
20070
20071
20078
20201
20211
20221
20231
20241
20251
20261
20270
20271
20278
20280
20281
20288
*20052
20030
20032
20038
20040
20042
20048
20050
20052
20058
20060
20062
20068
20070
20072
20078
20202
20212
20222
20232
20242
20252
20262
20270
20272
20278
20280
20282
20288
*20053
20030
20033
20038
20040
20043
20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20203
20213
20223
20233
20243
20253
20263
20270
20273
20278
20280
20283
20288

*20054
20030
20034
20038
20040
20044
20048
20050
20054
20058
20060
20064
20068
20070
20074
20078
20204
20214
20224
20234
20244
20254
20264
20270
20274
20278
20280
20284
20288
*20055
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20056
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280
20286
20288
*20057
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20067
20068
20070
20071
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
*20058
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20288
*20060
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20200
20210
20220
20230
20240
20250
20260
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20061
20030
20031
20038
20040
20041
20048
20050
20051
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20062
20030
20032
20038
20040
20042
20048
20050
20052
20058
20060
20062
20068
20070
20072
20078
20202
20212
20222
20232
20242
20252
20262
20270
20272
20278
20280
20282
20288
*20063
20030
20033
20038
20040
20043

20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20203
20213
20223
20233
20243
20253
20263
20270
20273
20278
20280
20283
20288
*20064
20030
20034
20038
20040
20044
20048
20050
20054
20058
20060
20064
20068
20070
20074
20078
20204
20214
20224
20234
20244
20254
20264
20270
20274
20278
20280
20284
20288
*20065
20030

20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20066
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280

20286
20288
*20067
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20067
20068
20070
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
20288
*20068
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053

20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20070
20030
20031
20032
20033
20034

20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20200
20210
20220
20230
20240
20250
20260
20270
20271
20272
20273
20274
20275
20276

20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20071
20030
20031
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20201
20211
20221
20231
20241
20251
20261
20270
20271
20278
20280
20281
20288
*20072
20030
20032
20038
20040
20042
20048
20050
20052
20058
20060
20062
20068
20070

20072
20078
20202
20212
20222
20232
20242
20252
20262
20270
20272
20278
20280
20282
20288
*20073
20030
20033
20038
20040
20043
20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20203
20213
20223
20233
20243
20253
20263
20270
20273
20278
20280
20283
20288
*20074
20030
20034
20038
20040
20044
20048
20050
20054

20058
20060
20064
20068
20070
20074
20078
20204
20214
20224
20234
20244
20254
20264
20270
20274
20278
20280
20284
20288
*20075
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20076
20030
20036
20038
20040

20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280
20286
20288
*20077
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20067
20068
20070
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
20288
*20078

20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271

20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20240
23873
23874
23876
23879
28983
*20241
23873
23874
23876
23879
28983
*20242
23873
23874
23876
23879
28983
*20243
23873
23874
23876
23879
28983
*20244
23873
23874
23876
23879
28983
*20245
23873
23874
23876
23879
28983
*20246
23873

23874
23876
23879
28983
*20247
23873
23874
23876
23879
28983
*20248
23873
23874
23876
23879
28983
*20270
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271

20071
20072
20073
20074
20075
20076
20077
20078
20200
20210
20220
20230
20240
20250
20260
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20271
20030
20031
20038
20040
20041
20048
20050
20051
20058
20060
20061
20068
20070
20071
20078
20201
20211
20221
20231
20241
20251
20261
20270
20271
20278
20280
20281
20288
*20272
20030
20032
20038
20040
20042
20048
20050
20052
20058
20060
20062
20068
20070
20072
20078
20202
20212
20222
20232
20242
20252
20262
20270
20272
20278
20280
20282
20288
*20273
20030
20033
20038
20040
20043
20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20203
20213
20223
20233
20243
20253
20263
20270
20273
20278
20280
20283
20288
*20274
20030
20034
20038
20040
20044
20048
20050
20054
20058
20060
20064
20068
20070
20074
20078
20204
20214
20224
20234
20244
20254
20264
20270
20274
20278
20280
20284
20288
*20275
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20205
20215
20225
20235
20245
20255
20265
20270
20275
20278
20280
20285
20288
*20276
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20206
20216
20226
20236
20246
20256
20266
20270
20276
20278
20280
20286
20288
*20277
20030
20037
20038
20040
20047
20048
20050
20057
20058
20060
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288
*20278
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20067
20068
20070
20077
20078
20207
20217
20227
20237
20247
20257
20267
20270
20277
20278
20280
20287
20288
*20280
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20208
20218
20228
20238
20248
20258
20268
20270
20271
20272
20273
20274
20275
20276
20277
20278
20280
20281
20282
20283
20284
20285
20286
20287
20288

20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20270
20271
20272
20273
20274
20275
20276
20277
20278
*20281
20030
20031
20038
20040
20041
20048
20050
20051
20058
20060
20061
20068
20070
20071
20078
20270
20272
20278
*20283
20030
20033
20038
20040
20043
20048
20050
20053
20058
20060
20063
20068
20070
20073
20078
20270
20273
20278
*20284
20030
20034
20038
20040
20044
20048
20050
20054
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20072
20078
20270
20272
20278
*20285
20030
20035
20038
20040
20045
20048
20050
20055
20058
20060
20065
20068
20070
20075
20078
20270
20275
20278
*20286
20030
20036
20038
20040
20046
20048
20050
20056
20058
20060
20066
20068
20070
20076
20078
20270
20276
20278
*20287
20030
20037
20038
20040
20047
20048
20050
20055
20057
20058
20060
20064
20068
20070
20074
20078
20270
20274
20278
*20288
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20270
20271
20272
20273
20274
20275
20276
20277
20278
*20290
20030
20040
20050
20060
20070
20270
*20291
20031
20041
20051
20061
20071
20271
*20292
20032
20042
20052
20062
20072
20272
*20293
20033
20043
20053
20063
20073
20273
*20294
20034
20044
20054
20064
20074
20274
*20295
20035
20045
20055
20065
20075
20275
*20296
20036
20046
20056
20066
20076
20276
*20297
20037
20047
20057
20067
20077
20277
*20298
20038
20048
20058
20068
20078
20278
*20310
23873
23874
23876
23879
28983
*20311
23873
23874
23876
23879
28983
*20380
23873
23874
23876
23879
28983
*20381
23873
23874
23876
23879
28983
*20400
23873
23874
23876
23879
28983
*20401

23873
23874
23876
23879
28983
*20410
23873
23874
23876
23879
28983
*20411
23873
23874
23876
23879
28983
*20420
23873
23874
23876
23879
28983
*20421
23873
23874
23876
23879
28983
*20480
23873
23874
23876
23879
28983
*20481
23873
23874
23876
23879
28983
*20490
23873
23874
23876
23879
28983
*20491
23873
23874
23876
23879
28983
*20500

23873
23874
23876
23879
28983
*20501
23873
23874
23876
23879
28983
*20510
23873
23874
23876
23879
28983
*20511
23873
23874
23876
23879
28983
*20520
23873
23874
23876
23879
28983
*20521
23873
23874
23876
23879
28983
*20530
23873
23874
23876
23879
28983
*20531
23873
23874
23876
23879
28983
*20580
23873
23874
23876
23879
28983
*20581

23873
23874
23876
23879
28983
*20590
23873
23874
23876
23879
28983
*20591
23873
23874
23876
23879
28983
*20600
23873
23874
23876
23879
28983

*20601
23873
23874
23876
23879
28983
*20610
23873
23874
23876
23879
28983
*20611
23873
23874
23876
23879
28983
*20620
23873
23874
23876
23879
28983
*20621
23873
23874
23876
23879
28983

23873
23874
23876
23879
28983
*20680
23873
23874
23876
23879
28983
*20681
23873
23874
23876
23879
28983
*20690
23873
23874
23876
23879
28983
*20691
23873
23874
23876
23879
28983
*20700
23873
23874
23876
23879
28983
*20701
23873
23874
23876
23879
28983
*20710
23873
23874
23876
23879
28983
*20711
23873
23874
23876
23879
28983

23873
23874
23876
23879
28983
*20721
23873
23874
23876
23879
28983
*20780
23873
23874
23876
23879
28983
*20781
23873
23874
23876
23879
28983
*20800
23873
23874
23876
23879
28983
*20801
23873
23874
23876
23879
28983
*20810
23873

23874
23876
23879
28983
*20811
23873
23874
23876
23879
28983
*20820
23873
23874
23876
23879
28983
*20821
23873

23874
*20880
23873
23874
23876
23879
28983
*20881

23873
23874
23876
23879
28983
*20890
23873
23874
23876
23879
28983
*20891
23873
23874
23876
23879
28983
*2300
1769
*2301
1769
*2302
1769
*2303
1769
*2304
1769
*2305
1769
*2306
1769

*2307
1769
*2308
1769
*2309
1769
*2310
1769
*2311
1769

*2312
1769
*2318
1769
*2319
1769
*2320
1769
*2321
1769
*2322
1769
*2323
1769
*2324
1769
*2325
1769
*2326
1769
*2327
1769
*2328
1769
*2329
1769
*2330
1769
*2331
1769
*2332
1769
*23330
1769
*23331
1769
*23332
1769
*23339
1769
*2334
1769
*2335
1769
*2336
1769
*2337
1769
*2339
1769
*2340
1769
*2348
1769
*2349
1769
*2350
1769
*2351
1769
*2352
1769
*2353
1769
*2354
1769
*2355
1769
*2356
1769
*2357
1769
*2358
1769
*2359
1769
*2360
1769
*2361
1769
*2362
1769
*2363
1769
*2364
1769
*2365
1769
*2366
1769
*2367
1769
*23690
1769
*23691
1769
*23699
1769
*2370
1769
*2371
1769
*2372
1769
*2373
1769
*2374
1769
*2375
1769
*2376
1769
*2379
1769
*2380
1769
*2381
1769
*2382
1769
*2383
1769
*2384
2385
2386
23873
23874
23876
23879
28983
*2385
2385
2386
23873
23874
23876
23879
28983
*2386
2385
2386
23873
23874
23876
23879
28983
*23871
2385
2386
23873
23874
23876
23879
28983
*23872
2385
2386
23873
23874
23876
23879
28983
*23873
2385
2386
23873
23874
23876
23879
28983
*23874
2385
2386
23873
23874
23876
23879
28983
*23875
2385
2386
23873
23874
23876
23879
28983
*23876
2385
2386
23873
23874
23876
23879
28983
*2388
1769
23873
23874
23876
23879
28983
*2389
1769
23873
23874
23876
23879
28983
*2390
1769
*2391
1620
1769
*2392
1769
*2393
1769
*2394
1769
*2395
1769
*2396
1769
1929
*2397
1769
1929
*2398
1620
1769
1929
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058
20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20270
20271
20272
20273
20274
20275
20276
20277
20278
*2399
1620
1769
1929
20030
20031
20032
20033
20034
20035
20036
20037
20038
20040
20041
20042
20043
20044
20045
20046
20047
20048
20050
20051
20052
20053
20054
20055
20056
20057
20058

20060
20061
20062
20063
20064
20065
20066
20067
20068
20070
20071
20072
20073
20074
20075
20076
20077
20078
20270
20271
20272
20273
20274
20275
20276
20277
20278
*2450
2450
*2451
2450
*2452
2450
*2453
2450
*2454
2450
*2458
2450
*2459
2450
*2463
2463
*25000
25010
25020
25030
*25001
25010
25020
25030
*25002
25010
25020
25030
*25003
25010
25020
25030
*25010
25010
25020
25030
*25011
25010
25020
25030
*25012
25010
25020
25030
*25013
25010
25020
25030
*25020
25010
25020
25030
*25021
25010
25020
25030
*25022
25010
25020
25030
*25023
25010
25020
25030
*25030
25010
25020
25030
*25031
25010
25020
25030
*25032
25010
25020
25030
*25033
25010
25020
25030
*25040
0786
25010
25020
25030
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25041
0786
25010
25020
25030
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25042
0786
25010
25020
25030
25030
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25043
0786
25010
25020
25030
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25050
25010
25020
25030
*25051
25010
25020
25030
*25052
25010
25020
25030
*25053
25010
25020
25030
*25060
25010
25020
25030
3361
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
34570
34580
3596
*25061
25010
25020
25030
3361
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
34570
34580
3596
*25062
25010
25020
25030
3361
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
34570
34580
3596
*25063
25010
25020
25030
3361
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
34570
34580
3596
*25070
25010
25020
25030
4350
4351
4352
4353
4358
4359
4371
449
*25071
25010
25020
25030
4350
4351
4352
4353
4358
4359
4371
449
*25072
25010
25020
25030
4350
4351
4352
4353
4358
4359
4371
449
*25073
25010
25020
25030
4350
4351
4352
4353
4358
4359
4371
449
*25080
0786
25010
25020

25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25081
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25082
0786

25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25083
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001

*25090
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25091
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831

58881
59001
*25092
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*25093
0786
25010
25020
25030
27411
3596
4350
4351
4352
4353
4358
4359
4371
449
5820
5821
5822
5824
58281
58289
5829
5830
5831

5832
5881
58881
59001
*2510
25010
25020
25030
*2511
25010
25020
25030
*2512
25010
25020
25030
*2513
25010
25020
25030
*2515
4561
45621
53130
53230
53330
53430
538
*2518
5771
*2530
2536
*2531
2531
2536
*2532
2536
*2533
2536
*2534
2531
2536
*2535
2536
*2536
2531
2536
*2537
2536
*2538
2536
*2539
2536
*2553

25541
25542
*25541
2553
25541
25542
2555
2556
*25542
2553
25541
25542
2555
2556
*2555
25541
25542
*2556
25541
25542
*2558
25541
25542
*2559
25541
25542
*2595
25541
25542
*2598
2501C
2502C
2503C
2536
25541
25542
*2599
2501C
2502C
2503C
2536
25541
25542
*2650
2650
2651
2660
*2651
2650
2651
2660
*2652
2650
2651

2660	2701	*2704	2711	2709	2707
*2660	2702	2700	2718	2710	2708
2650	2703	2701	*2708	2711	2709
2651	2704	2702	2700	2718	2710
2660	2705	2703	2701	*2712	2711
*2661	2706	2704	2702	2700	2718
2650	2707	2705	2703	2701	*2719
2651	2708	2706	2704	2702	2700
2660	2709	2707	2705	2703	2701
*2662	2710	2708	2706	2704	2702
2650	2711	2709	2707	2705	2703
2651	2718	2710	2708	2706	2704
2660	*2701	2711	2709	2707	2705
*2669	2700	2718	2710	2708	2706
2650	2701	*2705	2711	2709	2707
2651	2702	2700	2718	2710	2708
2660	2703	2701	*2709	2711	2709
*2680	2704	2702	2700	2718	2710
2680	2705	2703	2701	*2713	2711
*2681	2706	2704	2702	2700	2718
2680	2707	2705	2703	2701	*2720
*2682	2708	2706	2704	2702	2700
2680	2709	2707	2705	2703	2701
*2689	2710	2708	2706	2704	2702
2680	2711	2709	2707	2705	2703
*2690	2718	2710	2708	2706	2704
2680	*2702	2711	2709	2707	2705
*2691	2700	2718	2710	2708	2706
2650	2701	*2706	2711	2709	2707
2651	2702	2700	2718	2710	2708
2660	2703	2701	*2710	2711	2709
2680	2704	2702	2700	2718	2710
*2692	2705	2703	2701	*2714	2711
2650	2706	2704	2702	2700	2718
2651	2707	2705	2703	2701	*2721
2660	2708	2706	2704	2702	2700
2680	2709	2707	2705	2703	2701
*2693	2710	2708	2706	2704	2702
2650	2711	2709	2707	2705	2703
2651	2718	2710	2708	2706	2704
2660	*2703	2711	2709	2707	2705
2680	2700	2718	2710	2708	2706
*2698	2701	*2707	2711	2709	2707
2650	2702	2700	2718	2710	2708
2651	2703	2701	*2711	2711	2709
2660	2704	2702	2700	2718	2710
2680	2705	2703	2701	*2718	2711
*2699	2706	2704	2702	2700	2718
2650	2707	2705	2703	2701	*2722
2651	2708	2706	2704	2702	2700
2660	2709	2707	2705	2703	2701
2680	2710	2708	2706	2704	2702
*2700	2711	2709	2707	2705	2703
2700	2718	2710	2708	2706	2704

2705
2706
2707
2708
2709
2710
2711
2718
*2723
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2724
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2725
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2726
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2727
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2728
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2729
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2730
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2731
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2732
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2733
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2738
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*2739
2700
2701
2702
2703
2704
2705
2706
2707
2708
2709
2710
2711
2718
*27410
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*27411
27411
*27419
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*27489
27411
*27703
5791
5792
5794
5798
5799
*2771
2771
2772
2775
*2772
2771
2772
2775
*27730
27730
27731
27739
2775
*27731
27730
27731
27739
2775
*27739
27730
27731
27739
*2774
2771
2772
2775
27786
27787
27789
*2775
2771
2772
2775
*2776
2771
2772
2775
*2777
2771
2772
27730
27731
27739
2775
*27781
27785
27786
27787
27789
*27782
27785
27786
27787
27789
*27783
27785
27786
27787
27789
*27784
27785
27786
27787
27789
*27786
27785
27787
27789
*27787
27785
27786
27789
*27789
27785
27786
27787
*27800
V850
V854
*27801
V850
V854
*2781
V854
*27900
27900
27901

*27901
27900
27901
*27902
27900
27901
*27903
27900
27901
*27904
27900
27901
*27905
27900
27901
*27906
27900
27901
*27909
27900
27901
*27910
27900
27901
*27911
27900
27901
*27912
27900
27901
*27913
27900
27901
*27919
27900
27901
*2792
27900
27901
*2793
27900
27901
*2794
27900
27901
*2798
27900
27901
*2799
27900
27901
*2800
2828
2829
28401
28409
28481
28489
5173
7765
7766
*2801
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2808
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2809
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2810
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2811
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2812
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2813
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2814
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2818
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2819
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2820
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2821
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2822
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2823
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28241
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28242
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28249
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2825
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28260
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28261
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28262
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28263
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28264
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28268
2828
2829
28401
28409
28481
28489
7765
7766
*28269
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2827
2828
2829
28401
28409

28481
28489
2897
5173
7765
7766
7767
*2828
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*2829
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*2830
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*28310
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
7767
*28311
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*28319
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*2832
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
*2839
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
7767
*28401
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28409
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
7767
*2841
2828
2829
28401
28409
28481
28489
2897
5173
7765
7766
7767
*2842
2828
2829
2841
2842
28481
28489
2897
5173
7765
7766
7767
*28481
28242
28262
28264
28269
2828
2829
2830
28310
28311
28319
2839
28401
28409
28481
28489
2849
2851
2884
5173
7765
7766
7767
*2849
2828
2829
28401
28409
28481
28489
2884
5173
7765
7766
7767
*2850
2828
2829
28401
28409
28481
28489
2849
2851
2884
5173
7765
7766
7767
*2851
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28521
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*28522
2828
2829
28401
28409
2841
2842
28481
28489
5173
7765
7766
7767
*28529
2828
2829
28401
28409
28481
28489
5173
7765
7766
7767
*2858
2828
2829
28401
28409
2841
2842
28481
28489
2897
5173
7765
7766
7767
79001
*2859
2828
2829
28401
28409
2841
2842
28481
28489
2897
5173
7765
7766
7767
79001
*2866
2884
*28730
28409
2884
*28731
28409
2884
*28732
28409
2884
*28733
28409
2884
*28739
28409
2884
*2874
2884
*2875
2884
*2878
2884
*2879

2884
*28800
2841
2842
2884
*28801
2841
2842
2884
*28802
2841
2842
2884
*28803
2841
2842
2884
*28804
2841
2842
2884
*28809
2841
2842
2884
*28850
2841
2842

2884
*28851
2841
2842
*28859
2841
2842
2884
*28860
2841
2842
*28861
2841
2842
*28862
2841
2842
*28866
2841
2842
28981
28982

*28869
2841
2842
*2897
2897
*28981
28481
28489
*28982
28481
28489
*28983
2385
2386
28481
28489
*28989
28481
28489
*2899
2828
2829
28401
28409
2841
2842
28481
28489
2884
2897
5173
7765
7766
7767
*2900
29011
29012
29013
29020
2903
29041
2930
V6284
*29012
0461

0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
0737
0819
0869
124
29011
29012
29020
2903
29041
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*29013
29013
29020
29021
2903
*29020
29011
29012

29013
29020
2903
29041
*29021
29011
29012
29013
29021
*2903
29011
29012
29013
29021
*29041
29041
*29042
29042
*29043

29043
*2908
29011
29012
2908
2909
*2909
29011
29012
2908
2909
*2910
2908
2909
2939
*2911
2939
*2912
2939
*2913
2939
*2914
2939
*2915
2939
*29181
2939
*29182
2939
*29189

2939
*2919
2939
*2920
2939
*29211
2908
2909
2939
*29212
2939
*2922
2939
*29281
29011
29012
2908
2909
2939
*29282
2908
2909
2939
*29283
2939
*29284
2939
*29285
2939
*29289
2939
*2929
2939
*2930
29011
29012
2930
2931
2939
*2931
2931
2939
*29381
2939
*29382
2939
*29383
2939
*29384
2939
*29389
2931
2939

*2939
2931
2939
*2940
2939
*29410
2939
*29411
2939
29411
*2948
2939
*2949
2939
*29500
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29501
2908
2909
29520
29553
29554
29600
29601
29602
29610

29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29502
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29503
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29504
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29505
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29510
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29511
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29512
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29513
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29514
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29515
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29520
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641

29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29521
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29522
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29523
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29524
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29525
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29530
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29531
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29532
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29533
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29534
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29535
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151

2981
29901
29911
29981
29991
30151
*29540
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29541
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29542
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29543
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29544
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29545
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29550
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29551
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29552
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29553
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29554
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29555
29520
29600
29601

29602	29611	29602	29600	29553	2909
29610	29612	29610	29601	29554	29520
29611	29620	29611	29602	29600	29553
29612	29640	29612	29610	29601	29554
29620	29641	29620	29611	29602	29600
29640	29642	29640	29612	29610	29601
29641	29650	29641	29620	29611	29602
29642	29651	29642	29640	29612	29610
29650	29652	29650	29641	29620	29611
29651	29660	29651	29642	29640	29612
29652	29661	29652	29650	29641	29620
29660	29662	29660	29651	29642	29640
29661	29689	29661	29652	29650	29641
29662	29699	29662	29660	29651	29642
29689	2981	29689	29661	29652	29650
29699	29901	29699	29662	29660	29651
2981	29911	2981	29689	29661	29652
29901	29981	29901	29699	29662	29660
29911	29991	29911	2981	29689	29661
29981	30151	29981	29901	29699	29662
29991	*29562	29991	29911	2981	29689
30151	29520	30151	29981	29901	29699
*29560	29600	*29564	29991	29911	2981
29520	29601	2908	30151	29981	29901
29600	29602	2909	*29570	29991	29911
29601	29610	29520	29520	30151	29981
29602	29611	29553	29600	*29572	29991
29610	29612	29554	29601	29520	30151
29611	29620	29600	29602	29600	*29574
29612	29640	29601	29610	29601	2908
29620	29641	29602	29611	29602	2909
29640	29642	29610	29612	29610	29520
29641	29650	29611	29620	29611	29553
29642	29651	29612	29640	29612	29554
29650	29652	29620	29641	29620	29600
29651	29660	29640	29642	29640	29601
29652	29661	29641	29650	29641	29602
29660	29662	29642	29651	29642	29610
29661	29689	29650	29652	29650	29611
29662	29699	29651	29660	29651	29612
29689	2981	29652	29661	29652	29620
29699	29901	29660	29662	29660	29640
2981	29911	29661	29689	29661	29641
29901	29981	29662	29699	29662	29642
29911	29991	29689	2981	29689	29650
29981	30151	29699	29901	29699	29651
29991	*29563	2981	29911	2981	29652
30151	2908	29901	29981	29901	29660
*29561	2909	29911	29991	29911	29661
29520	29520	29981	30151	29981	29662
29600	29553	29991	*29571	29991	29689
29601	29554	30151	2908	30151	29699
29602	29600	*29565	2909	*29573	2981
29610	29601	29520	29520	2908	29901

29911
29981
29991
30151
*29575
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29580
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29581
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29582
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29583
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29584
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29585
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29590
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29591
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29592
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29593
2908
2909
29520
29553
29554
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29594
2908
2909
29520
29553

29554	29600	29602	29603	29611	29620
29600	29601	29610	29610	29612	29640
29601	29602	29611	29611	29620	29641
29602	29610	29612	29612	29640	29642
29610	29611	29620	29620	29641	29650
29611	29612	29640	29640	29642	29651
29612	29620	29641	29641	29650	29652
29620	29640	29642	29642	29651	29660
29640	29641	29650	29650	29652	29661
29641	29642	29651	29651	29660	29662
29642	29650	29652	29652	29661	29689
29650	29651	29660	29660	29662	29699
29651	29652	29661	29661	29689	2981
	29660	29662	29662	29699	29901
29652	29661	29689	29689	2981	29911
29660	29662	29699	29699	29901	29981
29661	29689	2981	2981	29911	29991
29662	29699	29901	29901	29981	30151
29689	2981	29911	29911	29991	*29612
29699	29901	29981	29981	30151	29520
2981	29911	29991	29991	*29610	29600
29901	29981	30151	30151	29520	29601
29911	29991	*29603	*29605	29600	29602
29981	30151	29520	29520	29601	29610
29991	*29601	29600	29600	29602	29611
30151	29520	29601	29601	29610	29612
*29595	29600	29602	29602	29611	29620
29520	29601	29603	29610	29612	29640
29600	29602	29610	29611	29620	29641
29601	29610	29611	29612	29640	29642
29602	29611	29612	29620	29641	29650
29610	29612	29620	29640	29642	29651
29611	29620	29640	29641	29650	29652
29612	29640	29641	29642	29651	29660
29620	29641	29642	29650	29652	29661
29640	29642	29650	29651	29660	29662
29641	29650	29651	29652	29661	29689
29642	29651	29652	29660	29662	29699
29650	29652	29660	29661	29689	2981
29651	29660	29661	29662	29699	29901
29652	29661	29662	29689	2981	29911
29660	29662	29689	29699	29901	29981
29661	29689	29699	2981	29911	29991
29662	29699	2981	29901	29981	30151
29689	2981	29901	29911	29991	*29613
29699	29901	29911	29981	30151	29520
2981	29911	29981	29991	*29611	29600
29901	29981	29991	30151	29520	29601
29911	29991	30151	*29606	29600	29602
29981	30151	*29604	29520	29601	29603
29991	*29602	29520	29600	29602	29610
30151	29520	29600	29601	29610	29611
*29600	29600	29601	29602	29611	29612
29520	29601	29602	29610	29612	29613

29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29614
29520
29600
29601
29602
29603
29610
29611
29612
29613
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29615
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29616
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29620
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29621
29013
2908
2909
29520
29600
29601
29602
29610
29611
29612
29620
29621
29622
29623
29624
29630
29631
29632
29633
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29622
29630
29631
29632
29633
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29623
29013
2908
2909
29520
29600
29601
29602
29610
29611
29612
29620
29621
29622
29623
29624
29630
29631
29632
29633
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29624
29013
2908
2909
29520
29600
29601
29602
29610
29611
29612
29620
29621
29622
29623
29624
29630
29631
29632
29633
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29625
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29626
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981

29991	29624	29901	29621	29601	29610
30151	29630	29911	29622	29602	29611
*29630	29631	29981	29623	29610	29612
29013	29632	29991	29624	29611	29620
2908	29633	30151	29630	29612	29640
2909	29640	*29633	29631	29620	29641
29520	29641	29013	29632	29640	29642
29600	29642	2908	29633	29641	29650
29601	29650	2909	29640	29642	29651
29602	29651	29520	29641	29650	29652
29610	29652	29600	29642	29651	29660
29611	29660	29601	29650	29652	29661
29612	29661	29602	29651	29660	29662
29620	29662	29610	29652	29661	29689
29621	29689	29611	29660	29662	29699
29622	29699	29612	29661	29689	2981
29623	2981	29620	29662	29699	29901
29624	29901	29621	29689	2981	29911
29630	29911	29622	29699	29901	29981
29631	29981	29623	2981	29911	29991
29632	29991	29624	29901	29981	30151
29633	30151	29630	29911	29991	*29642
29640	*29632	29631	29981	30151	29520
29641	29013	29632	29991	*29640	29600
29642	2908	29633	30151	29520	29601
29650	2909	29640	*29635	29600	29602
29651	29520	29641	29520	29601	29610
29652	29600	29642	29600	29602	29611
29660	29601	29650	29601	29610	29612
29661	29602	29651	29602	29611	29620
29662	29610	29652	29610	29612	29640
29689	29611	29660	29611	29620	29641
29699	29612	29661	29612	29640	29642
2981	29620	29662	29620	29641	29650
29901	29621	29689	29640	29642	29651
29911	29622	29699	29641	29650	29652
29981	29623	2981	29642	29651	29660
29991	29624	29901	29650	29652	29661
30151	29630	29911	29651	29660	29662
*29631	29631	29981	29652	29661	29689
29013	29632	29991	29660	29662	29699
2908	29633	30151	29661	29689	2981
2909	29640	*29634	29662	29699	29901
29520	29641	29013	29689	2981	29911
29600	29642	2908	29699	29901	29981
29601	29650	2909	2981	29911	29991
29602	29651	29520	29901	29981	30151
29610	29652	29600	29911	29991	*29643
29611	29660	29601	29981	30151	29013
29612	29661	29602	29991	*29641	29520
29620	29662	29610	30151	29520	29600
29621	29689	29611	*29636	29600	29601
29622	29699	29612	29520	29601	29602
29623	2981	29620	29600	29602	29603

29610
29611
29612
29613
29620
29640
29641
29642
29643
29650
29651
29652
29653
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29644
29013
29520
29600
29601
29602
29603
29610
29611
29612
29613
29620
29640
29641
29642
29643
29650
29651
29652
29653
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29645
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29646
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29650
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29651
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29652
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29653
29013
29520
29600
29601
29602
29603
29610
29611
29612
29613
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29654
29013
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29655
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29656
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29660
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151

29901
29911
29981
29991
30151
*29661
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29662
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29663
29013
29520
29600
29601
29602
29603
29610
29611
29612
29613
29620
29640
29641
29642
29643
29650
29651
29652
29653
29660
29661
29662
29663
29689
29699
2981
29901
29911
29981
29991
30151
*29664
29013
29520
29600
29601
29602
29603
29610
29611
29612
29613
29620
29640
29641
29642
29650
29651
29652
29653
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29665
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29653
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29666
29520
29600
29601
29602
29610
29611
29612
29613
29620
29640
29641
29642
29643
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29667
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29680
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29681
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*29682
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
*29689
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
*29690
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689

29699
29901
29911
29991
*2981
29520
2981
29911
29981
30151
29520
29600
29901
29981
29991
*2979
29600
29601
29911
29991
30151
29520
29601
29602
29981
30151
*2973
29600
29602
29610
29991
*2971
29520
29601
29610
29611
30151
29520
29600
29602
29611
29612
*29699
29600
29601
29610
29612
29620
29520
29601
29602
29611
29612
29620
29640
29600
29602
29610
29611
29612
29620
29640
29641
29601
29610
29611
29612
29620
29640
29641
29642
29602
29611
29612
29620
29640
29641
29642
29650
29610
29612
29620
29640
29641
29642
29650
29651
29611
29620
29640
29641
29642
29650
29651
29652
29612
29640
29641
29642
29650
29651
29652
29660
29620
29641
29642
29650
29651
29652
29660
29661
29640
29642
29650
29651
29652
29660
29661
29662
29641
29650
29651
29652
29660
29661
29662
29689
29642
29651
29652
29661
29662
29689
29699
29650
29652
29660
29661
29662
29689
29699
2981
29651
29660
29661
29662
29689
29699
2981
29901
29652
29661
29662
29689
29699
2981
29901
29911
29660
29662
29689
29699
2981
29901
29911
29981
29661
29689
29699
2981
29901
29911
29981
29991
29662
29699
2981
29901
29911
29981
29991
30151
29689
2981
29901
29911
29981
29991
30151
*2984
29699
29901
29911
29981
29991
30151
*2982
29520
2981
29911
29981
29991
30151
*2980
29520
29600
29901
29911
29981
29991
30151
*2978
29520
29600
29601
29911
29981
29991
30151
*2972
29520
29600
29601
29602
29991
30151
*2970
29520
29600
29601
29602
29610
29611
29612
29520
29600
29601
29602
29610
29611
29612
29620
29640
29601
29602
29610
29611
29612
29620
29640
29641
29602
29610
29611
29612
29620
29640
29641
29642
29610
29611
29612
29620
29640
29641
29642
29650
29611
29612
29620
29640
29641
29642
29650
29651
29612
29640
29641
29642
29650
29651
29652
29660
29620
29641
29642
29650
29651
29652
29660
29661
29640
29642
29650
29651
29652
29660
29661
29662
29641
29650
29651
29652
29660
29661
29662
29689
29642
29651
29652
29661
29662
29689
29699
29650
29652
29660
29661
29662
29689
29699
2981
29651
29660
29661
29662
29689
29699
2981
29901
29652
29661
29662
29689
29699
2981
29901
29911
29660
29662
29689
29699
2981
29901
29911
29981
29661
29689
29699
2981
29901
29911
29981
29991
29662
29699
2981
29901
29911
29981
29991
30151
29689
2981
29901
29911
29981
29991
30151
*2988
29699
29901
29911
29981
29991
30151
*2983
29600
2981
29911
29981
29991
30151

29601	29610	29611	29612	29640	29642
29602	29611	29612	29620	29641	29650
29610	29612	29620	29640	29642	29651
29611	29620	29640	29641	29650	29652
29612	29640	29641	29642	29651	29660
29620	29641	29642	29650	29652	29661
29640		29650	29651	29660	29662
29641	29642	29651	29652	29661	29689
29642	29650	29652	29660	29662	29699
29650	29651	29660	29661	29689	2981
29651	29652	29661	29662	29699	29901
29652	29660	29662	29689	2981	29911
29660	29661	29689	29699	29901	29981
29661	29662	29699	2981	29911	29991
29662	29689	2981	29901	29981	30151
29689	29699	29901	29911	29991	*30001
29699	2981	29911	29981	30151	29520
2981	29901	29981	29991	*29991	29600
29901	29911	29991	30151	29520	29601
29911	29981	30151	*29981	29600	29602
29981	29991	*29911	29520	29601	29610
29991	30151	29520	29600	29602	29611
30151	*29901	29600	29601	29610	29612
*2989	29520	29601	29602	29611	29620
29520	29600	29602	29610	29612	29640
29600	29601	29610	29611	29620	29641
29601	29602	29611	29612	29640	29642
29602	29610	29612	29620	29641	29650
29610	29611	29620	29640	29642	29651
29611	29612	29640	29641	29650	29652
29612	29620	29641	29642	29651	29660
29620	29640	29642	29650	29652	29661
29640	29641	29650	29651	29660	29662
29641	29642	29651	29652	29661	29689
29642	29650	29652	29660	29662	29699
29650	29651	29660	29661	29689	2981
29651	29652	29661	29662	29699	29901
29652	29660	29662	29689	2981	29911
29660	29661	29689	29699	29901	29981
29661	29662		2981	29911	29991
29662	29689	29699	29901	29981	30151
29689	29699	2981	29911	29991	*30002
29699	2981	29901	29981	30151	29520
2981	29901	29911	29991	*30000	29600
29901	29911	29981	30151	29520	29601
29911	29981	29991	*29990	29600	29602
29981	29991	30151	29520	29601	29610
29991	30151	*29980	29600	29602	29611
30151	*29910	29520	29601	29610	29612
*29900	29520	29600	29602	29611	29620
29520	29600	29601	29610	29612	29640
29600	29601	29602	29611	29620	29641
29601	29602	29610	29612	29640	29642
29602	29610	29611	29620	29641	29650

29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*30021
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*30019	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*30015	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*30013	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*30011	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*30009	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*30022
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*30020	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*30016	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*30014	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*30012	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*30010	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991

30151
*30023
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30029
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3003
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3004
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3005
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3006
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3007
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30081
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30082
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30089
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3009
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3010
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30110
29520
29600
29601
29602
29610
29611
29612
29620
29640

29641	29650	29651	29660	29662	29699
29642	29651	29652	29661	29689	2981
29650	29652	29660	29662	29699	29901
29651	29660	29661	29689	2981	29911
29652	29661	29662	29699	29901	29981
29660	29662	29689	2981	29911	29991
29661	29689	29699	29901	29981	30151
29662	29699	2981	29911	29991	*30159
29689	2981	29901	29981	30151	29520
29699	29901	29911	29991	*30150	29600
2981	29911	29981	30151	29520	29601
29901	29981	29991	*3013	29600	29602
29911	29991	30151	29520	29601	29610
29981	30151	*30121	29600	29602	29611
29991	*30113	29520	29601	29610	29612
30151	29520	29600	29602	29611	29620
*30111	29600	29601	29610	29612	29640
29520	29601	29602	29611	29620	29641
29600	29602	29610	29612	29640	29642
29601	29610	29611	29620	29641	29650
29602	29611	29612	29640	29642	29651
29610	29612	29620	29641	29650	29652
29611	29620	29640	29642	29651	29660
29612	29640	29641	29650	29652	29661
29620	29641	29642	29651	29660	29662
29640	29642	29650	29652	29661	29689
29641	29650	29651	29660	29662	29699
29642	29651	29652	29661	29689	2981
29650	29652	29660	29662	29699	
29651	29660	29661	29689	2981	29901
29652	29661	29662	29699	29901	29911
29660	29662	29689	2981	29911	29981
29661	29689	29699	29901	29981	29991
29662	29699	2981	29911	29991	30151
29689	2981	29901	29981	30151	*3016
29699	29901	29911	29991	*30151	29520
2981	29911	29981	30151	29520	29600
29901	29981	29991	*3014	29600	29601
29911	29991	30151	29520	29601	29602
29981	30151	*30122	29600	29602	29610
29991	*30120	29520	29601	29610	29611
30151	29520	29600	29602	29611	29612
*30112		29601	29610	29612	29620
29520	29600	29602	29611	29620	29640
29600	29601	29610	29612	29640	29641
29601	29602	29611	29620	29641	29642
29602	29610	29612	29640	29642	29650
29610	29611	29620	29641	29650	29651
29611	29612	29640	29642	29651	29652
29612	29620	29641	29650	29652	29660
29620	29640	29642	29651	29660	29661
29640	29641	29650	29652	29661	29662
29641	29642	29651	29660	29662	29689
29642	29650	29652	29661	29689	29699

2981	29911	29981	30151	2939	2939
29901	29981	29991	*3019	*30412	*30481
29911	29991	30151	29520	2939	2939
29981	30151	*30184	29600	*30413	*30482
29991	*30182	29520	29601	2939	2939
30151	29520	29600	29602	*30420	*30483
*3017	29600	29601	29610	2939	2939
29520	29601	29602	29611	*30421	*30490
29600	29602	29610	29612	2939	2939
29601	29610	29611	29620	*30422	*30491
29602	29611	29612	29640	2939	2939
29610	29612	29620	29641	*30423	*30492
29611	29620	29640	29642	2939	2939
29612	29640	29641	29650	*30430	*30493
29620	29641	29642	29651	2939	2939
29640	29642	29650	29652	*30431	*30500
29641	29650	29651	29660	2939	2939
29642	29651	29652	29661	*30432	*30501
29650	29652	29660	29662	2939	2939
29651	29660	29661	29689	*30433	*30502
29652	29661	29662	29699	2939	2939
29660	29662	29689	2981	*30440	*30503
29661	29689	29699	29901	2939	2939
29662	29699	2981	29911	*30441	*30520
29689	2981	29901	29981	2939	2939
29699	29901	29911	29991	*30442	*30521
2981	29911	29981	30151	2939	2939
29901	29981	29991	*30300	*30443	*30522
29911	29991	30151	2939	2939	2939
29981	30151	*30189	*30301	*30450	*30523
29991	*30183	29520	2939	2939	2939
30151	29520	29600	*30302	*30451	*30530
*30181	29600	29601	2939	2939	2939
29520	29601	29602	*30303	*30452	*30531
29600	29602	29610	2939	2939	2939
29601	29610	29611	*30390	*30453	*30532
29602		29612	2939	2939	2939
29610	29611	29620	*30391	*30460	*30533
29611	29612	29640	2939	2939	2939
29612	29620	29641	*30392	*30461	*30540
29620	29640	29642	2939	2939	2939
29640	29641	29650	*30393	*30462	*30541
29641	29642	29651	2939	2939	2939
29642	29650	29652	*30400	*30463	*30542
29650	29651	29660	2939	2939	2939
29651	29652	29661	*30401	*30470	*30543
29652	29660	29662	2939	2939	2939
29660	29661	29689	*30402	*30471	*30550
29661	29662	29699	2939	2939	2939
29662	29689	2981	*30403	*30472	*30551
29689	29699	29901	2939	2939	2939
29699	2981	29911	*30410	*30473	*30552
2981	29901	29981	2939	2939	2939
29901	29911	29991	*30411	*30480	*30553

2939
*30560
2939
*30561
2939
*30562
2939
*30563
2939
*30570
2939
*30571
2939
*30572
2939
*30573
2939
*30580
2939
*30581
2939
*30582
2939
*30583
2939
*30590
2939
*30591
2939
*30592
2939
*30593
2939
*3060
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3061
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3062
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3063
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3064
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30650
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30651
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30652
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30653
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30659
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3066
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3067
29520
29600
29601

29602	29611	29620	29640	29641	29650
29610	29612	29640	29641	29642	29651
29611	29620	29641	29642	29650	29652
29612	29640	29642	29650	29651	29660
29620	29641	29650	29651	29652	29661
29640	29642	29651	29652	29660	29662
29641	29650	29652	29660	29661	29689
29642	29651	29660	29661	29662	29699
29650	29652	29661	29662	29689	2981
29651	29660	29662	29689	29699	29901
29652	29661	29689	29699	2981	29911
29660	29662	29699	2981	29901	29981
29661	29689	2981	29901	29911	29991
29662	29699	29901	29911	29981	30151
29689	2981	29911	29981	29991	*30741
29699	29901	29981	29991	30151	29520
2981	29911	29991	30151	*3073	29600
29901	29981	30151	*30722	29520	29601
29911	29991	30751		29600	29602
29981	30151	*30720	29520	29601	29610
29991	*3070	29520	29600	29602	29611
30151	29520	29600	29601	29610	29612
*3068	29600	29601	29602	29611	29620
29520	29601	29602	29610	29612	29640
29600	29602	29610	29611	29620	29641
29601	29610	29611	29612	29640	29642
29602	29611	29612	29620	29641	29650
29610	29612	29620	29640	29642	29651
29611	29620	29640	29641	29650	29652
29612	29640	29641	29642	29651	29660
29620	29641	29642	29650	29652	29661
29640	29642	29650	29651	29660	29662
29641	29650	29651	29652	29661	29689
29642	29651	29652	29660	29662	29699
29650	29652	29660	29661	29689	2981
29651	29660	29661	29662	29699	29901
29652	29661	29662	29689	2981	29911
29660	29662	29689	29699	29901	29981
29661	29689	29699	2981	29911	29991
29662	29699	2981	29901	29981	30151
29689	2981	29901	29911	29991	*30742
29699	29901	29911	29981	30151	29520
2981	29911	29981	29991	*30740	29600
29901	29981	29991	30151	29520	29601
29911	29991	30151	*30723	29600	29602
29981	30151	*30721	29520	29601	29610
29991	*3071	29520	29600	29602	29611
30151	29520	29600	29601	29610	29612
*3069	29600	29601	29602	29611	29620
29520	29601	29602	29610	29612	29640
29600	29602	29610	29611	29620	29641
29601	29610	29611	29612	29640	29642
29602	29611	29612	29620	29641	29650
29610	29612	29620	29640	29642	29651

29652	29661	29689	29699	29901	2981
29660	29662	29699	2981	29911	29901
29661	29689	2981	29901	29981	29911
29662	29699	29901	29911	29991	29981
29689	2981	29911	29981	30151	29991
29699	29901	29981	29991	30751	30151
2981	29911	29991	30151	*30751	*30753
29901	29981	30151	*30749	29520	29520
29911	29991	*30747	29520	29600	29600
29981	30151	29520	29600	29601	29601
29991	*30745	29600	29601	29602	29602
30151	29520	29601	29602	29610	29610
*30743	29600	29602	29610	29611	29611
29520	29601	29610	29611	29612	29612
29600	29602	29611	29612	29620	29620
29601	29610	29612	29620		29640
29602	29611	29620	29640	29640	29641
29610	29612	29640	29641	29641	29642
29611	29620	29641	29642	29642	29650
29612	29640	29642	29650	29650	29651
29620	29641	29650	29651	29651	29652
29640	29642	29651	29652	29652	29660
29641	29650	29652	29660	29660	29661
29642	29651	29660	29661	29661	29662
29650	29652	29661	29662	29662	29689
29651	29660	29662	29689	29689	29699
29652	29661	29689	29699	29699	2981
29660	29662	29699	2981	2981	29901
29661	29689	2981	29901	29901	29911
29662	29699	29901	29911	29911	29981
29689	2981	29911	29981	29981	29991
29699	29901	29981	29991	29991	30151
2981	29911	29991	30151	30151	30751
29901	29981	30151	*30750	30751	*30754
29911	29991	*30748	29520	*30752	29520
29981	30151	29520	29600	29520	29600
29991	*30746		29601	29600	29601
30151	29520	29600	29602	29601	29602
*30744	29600	29601	29610	29602	29610
29520	29601	29602	29611	29610	29611
29600	29602	29610	29612	29611	29612
29601	29610	29611	29620	29612	29620
29602	29611	29612	29640	29620	29640
29610	29612	29620	29641	29640	29641
29611	29620	29640	29642	29641	29642
29612	29640	29641	29650	29642	29650
29620	29641	29642	29651	29650	29651
29640	29642	29650	29652	29651	29652
29641	29650	29651	29660	29652	
29642	29651	29652	29661	29660	29660
29650	29652	29660	29662	29661	29661
29651	29660	29661	29689	29662	29662
29652	29661	29662	29699	29689	29689
29660	29662	29689	2981	29699	29699

2981
29901
29911
29981
29991
30151
*30759
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3076
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3077
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30780
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30781
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30789
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3079
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3080
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3081
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3082
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3083
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3084
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3089
29520
29600

29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3090
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3091
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30921
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30922
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30923
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30924
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30928
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30929
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3093
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3094
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30981
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30982
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651

29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*30983
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3099
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3100
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3101
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3102
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3108
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3109
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*311
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31200
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31201
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31202
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991

30151	29520	29601	29610	29612	29640
*31203	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*31232
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*31230	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*31222	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*31220	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*31212	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*31210	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*31233
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*31231	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*31223	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*31221	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*31213	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*31211	29600	29602	29611	29620	29641

29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*31321
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*3130	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*31289	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*31281	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*31239	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*31234	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911
29651	29660	29662	29699	29901	29981
29652	29661	29689	2981	29911	29991
29660	29662	29699	29901	29981	30151
29661	29689	2981	29911	29991	*31322
29662	29699	29901	29981	30151	29520
29689	2981	29911	29991	*3131	29600
29699	29901	29981	30151	29520	29601
2981	29911	29991	*3129	29600	29602
29901	29981	30151	29520	29601	29610
29911	29991	*31282	29600	29602	29611
29981	30151	29520	29601	29610	29612
29991	*3124	29600	29602	29611	29620
30151	29520	29601	29610	29612	29640
*31235	29600	29602	29611	29620	29641
29520	29601	29610	29612	29640	29642
29600	29602	29611	29620	29641	29650
29601	29610	29612	29640	29642	29651
29602	29611	29620	29641	29650	29652
29610	29612	29640	29642	29651	29660
29611	29620	29641	29650	29652	29661
29612	29640	29642	29651	29660	29662
29620	29641	29650	29652	29661	29689
29640	29642	29651	29660	29662	29699
29641	29650	29652	29661	29689	2981
29642	29651	29660	29662	29699	29901
29650	29652	29661	29689	2981	29911

29981
29991
30151
*31323
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31382
29520
29600
29601
29602
29610
29611
29612
*3133
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31381
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31389
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31383
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31400
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31401
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3139
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3141
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3142
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3148
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3149
29520
29600
29601
29602
29610
29611

29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31500
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31501
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31502
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31509
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3151
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3152
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31531
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
7843
*31532
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*31534
29500
29501
29502
29503
29504
29510
29511
29512
29513
29514
29520
29521
29522
29523
29524
29530
29531
29532
29533
29534
29540
29541
29542
29543
29544
29560
29561
29562
29563
29564
29571
29572
29573
29574
29580
29581
29582
29583
29584
29591
29592
29593
29594
29600
29601
29602
29604
29610
29611
29612
29614
29620
29634
29640
29641
29642
29644
29650
29651
29652
29654
29660
29661
29662
29664
29689
29699
2980
2981
2983
2984
29900
29901
29910
29911
29980
29981
29990
29991
30151
*31539
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651

29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3154
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3155
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3158
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3159
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*316
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*317
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3180
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3181
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
*3182
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
3181
3182
*319
29520
29600
29601
29602
29610
29611
29612
29620
29640
29641
29642
29650
29651
29652
29660
29661
29662
29689
29699
2981
29901
29911
29981
29991
30151
3181
3182
*3200
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*3201
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
29689
29699
32363

32371	32371	32363	32363	32363	32363
32372	32372	32371	32371	32371	32371
32381	32381	32372	32372	32372	32372
32382	32382	32381	32381	32381	32381
34120	34120	32382	32382	32382	32382
34121	34121	34120	34120	34120	34120
34122	34122	34121	34121	34121	34121
*3202	*3207	34122	34122	34122	34122
00321	00321	*32082	*3209	*3211	*3213
0470	0470	00321	00321	00321	00321
0471	0471	0470	0470	0470	0470
0478	0478	0471	0471	0471	0471
0479	0479	0478	0478	0478	0478
0490	0490	0479	0479	0479	0479
0491	0491	0490	0490	0490	0490
09181	09181	0491	0491	0491	0491
09882	09882	09181	09181	09181	09181
10081	10081	09882	09882	09882	09882
32301	32301	10081	10081	10081	10081
32302	32302	32301	32301	32301	32301
32341	32341	32302	32302	32302	32302
32342	32342	32341	32341	32341	32341
32351	32351	32342	32342	32342	32342
32352	32352	32351	32351	32351	32351
32361	32361	32352	32352	32352	32352
32362	32362	32361	32361	32361	32361
32363	32363	32362	32362	32362	32362
32371	32371	32363	32363	32363	32363
32372	32372	32371	32371	32371	32371
32381	32381	32372	32372	32372	32372
32382	32382	32381	32381	32381	32381
34120	34120	32382	32382	32382	32382
34121	34121	34120	34120	34120	34120
34122		34121	34121	34121	34121
*3203	34122	34122	34122	34122	34122
00321	*32081	*32089	*3210	*3212	*3214
0470	00321	00321	00321	00321	00321
0471	0470	0470	0470	0470	0470
0478	0471	0471	0471	0471	0471
0479	0478	0478	0478	0478	0478
0490	0479	0479	0479	0479	0479
0491	0490	0490	0490	0490	0490
09181	0491	0491	0491	0491	0491
09882	09181	09181	09181	09181	09181
10081	09882	09882	09882	09882	09882
32301	10081	10081	10081	10081	10081
32302	32301	32301	32301	32301	32301
32341	32302	32302	32302	32302	32302
32342	32341	32341	32341	32341	32341
32351	32342	32342	32342	32342	32342
32352	32351	32351	32351	32351	32351
32361	32352	32352	32352	32352	32352
32362	32361	32361	32361	32361	32361
32363	32362	32362	32362	32362	32362

32363
32371
32372
32381
32382
34120
34121
34122
*3218
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*3220
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362

32363
32371
32372
32381
32382
34120
34121
34122
*3221
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*3222
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362

32363
32371
32372
32381
32382
34120
34121
34122
*3229
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
*32301
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639

064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*32302
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649

0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*3231
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
3231

3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*3232
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
3231
3232
32341
32342
32351
32352
32361
32362

32363	*32342	0620	0629	0662	0819
32371	0461	0621	0630	0663	0869
32372	0463	0622	0631	06640	124
32381	048	0623	0632	06641	32301
32382	0498	0624	0638	06642	32302
3239	0499	0625	0639	06649	3231
7712	0620	0628	064	0737	3232
*32341	0621	0629	0662	0819	32341
0461	0622	0630	0663	0869	32342
0463	0623	0631	06640	124	32351
048	0624	0632	06641	32301	32352
0498	0625	0638	06642	32302	32361
0499	0628	0639	06649	3231	32362
0620	0629	064	0737	3232	32363
0621	0630	0662	0819	32341	32371
0622	0631	0663	0869	32342	32372
0623	0632	06640	124	32351	32381
0624	0638	06641	32301	32352	32382
0625	0639	06642	32302	32361	3239
0628	064	06649	3231	32362	7712
0629	0662	0737	3232	32363	*32363
0630	0663	0819	32341	32371	0461
0631	06640	0869	32342	32372	0463
0632	06641	124	32351	32381	048
0638	06642	32301	32352	32382	0498
0639	06649	32302	32361	3239	0499
064	0737	3231	32362	7712	0620
0662	0819	3232	32363	*32362	0621
0663	0869	32341	32371	0461	0622
06640	124	32342	32372	0463	0623
06641	32301	32351	32381	048	0624
06642	32302	32352	32382	0498	0625
06649	3231	32361	3239	0499	0628
0737	3232	32362	7712	0620	0629
0819	32341	32363	*32361	0621	0630
0869	32342	32371	0461	0622	0631
124	32351	32372	0463	0623	0632
32301	32352	32381	048	0624	0638
32302	32361	32382	0498	0625	0639
3231	32362	3239	0499	0628	064
3232	32363	7712	0620	0629	0662
32341	32371	*32352	0621	0630	0663
32342	32372	0461	0622	0631	06640
32351	32381	0463	0623	0632	06641
32352	32382	048	0624	0638	06642
32361	3239	0498	0625	0639	06649
32362		0499	0628	064	0737
32363	7712	0620	0629	0662	0819
32371	*32351	0621	0630	0663	0869
32372	0461	0622	0631	06640	124
32381	0463	0623	0632	06641	32301
32382	048	0624	0638	06642	32302
3239	0498	0625	0639	06649	3231
7712	0499	0628	064	0737	3232

32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*32371
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
*32372
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
*32381
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
*32382
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
*32239
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
*3240
0065
*3300
3300
*3301
3300
3301
3302
3303
3308
3309
*3308
3300
3301
3302
3303
3308
3309
*3309
3300
3301
3302
3303
3308
3309
*3310
3301
3302
3303
3308
3309
*33111
3301
3302
3303
3308
3309
*33119
3301
3302
3303
3308
3309
*3312
3301
3302
3303
3308
3309
*3313
3313
3315
*3314
3313
3315
*3315
3313
3314
3315
*3317
3300
3301

3302
3303
3308
3309
*33181
33181
*33183
3301
3302
3303
3308
3309
*33189
3301
3302
3303
3308
3309
*3319
3301
3302
3303
3308
3309
*3320
09482
3321
3330
3334
33371
33372
33379
33390
33391
*3321
09482
3321
3330
3334
33371
33372
33379
33390
33391

*3330
09482
33392
3341
3342
3343
3344
3348
*3331
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3332
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3333
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3334
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3335
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3336
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33371
33371
33372
33379
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33372
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33379
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33381
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33382
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33383
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33384
33392
3341
3342
3343
3344
3348
3418
3419
*33385
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33389
3341
3342
3343
3344
3348
3418
3419
*33390
33371
33372
33379
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33391
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33392
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33393
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*33399
33371
33372
33379
33390
33391
33392
3341
3342
3343
3344
3348
3418
3419
*3340
3340
3341
3342
3343
3344
3348
3349
3369
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3341
3340
3341
3342
3343
3344
3348
3349
3369
3418
3419
34200
34201
34202

34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3342
3340
3341
3342
3343
3344
3348
3349
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3343
3340
3341
3342
3343
3344
3348
3349
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3344
3340
3341
3342
3343
3344
3348
3349
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3348
3340
3341
3342
3343
3344
3348
3349
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3349
3340
3341
3342
3343
3344
3348
3349
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3350
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33510
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33511
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33519
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33520
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721

33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33521
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33522
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33523
3330
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33524
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33529
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3358
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3359
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3360
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3361
3341
3342
3343
3344
3348
3360
3361
3362

3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3362
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3363
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3368
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3369
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3370
3330
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3371
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33720
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33720
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33720
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33721
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33720
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33722
3341

3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33720
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*33729
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33720
33721
33722
33729
3434
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3373
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3379
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3380
78951
78959
*33811
78951
78959
*33812
78951
78959
*33818
78951
78959
*33819
78951
78959
*33821
78951
78959
*33822
78951
78959
*33828
78951
78959
*33829
78951
78959
*3383
78951
78959
*3384
78951
78959
*340
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3410
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3410
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3411
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120

34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
7712
*34120
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*34121
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*34122
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3418
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3419
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
*34200
33392
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3434
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
*34201
33392
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
*3441
3334
33390
33391
3441
34461
34481
*34202
33392
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*34210
33392
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368

3369	34280	3344	3418	34461	3370
3370	34281	3348	3419	34481	33721
33721	34282	3360	34200	*34290	33722
33722	34290	3361	34201	33392	33729
33729	34291	3362	34202	3341	34120
34120	34292	3363	34210	3342	34121
34121	3434	3368	34211	3343	34122
34122	3441	3369	34212	3344	3418
3418	34461	3370	34280	3348	3419
3419	34481	33721	34281	3360	34200
34200	*34212	33722	34282	3361	34201
34201	33392	33729	34290	3362	34202
34202	3341	34120	34291	3363	34210
34210	3342	34121	34292	3368	34211
34211	3343	34122	3434	3369	34212
34212	3344	3418	3441	3370	34280
34280		3419	34461	33721	34281
34281	3348	34200	34481	33722	34282
34282	3360	34201	*34282	33729	34290
34290	3361	34202	33392	34120	34291
34291	3362	34210	3341	34121	34292
34292	3363	34211	3342	34122	3434
3434	3368	34212	3343	3418	3441
3441	3369	34280	3344	3419	34461
34461	3370	34281	3348	34200	34481
34481	33721	34282	3360	34201	*34292
*34211	33722	34290	3361	34202	33392
33392	33729	34291	3362	34210	3341
3341	34120	34292	3363	34211	3342
3342	34121	3434	3368	34212	3343
3343	34122	3441	3369	34280	3344
3344	3418	34461	3370	34281	3348
3348	3419	34481	33721	34282	3360
3360	34200	*34281	33722	34290	3361
3361	34201	33392	33729	34291	3362
3362	34202	3341	34120	34292	3363
3363	34210	3342	34121	3434	3368
3368	34211	3343	34122	3441	3369
3369	34212	3344	3418	34461	3370
3370	34280	3348	3419	34481	33721
33721	34281	3360	34200	3484	33722
33722	34282	3361	34201	*34291	33729
33729	34290	3362	34202	33392	34120
34120	34291	3363	34210	3341	34121
34121	34292	3368	34211	3342	34122
34122	3434	3369	34212	3343	3418
3418	3441	3370	34280	3344	3419
3419	34461	33721	34281	3348	34200
34200	34481	33722	34282	3360	34201
34201	*34280	33729	34290	3361	34202
34202	33392	34120	34291	3362	34210
34210	3341	34121	34292	3363	34211
34211	3342	34122	3434	3368	34212
34212	3343		3441	3369	34280

34281
34282
34290
34291
34292
3434
3441
34461
34481
*3430
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3431
3434
3441
34461
34481
*3432
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*3433
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*3434
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*3438
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*3439
3334
33371
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
*34400
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419

34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34401
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34402
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34403
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34404
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34409
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*3441
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
*3442
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
*34430
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370

33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34431
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34440
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34432
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34441
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34442
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*3445
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34460
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460
34461
34481
*34461
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34460

34461
34481
*34481
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*3449
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729

34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34489
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729

34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
*34500
34540
34550
34560
34570
34580
*34501
34540
34550
34560
34570
34580
*34510
34540
34550
34560
34570
34580
*34511
34540
34550
34560
34570
34580
*3452
34540
34550
34560
34570
34580
*3453
34540
34550
34560
34570
34580
*34540
34540
34550

34560
34570
34580
*34541
34540
34550
34560
34570
34580
*34550
34540
34550
34560
34570
34580
*34551
34540
34550
34560
34570
34580
*34560
34540
34550
34560
34570
34580
*34561
34540
34550
34560
34570
34580
*34570
34540
34550
34560
34570
34580
*34571
34540
34550
34560
34570
34580
*34580
34540
34550
34560
34570
34580
*34581
34540
34550

34560
34570
34580
*34590
34540
34550
34560
34570
34580
*34591
34540
34550
34560
34570
34580
*3480
3342
3343
3344
3348
*3481
3334
33390
33391
3341
3342
3343
3344
3348
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
*3482
33392
*34830
3330
3334
33371
33372
33379
33390
33391
33392
3340
3341

3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3441
34461
34481
34540
34550
34560
34570
34580
34839
*34831
3330
3334
33371
33372
33379
33390
33391

33392
3340
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
3371
33721
33722
33729
3410
3411
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3430
3431
3434
3441
34461
34481
34540
34550
34560
34830
34839
*34839
3330
3334
33371
33372
33379
33390
33392
3340
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
3410
3411
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3430
3431
3434
3441
34461
34481
34540
34550
34560
34830
34831
*3484
3334
33390
33391
*3485
3334
33390
33391
3485
*3488
3300
3334
33390
33391
3341
3342
3343
3344
3348
3360
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
34570
34580
*3489
3300
3334
33390
33391
3341
3342
3343
3344
3348
3360
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
34540
34550
34560
34830
34839
*34839
3330
3334
33371
33372
33379
33390
33391
*3485
3334
33390
33391
3485
*3488
3300
3334
33390
33391
3341
3342
3343
3344
3348
3360
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
34540
34550
34560
34570
34580
*3489
3300
3334
33390
33391
3341
3342
3343
3344
3348
3360
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
34461
34481
34540
34550
34560
34830
34839
*34839
3330
3334
33371
33372
33379
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
*3491
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
*3492
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
*3490
3341

34550
34560
34570
34580
3594
3596
*3499
00321
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3300
3334
33390
33391
3341
3342
3343
3344
3348
3360
3361
3362
3363
3368
3369
3370
33721
33722
33729
34120
34121
34122
3418
3419
34200
34201
34202
34210
34211
34212
34280
34281
34282
34290
34291
34292
3434
3441
3442
34460
34461
34481
34540
34550
34560
34570
34580
3594
3596
*3501
3563
*3502
3563
*3508
3563
*3509
3563
*3510
3563
35781
35782
*3511
3563
35781
35782
*3518
3563
35781
35782
*3519
3563
35781
35782
*3520
3563
35781
35782
*3521
3563
35781
35782
*3522
3563
35781
35782
*3523
3563
35781
35782
*3524
3563
35781
35782
*3525
3563
35781
35782
*3526
3563
35781
35782
*3529
3563
35781
35782
*3530
3563
35781
35782
*3531
3563
35781
35782
*3532
3563
35781
35782
*3533
3563
35781
35782
*3534
3563
35781
35782
*3535
3563
35781
35782
*3536
3563
*3538
3563
35781
35782
*3539
3563
35781
35782
*3540
3563
35781
35782
*3541
3563
35781
35782
*3542
3563
35781
35782
*3543
3563
35781
35782
*3544
3563
35781
35782
*3545
3563
35781
35782
*3548
3563
35781
35782
*3549
3563
35781
35782
*3550
3563
35781
35782
*3551
3563
35781
35782
*3552
3563
35781
35782
*3553
3563
35781
35782
*3554
3563
35781
35782
*3555
3563
35781
35782
*3556
3563
35781
35782
*35571
3563
35781
35782
*35579
3563
35781
35782
*3558
3563
35781
35782
*3559
3563
35781
35782
*3560
3563
35781
35782
*3561
3563
35781
35782
*3562
3563
35781
35782
*3563
3563
35781
35782
*3564
3563
35781
35782
*3568
3563
35781
35782
*3569
3563
35781
35782
*3570
0470
0471
0478
0479
0490
0491
09181
09882
10081
32301
32302
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
34120
34121
34122
3563
*3571
3563
*3572
3563
*3573
3563
*3574
3563
*3575
3563
*3576
3563
*3577
3563
*35781
3563
35781
35782
*35782
3563
35781
35782
*35789

3563
35781
35782
*3579
3563
35782
*35800
3594
3596
*35801
3594
3596
*3581
3594
3596
35981
*3582
3594
3596
35981
*3588
3594
3596
35981
*3589
3594
3596
35981
*3590
3594
3596
35981
*3591
3594
3596
35981
*35921
3594
3596
35981
*35922
3594
3596
35981
*35923
3594
3596
35981
*35924
3594
3596
35981
*35929
3594
3596
35981
*3593
3594
3596
35981
*3594
3594
3596
35981
*3595
3594
3596
35981
*3596
3594
3596
35981
*35981
3594
3596
35981
*35989
3594
3596
35981
*3599
3594
3596
35981
*36000
36000
36001
36002
36004
36013
36019
*36001
36000
36001
36002
36004
36013
36019
*36002
36000
36001
36002
36004
36013
36019
*36003
36000
36001
36002
36004
36013
36019
*36004
36000
36001
36002
36004
36013
36019
*36011
36004
36011
36012
*36012
36004
36011
36012
*36013
36000
36001
36002
36004
36013
36019
*36014
36004
*36019
36000
36001
36002
36004
36013
36019
*36100
3612
36181
36189
3619
36240
36242
36243
*36101
3612
36181
36189
3619
36240
36242
36243
*36102
3612
36181
36189
3619
36240
36242
36243
*36103
3612
36181
36189
3619
36240
36242
36243
*36104
3612
36181
36189
3619
36240
36242
36243
*36105
3612
36181
36189
3619
36240
36242
36243
*36106
3612
36181
36189
3619
36240
36242
36243
*36107
3612
36181
36189
3619
36240
36242
36243
*36110
3612
36181
36189
3619
36240
36242
36243
*36111
3612
36181
36189
3619
36240
36242
36243
*36112
3612
36181
36189
3619
36240
36242
36243
*36113
3612
36181
36189
3619
36240
36242
36243
*36114
3612
36181
36189
3619
36240
36242
36243
*36119
3612
36181
36189
3619
36240
36242
36243
*36130
3612
36181
36189
3619
36240
36242
36243
*36131
3612
36181
36189
3619
36240
36242
36243
*36132
3612
36181
36189
3619
36240
36242
36243
*36133
3612
36181
36189
3619
36240
36242
36243
*36181
3612
36181
36189
3619
36240
36242
36243
*36189
3612
36181
36189
3619
36240
36242
36243
*3612
3612
36181
36189
3619
36240
36242
36243
*3619
3612
36181
36189
3619
36240
36242
36243
*36201
09483

*36212
09483
*36213
09483
*36229
09483
*36230
36230
36231
36232
36233
36234
36235
*36231
36230
36231
36232
36233
36234
36235
*36232
36230
36231
36232
36233
36234
36235
*36233
36230
36231
36232
36233
36234
36235
*36234
36230
36231
36232
36233
36234
36235
*36235
36230
36231
36232
36233
36234
36235
*36236
36230
36231
36232
36233
36234
36235
*36237
36230
36231
36232
36233
36234
36235
*36240
3612
36181
36189
3619
36240
36242
36243
*36241
09483
3612
36181
36189
3619
36240
36242
36243
*36242
3612
36181
36189
3619
36240
36242
36243
*36243
3612
36181
36189
3619
36240
36242
36243
*36252
09483
*36276
09483
*36281
36284
*36282
36284
*36283
36284
*36284
36284
*36285
36284
*36289
36284
*36300
09483
36310
36311
36312
36313
36314
36315
36320
*36301
36310
36311
36312
36313
36314
36315
36320
*36303
36310
36311
36312
36313
36314
36315
36320
*36304
36310
36311
36312
36313
36314
36315
36320
*36305
09483
36310
36311
36312
36313
36314
36315
36320
*36306
09483
36310
36311
36312
36313
36314
36315
36320
*36307
09483
36310
36311
36312
36313
36314
36315
36320
*36308
09483
36310
36311
36312
36313
36314
36315
36320
*36310
09483
36310
36311
36312
36313
36314
36315
36320
*36311
36310
36311
36312
36313
36314
36315
36320
*36312
36310
36311
36312
36313
36314
36315
36320
*36313
09483
36310
36311
36312
36313
36314
36315
36320
*36314
09483
36310
36311
36312
36313
36314
36315
36320
*36315
09483
36310
36311
36312
36313
36314
36315
36320
*36320
36310
36311
36312
36313
36314
36315
36320
*36321
36310
36311
36312
36313
36314
36315
36320
*36322
36310
36311
36312
36313
36314
36315
36320
*36361
36363
36370
36371
36372
36363
36370
36371
36372
36363
36370
36371
36372
36363
36370
36371
36372
*36362
36363
36370
36371
36372
36363
36370
36371
36372
*36363
36363
36370
36371
36372
*36364
36363
36370
36371
36372
*36365
36363
36370
36371
36372
*36366
36363
36370
36371
36372
*36367
36363
36370
36371
36372
*36368
36363
36370
36371
36372
*36369
36363
36370
36371
36372
*36370
36363
36370
36371
36372
*36371
36363
36370
36371
36372
*36372
36363
36370
36371
36372
*3638
36363
36370
36371
36372
*3639
36363
36370
36371
36372
*36400
36400
36401
36402
36403
36422
3643
*36401
36400
36401
36402
36403
36422
3643
*36402
36400
36401
36402
36403
36422
3643
*36403
36400
36401
36402
36403
36422
3643
*36404
36400
36401
36402
36403
36422
3643
*36405
36400
36401
36402
36403
36422
3643
*36406
36400
36401
36402
36403
36422
3643
*36407
36400
36401
36402
36403
36422
3643
*36408
36400
36401
36402
36403
36422
3643
*36409
36400
36401
36402
36403
36422
3643
*36410
36400
36401
36402
36403
36422
3643
*36411
36400
36401
36402
36403
36422
3643
*36412
36400
36401
36402
36403
36422
3643
*36413
36400
36401
36402
36403
36422
3643
*36414
36400
36401
36402
36403
36422
3643
*36415
36400
36401
36402
36403
36422
3643
*36416
36400
36401
36402
36403
36422
3643
*36417
36400
36401
36402
36403
36422
3643
*36418
36400
36401
36402
36403
36422
3643
*36419
36400
36401
36402
36403
36422
3643
*36420
36400
36401
36402
36403
36422
3643
*36421
36400
36401
36402
36403
36422
3643
*36422
36400
36401
36402
36403
36422
3643
*36423
36400
36401
36402
36403
36422
3643
*36424
36400
36401
36402
36403
36422
3643
*36425
36400
36401
36402
36403
36422
3643
*36426
36400
36401
36402
36403
36422
3643
*36427
36400
36401
36402
36403
36422
3643
*36428
36400
36401
36402
36403
36422
3643
*36429
36400
36401
36402
36403
36422
3643
*36430
36400
36401
36402
36403
36422
3643
*36431
36400
36401
36402
36403
36422
3643
*36432
36400
36401
36402
36403
36422
3643
*36433
36400
36401
36402
36403
36422
3643
*36434
36400
36401
36402
36403
36422
3643
*36435
36400
36401
36402
36403
36422
3643
*36436
36400
36401
36402
36403
36422
3643
*36437
36400
36401
36402
36403
36422
3643
*36438
36400
36401
36402
36403
36422
3643
*36439
36400
36401
36402
36403
36422
3643
*36440
36400
36401
36402
36403
36422
3643
*36441
36400
36401
36402
36403
36422
3643
*36442
36400
36401
36402
36403
36422
3643
*36443
36400
36401
36402
36403
36422
3643
*36444
36400
36401
36402
36403
36422
3643
*36445
36400
36401
36402
36403
36422
3643
*36446
36400
36401
36402
36403
36422
3643
*36447
36400
36401
36402
36403
36422
3643
*36448
36400
36401
36402
36403
36422
3643
*36449
36400
36401
36402
36403
36422
3643
*36450
36400
36401
36402
36403
36422
3643
*36451
36400
36401
36402
36403
36422
3643
*36452
36400
36401
36402
36403
36422
3643
*36453
36400
36401
36402
36403
36422
3643
*36454
36400
36401
36402
36403
36422
3643
*36455
36400
36401
36402
36403
36422
3643
*36456
36400
36401
36402
36403
36422
3643
*36457
36400
36401
36402
36403
36422
3643
*36458
36400
36401
36402
36403
36422
3643
*36459
36400
36401
36402
36403
36422
3643
*36460
36400
36401
36402
36403
36422
3643
*36461
36400
36401
36402
36403
36422
3643
*36462
36400
36401
36402
36403
36422
3643
*36463
36400
36401
36402
36403
36422
3643
*36464
36400
36401
36402
36403
36422
3643
*36465
36400
36401
36402
36403
36422
3643
*36466
36400
36401
36402
36403
36422
3643
*36467
36400
36401
36402
36403
36422
3643
*36468
36400
36401
36402
36403
36422
3643
*36469
36400
36401
36402
36403
36422
3643
*36470
36400
36401
36402
36403
36422
3643
*36471
36400
36401
36402
36403
36422
3643
*36472
36400
36401
36402
36403
36422
3643
*36473
36400
36401
36402
36403
36422
3643
*36474
36400
36401
36402
36403
36422
3643
*36475
36400
36401
36402
36403
36422
3643
*36476
36400
36401
36402
36403
36422
3643
*36477
36400
36401
36402
36403
36422
3643
*36478
36400
36401
36402
36403
36422
3643
*36479
36400
36401
36402
36403
36422
3643
*36480
36400
36401
36402
36403
36422
3643
*36481
36400
36401
36402
36403
36422
3643
*36482
36400
36401
36402
36403
36422
3643
*36483
36400
36401
36402
36403
36422
3643
*36484
36400
36401
36402
36403
36422
3643
*36485
36400
36401
36402
36403
36422
3643
*36486
36400
36401
36402
36403
36422
3643
*36487
36400
36401
36402
36403
36422
3643
*36488
36400
36401
36402
36403
36422
3643
*36489
36400
36401
36402
36403
36422
3643
*36490
36400
36401
36402
36403
36422
3643
*36491
36400
36401
36402
36403
36422
3643
*36492
36400
36401
36402
36403
36422
3643
*36493
36400
36401
36402
36403
36422
3643
*36494
36400
36401
36402
36403
36422
3643
*36495
36400
36401
36402
36403
36422
3643
*36496
36400
36401
36402
36403
36422
3643
*36497
36400
36401
36402
36403
36422
3643
*36498
36400
36401
36402
36403
36422
3643
*36499
36400
36401
36402
36403
36422
3643
*36500
36400
36401
36402
36403
36422
3643
*36501
36400
36401
36402
36403
36422
3643
*36502
36400
36401
36402
36403
36422
3643
*36503
36400
36401
36402
36403
36422
3643
*36504
36400
36401
36402
36403
36422
3643
*36505
36400
36401
36402
36403
36422
3643
*36506
36400
36401
36402
36403
36422
3643
*36507
36400
36401
36402
36403
36422
3643
*36508
36400
36401
36402
36403
36422
3643
*36509
36400
36401
36402
36403
36422
3643
*36510
36400
36401
36402
36403
36422
3643
*36511
36400
36401
36402
36403
36422
3643
*36512
36400
36401
36402
36403
36422
3643
*36513
36400
36401
36402
36403
36422
3643
*36514
36400
36401
36402
36403
36422
3643
*36515
36400
36401
36402
36403
36422
3643
*36516
36400
36401
36402
36403
36422
3643
*36517
36400
36401
36402
36403
36422
3643
*36518
36400
36401
36402
36403
36422
3643
*36519
36400
36401
36402
36403
36422
3643
*36520
36400
36401
36402
36403
36422
3643
*36521
36400
36401
36402
36403
36422
3643
*36522
36400
36401
36402
36403
36422
3643
*36523
36400
36401
36402
36403
36422
3643
*36524
36400
36401
36402
36403
36422
3643
*36525
36400
36401
36402
36403
36422
3643
*36526
36400
36401
36402
36403
36422
3643
*36527
36400
36401
36402
36403
36422
3643
*36528
36400
36401
36402
36403
36422
3643
*36529
36400
36401
36402
36403
36422
3643
*36530
36400
36401
36402
36403
36422
3643
*36531
36400
36401
36402
36403
36422
3643
*36532
36400
36401
36402
36403
36422
3643
*36533
36400
36401
36402
36403
36422
3643
*36534
36400
36401
36402
36403
36422
3643
*36535
36400
36401
36402
36403
36422
3643
*36536
36400
36401
36402
36403
36422
3643
*36537
36400
36401
36402
36403
36422
3643
*36538
36400
36401
36402
36403
36422
3643
*36539
36400
36401
36402
36403
36422
3643
*36540
36400
36401
36402
36403
36422
3643
*36541
36400
36401
36402
36403
36422
3643
*36542
36400
36401
36402
36403
36422
3643
*36543
36400
36401
36402
36403
36422
3643
*36544
36400
36401
36402
36403
36422
3643
*36545
36400
36401
36402
36403
36422
3643
*36546
36400
36401
36402
36403
36422
3643
*36547
36400
36401
36402
36403
36422
3643
*36548
36400
36401
36402
36403
36422
3643
*36549
36400
36401
36402
36403
36422
3643
*36550
36400
36401
36402
36403
36422
3643
*36551
36400
36401
36402
36403
36422
3643
*36552
36400
36401
36402
36403
36422
3643
*36553
36400
36401
36402
36403
36422
3643
*36554
36400
36401
36402
36403
36422
3643
*36555
36400
36401
36402
36403
36422
3643
*36556
36400
36401
36402
36403
36422
3643
*36557
36400
36401
36402
36403
36422
3643
*36558
36400
36401
36402
36403
36422
3643
*36559
36400
36401
36402
36403
36422
3643
*36560
36400
36401
36402
36403
36422
3643
*36561
36400
36401
36402
36403
36422
3643
*36562
36400
36401
36402
36403
36422
3643
*36563
36400
36401
36402
36403
36422
3643
*36564
36400
36401
36402
36403
36422
3643
*36565
36400
36401
36402
36403
36422
3643
*36566
36400
36401
36402
36403
36422
3643
*36567
36400
36401
36402
36403
36422
3643
*36568
36400
36401
36402
36403
36422
3643
*36569
36400
36401
36402
36403
36422
3643
*36570
36400
36401
36402
36403
36422
3643
*36571
36400
36401
36402
36403
36422
3643
*36572
36400
36401
36402
36403
36422
3643
*36573
36400
36401
36402
36403
36422
3643
*36574
36400
36401
36402
36403
36422
3643
*36575
36400
36401
36402
36403
36422
3643
*36576
36400
36401
36402
36403
36422
3643
*36577
36400
36401
36402
36403
36422
3643
*36578
36400
36401
36402
36403
36422
3643
*36579
36400
36401
36402
36403
36422
3643
*36580
36400
36401
36402
36403
36422
3643
*36581
36400
36401
36402
36403
36422
3643
*36582
36400
36401
36402
36403
36422
3643
*36583
36400
36401
36402
36403
36422
3643
*36584
36400
36401
36402
36403
36422
3643
*36585
36400
36401
36402
36403
36422
3643
*36586
36400
36401
36402
36403
36422
3643
*36587
36400
36401
36402
36403
36422
3643
*36588
36400
36401
36402
36403
36422
3643
*36589
36400
36401
36402
36403
36422
3643
*36590
36400
36401
36402
36403
36422
3643
*36591
36400
36401
36402
36403
36422
3643
*36592
36400
36401
36402
36403
36422
3643
*36593
36400
36401
36402
36403
36422
3643
*36594
36400
36401
36402
36403
36422
3643
*36595
36400
36401
36402
36403
36422
3643
*36596
36400
36401
36402
36403
36422
3643
*36597
36400
36401
36402
36403
36422
3643
*36598
36400
36401
36402
36403
36422
3643
*36599
36400
36401
36402
36403
36422
3643
*36600
36400
36401
36402
36403
36422
3643
*36601
36400
36401
36402
36403
36422
3643
*36602
36400
36401
36402
36403
36422
3643
*36603
36400
36401
36402
36403
36422
3643
*36604
36400
36401
36402
36403
36422
3643
*36605
36400
36401
36402
36403
36422
3643
*36606
36400
36401
36402
36403
36422
3643
*36607
36400
36401
36402
36403
36422
3643
*36608
36400
36401
36402
36403
36422
3643
*36609
36400
36401
36402
36403
36422
3643
*36610
36400
36401
36402
36403
36422
3643
*36611
36400
36401
36402
36403
36422
3643
*36612
36400
36401
36402
36403
36422
3643
*36613
36400
36401
36402
36403
36422
3643
*36614
36400
36401
36402
36403
36422
3643
*36615
36400
36401
36402
36403
36422
3643
*36616
36400
36401
36402
36403
36422
3643
*36617
36400
36401
36402
36403
36422
3643
*36618
36400
36401
36402
36403
36422
3643
*36619
36400
36401
36402
36403
36422
3643
*36620
36400
36401
36402
36403
36422
3643
*36621
36400
36401
36402
36403
36422
3643
*36622
36400
36401
36402
36403
36422
3643
*36623
36400
36401
36402
36403
36422
3643
*36624
36400
36401
36402
36403
36422
3643
*36625
36400
36401
36402
36403
36422
3643
*36626
36400
36401
36402
36403
36422
3643
*36627
36400
36401
36402
36403
36422
3643
*36628
36400
36401
36402
36403
36422
3643
*36629
36400
36401
36402
36403
36422
3643
*36630
36400
36401
36402
36403
36422
3643
*36631
36400
36401
36402
36403
36422
3643
*36632
36400
36401
36402
36403
36422
3643
*36633
36400
36401
36402
36403
36422
3643
*36634
36400
36401
36402
36403
36422
3643
*36635
36400
36401
36402
36403
36422
3643
*36636
36400
36401
36402
36403
36422
3643
*36637
36400
36401
36402
36403
36422
3643
*36638
36400
36401
36402
36403
36422
3643
*36639
36400
36401
36402
36403
36422
3643
*36640
36400
36401
36402
36403
36422
3643
*36641
36400
36401
36402
36403
36422
3643
*36642
36400
36401
36402
36403
36422
3643
*36643
36400
36401
36402
36403
36422
3643
*36644
36400
36401
36402
36403
36422
3643
*36645
36400
36401
36402
36403
36422
3643
*36646
36400
36401
36402
36403
36422
3643
*36647
36400
36401
36402
36403
36422
3643
*36648
36400
36401
36402
36403
36422
3643
*36649
36400
36401
36402
36403
36422
3643
*36650
36400
36401
36402
36403
36422
3643
*36651
36400
36401
36402
36403
36422
3643
*36652
36400
36401
36402
36403
36422
3643
*36653
36400
36401
36402
36403
36422
3643
*36654
36400
36401
36402
36403
36422
3643
*36655
36400
36401
36402
36403
36422
3643
*36656
36400
36401
36402
36403
36422
3643
*36657
36400
36401
36402
36403
36422
3643
*36658
36400
36401
36402
36403
36422
3643
*36659
36400
36401
36402
36403
36422
3643
*36660
36400
36401
36402
36403
36422
3643
*36661
36400
36401
36402
36403
36422
3643
*36662
36400
36401
36402
36403
36422
3643
*36663
36400
36401
36402
36403
36422
3643
*36664
36400
36401
36402
36403
36422
3643
*36665
36400
36401
36402
36403
36422
3643
*36666
36400
36401
36402
36403
36422
3643
*36667
36400
36401
36402
36403
36422
3643
*36668
36400
36401
36402
36403
36422
3643
*36669
36400
36401
36402
36403
36422
3643
*36670
36400
36401
36402
36403
36422
3643
*36671
36400
36401
36402
36403
36422
3643
*36672
36400
36401
36402
36403
36422
3643
*36673
36400
36401
36402
36403
36422
3643
*36674
36400
36401
36402
36403
36422
3643
*36675
36400
36401
36402
36403
36422
3643
*36676
36400
36401
36402
36403
36422
3643
*36677
36400
36401
36402
36403
36422
3643
*36678
36400
36401
36402
36403
36422
3643
*36679
36400
36401
36402
36403
36422
3643
*36680
36400
36401
36402
36403
36422
3643
*36681
36400
36401
36402
36403
36422
3643
*36682
36400
36401
36402
36403
36422
3643
*36683
36400
36401
36402
36403
36422
3643
*36684
36400
36401
36402
36403
36422
3643
*36685
36400
36401
36402
36403
36422
3643
*36686
36400
36401
36402
36403
36422
3643
*36687
36400
36401
36402
36403
36422
3643
*36688
36400
36401
36402
36403
36422
3643
*36689
36400
36401
36402
36403
36422
3643
*36690
36400
36401
36402
36403
36422
3643
*36691
36400
36401
36402
36403
36422
3643
*36692
36400
36401
36402
36403
36422
3643
*36693
36400
36401
36402
36403
36422
3643
*36694
36400
36401
36402
36403
36422
3643
*36695
36400
36401
36402
36403
36422
3643
*36696
36400
36401
36402
36403
36422
3643
*36697
36400
36401
36402
36403
36422
3643
*36698
36400
36401
36402
36403
36422
3643
*36699
36400
36401
36402
36403
36422
3643
*36700
36400
36401
36402
36403
36422
3643
*36701
36400
36401
36402
36403
36422
3643
*36702
36400
36401
36402
36403
36422
3643
*36703
36400
36401
36402
36403
36422
3643
*36704
36400
36401
36402
36403
36422
3643
*36705
36400
36401
36402
36403
36422
3643
*36706
36400
36401
36402
36403
36422
3643
*36707
36400
36401
36402
36403
36422
3643
*36708
36400
36401
36402
36403
36422
3643
*36709
36400
36401
36402
36403
36422
3643
*36710
36400
36401
36402
36403
36422
3643
*36711
36400
36401
36402
36403
36422
3643
*36712
36400
36401
36402
36403
36422
3643
*36713
36400
36401
36402
36403
36422
3643
*36714
36400
36401
36402
36403
36422
3643
*36715
36400
36401
36402
36403
36422
3643
*36716
36400
36401
36402
36403
36422
3643
*36717
36400
36401
36402
36403
36422
3643
*36718
36400
36401
36402
36403
36422
3643
*36719
36400
36401
36402
36403
36422
3643
*36720
36400
36401
36402
36403
36422
3643
*36721
36400
36401
36402
36403
36422
3643
*36722
36400
36401
36402
36403
36422
3643
*36723
36400
36401
36402
36403
36422
3643
*36724
36400
36401
36402
36403
36422
3643
*36725
36400
36401
36402
36403
36422
3643
*36726
36400
36401
36402
36403
36422
3643
*36727
36400
36401
36402
36403
36422
3643
*36728
36400
36401
36402
36403
36422
3643
*36729
36400
36401
36402
36403
36422
3643
*36730
36400
36401
36402
36403
36422
3643
*36731
36400
36401
36402
36403
36422
3643
*36732
36400
36401
36402
36403
36422
3643
*36733
36400
36401
36402
36403
36422
3643
*36734
36400
36401
36402
36403
36422
3643
*36735
36400
36401
36402
36403
36422
3643
*36736
36400
36401
36402
36403
36422
3643
*36737
36400
36401
36402
36403
36422
3643
*36738
36400
36401
36402
36403
36422
3643
*36739
36400
36401
36402
36403
36422
3643
*36740
36400
36401
36402
36403
36422
3643
*36741
36400
36401
36402
36403
36422
3643
*36742
36400
36401
36402
36403
36422
3643
*36743
36400
36401
36402
36403
36422
3643
*36744
36400
36401
36402
36403
36422
3643
*36745
36400
36401
36402
36403
36422
3643
*36746
36400
36401
36402
36403
36422
3643
*36747
36400
36401
36402
36403
36422
3643
*36748
36400
36401
36402
36403
36422
3643
*36749
36400
36401
36402
36403
36422
3643
*36750
36400
36401
36402
36403
36422
3643
*36751
36400
36401
36402
36403
36422
3643
*36752
36400
36401
36402
36403
36422
3643
*36753
36400
36401
36402
36403
36422
3643
*36754
36400
36401
36402
36403
36422
3643
*36755
36400
36401
36402
36403
36422
3643
*36756
36400
36401
36402
36403
36422
3643
*36757
36400
36401
36402
36403
36422
3643
*36758
36400
36401
36402
36403
36422
3643
*36759
36400
36401
36402
36403
36422
3643
*36760
36400
36401
36402
36403
36422
3643
*36761
36400
36401
36402
36403
36422
3643
*36762
36400
36401
36402
36403
36422
3643
*36763
36400
36401
36402
36403
36422
3643
*36764
36400
36401
36402
36403
36422
3643
*36765
36400
36401
36402
36403
36422
3643
*36766
36400
36401
36402
36403
36422
3643
*36767
36400
36401
36402
36403
36422
3643
*36768
36400
36401
36402
36403
36422
3643
*36769
36400
36401
36402
36403
36422
3643
*36770
36400
36401
36402
36403
36422
3643
*36771
36400
36401
36402
36403
36422
3643
*36772
36400
36401
36402
36403
36422
3643
*36773
36400
36401
36402
36403
36422
3643
*36774
36400
36401
36402
36403
36422
3643
*36775
36400
36401
36402
36403
36422
3643
*36776
36400
36401
36402
36403
36422
3643
*36777
36400
36401
36402
36403
36422
3643
*36778
36400
36401
36402
36403
36422
3643
*36779
36400
36401
36402
36403
36422
3643
*36780
36400
36401
36402
36403
36422
3643
*36781
36400
36401
36402
36403
36422
3643
*36782
36400
36401
36402
36403
36422
3643
*36783
36400
36401
36402
36403
36422
3643
*36784
36400
36401
36402
36403
36422
3643
*36785
36400
36401
36402
36403
36422
3643
*36786
36400
36401
36402
36403
36422
3643
*36787
36400
36401
36402
36403
36422
3643
*36788
36400
36401
36402
36403
36422
3643
*36789
36400
36401
36402
36403
36422
3643
*36790
36400
36401
36402
36403
36422
3643
*36791
36400
36401
36402
36403
36422
3643
*36792
36400
36401
36402
36403
36422
3643
*36793
36400
36401
36402
36403
36422
3643
*36794
36400
36401
36402
36403
36422
3643
*36795
36400
36401
36402
36403
36422
3643
*36796
36400
36401
36402
36403
36422
3643
*36797
36400
36401
36402
36403
36422
3643
*36798
36400
36401
36402
36403
36422
3643
*36799
36400
36401
36402
36403
36422
3643
*36800
36400
36401
36402
36403
36422
3643
*36801
36400
36401
36402
36403
36422
3643
*36802
36400
36401
36402
36403
36422
3643
*36803
36400
36401
36402
36403
36422
3643
*36804
36400
36401
36402
36403
36422
3643
*36805
36400
36401
36402
36403
36422
3643
*36806
36400
36401
36402
36403
36422
3643
*36807
36400
36401
36402
36403
36422
3643
*36808
36400
36401
36402
36403
36422
3643
*36809
36400
36401
36402
36403
36422
3643
*36810
36400
36401
36402
36403
36422
3643
*36811
36400
36401
36402
36403
36422
3643
*36812
36400
36401
36402
36403
36422
3643
*36813
36400
36401
36402
36403
36422
3643
*36814
36400
36401
36402
36403
36422
3643
*36815
36400
36401
36402
36403
36422
3643
*36816
36400
36401
36402
36403
36422
3643
*36817
36400
36401
36402
36403
36422
3643
*36818
36400
36401
36402
36403
36422
3643
*36819
36400
36401
36402
36403
36422
3643
*36820
36400
36401
36402
36403
36422
3643
*36821
36400
36401
36402
36403
36422
3643
*36822
36400
36401
36402
36403
36422
3643
*36823
36400
36401
36402
36403
36422
3643
*36824
36400
36401
36402
36403
36422
3643
*36825
36400
36401
36402
36403
36422
3643
*36826
36400
36401
36402
36403
36422
3643
*36827
36400
36401
36402
36403
36422
3643
*36828
36400
36401
36402
36403
36422
3643
*36829
36400
36401
36402
36403
36422
3643
*36830
36400
36401
36402
36403
36422
3643
*36831
36400
36401
36402
36403
36422
3643
*36832
36400
36401
36402
36403
36422
3643
*36833
36400
36401
36402
36403
36422
3643
*36834
36400
36401
36402
36403
36422
3643
*36835
36400
36401
36402
36403
36422
3643
*36836
36400
36401
36402
36403
36422
3643
*36837
36400
36401
36402
36403
36422
3643
*36838
36400
36401
36402
36403
36422
3643
*36839
36400
36401
36402
36403
36422
3643
*36840
36400
36401
36402
36403
36422
3643
*36841
36400
36401
36402
36403
36422
3643
*36842
36400
36401
36402
36403
36422
3643
*36843
36400
36401
36402
36403
36422
3643
*36844
36400
36401
36402
36403
36422
3643
*36845
36400
36401
36402
36403
36422
3643
*36846
36400
36401
36402
36403
36422
3643
*36847
36400
36401
36402
36403
36422
3643
*36848
36400
36401
36402
36403
36422
3643
*36849
36400
36401
36402
36403
36422
3643
*36850
36400
36401
36402
36403
36422
3643
*36851
36400
36401
36402
36403
36422
3643
*36852
36400
36401
36402
36403
36422
3643
*36853
36400
36401
36402
36403
36422
3643
*36854
36400
36401
36402
36403
36422
3643
*36855
36400
36401
36402
36403
36422
3643
*36856
36400
36401
36402
36403
36422
3643
*36857
36400
36401
36402
36403
36422
3643
*36858
36400
36401
36402
36403
36422
3643
*36859
36400
36401
36402
36403
36422
3643
*36860
36400
36401
36402
36403
36422
3643
*36861
36400
36401
36402
36403
36422
3643
*36862
36400
36401
36402
36403
36422
3643
*36863
36400
36401
36402
36403
36422
3643
*36864
36400
36401
36402
36403
36422
3643
*36865
36400
36401
36402
36403
36422
3643
*36866
36400
36401
36402
36403
36422
3643
*36867
36400
36401
36402
36403
36422
3643
*36868
36400
36401
36402
36403
36422
3643
*36869
36400
36401
36402
36403
36422
3643
*36870
36400
36401
36402
36403
36422
3643
*36871
36400
36401
36402
36403
36422
3643
*36872
36400
36401
36402
36403
36422
3643
*36873
36400
36401
36402
36403
36422
3643
*36874
36400
36401
36402
36403
36422
3643
*36875
36400
36401
36402
36403
36422
3643
*36876
36400
36401
36402
36403
36422
3643
*36877
36400
36401
36402
36403
36422
3643
*36878
36400
36401
36402
36403
36422
3643
*36879
36400
36401
36402
36403
36422
3643
*36880
36400
36401
36402
36403
36422
3643
*36881
36400
36401
36402
36403
36422
3643
*36882
36400
36401
36402
36403
36422
3643
*36883
36400
36401
36402
36403
36422
3643
*36884
36400
36401
36402
36403
36422
3643
*36885
36400
36401
36402
36403
36422
3643
*36886
36400
36401
36402
36403
36422
3643
*36887
36400
36401
36402
36403
36422
3643
*36888
36400
36401
36402
36403
36422
3643
*36889
36400
36401
36402
36403
36422
3643
*36890
36400
36401
36402
36403
36422
3643
*36891
36400
36401
36402
36403
36422
3643
*36892
36400
36401
36402
36403
36422
3643
*36893
36400
36401
36402
36403
36422
3643
*36894
36400
36401
36402
36403
36422
3643
*36895
36400
36401
36402
36403
36422
3643
*36896
36400
36401
36402
36403
36422
3643
*36897
36400
36401
36402
36403
36422
3643
*36898
36400
36401
36402
36403
36422
3643
*36899
36400
36401
36402
36403
36422
3643
*36900
36400
36401
36402
36403
36422
3643
*36901
36400
36401
36402
36403
36422
3643
*36902
36400
36401
36402
36403
36422
3643
*36903
36400
36401
36402
36403
36422
3643
*36904
36400
36401
36402
36403
36422
3643
*36905
36400
36401
36402
36403
36422
3643
*36906
36400
36401
36402
36403
36422
3643
*36907
36400
36401
36402
36403
36422
3643
*36908
36400
36401
36402
36403
36422
3643
*36909
36400
36401
36402
36403
36422
3643
*36910
36400
36401
36402
36403
36422
3643
*36911
36400
36401
36402
36403
36422
3643
*36912
36400
36401
36402
36403
36422
3643
*36913
36400
36401
36402
36403
36422
3643
*36914
36400
36401
36402
36403
36422
3643
*36915
36400
36401
36402
36403
36422
3643
*36916
36400
36401
36402
36403
36422
3643
*36917
36400
36401
36402
36403
36422
3643
*36918
36400
36401
36402
36403
36422
3643
*36919
36400
36401
36402
36403
36422
3643
*36920
36400
36401
36402
36403
36422
3643
*36921
36400
36401
36402
36403
36422
3643
*36922
36400
36401
36402
36403
36422
3643
*36923
36400
36401
36402
36403
36422
3643
*36924
36400
36401
36402
36403
36422
3643
*36925
36400
36401
36402
36403
36422
3643
*36926
36400
36401
36402
36403
36422
3643
*36927
36400
36401
36402
36403
36422
3643
*36928
36400
36401
36402
36403
36422
3643
*36929
36400
36401
36402
36403
36422
3643
*36930
36400
36401
36402
36403
36422
3643
*36931
36400
36401
36402
36403
36422
3643
*36932
36400
36401
36402
36403
36422
3643
*36933
36400
36401
36402
36403
36422
3643
*36934
36400
36401
36402
36403
36422
3643
*36935
36400
36401
36402
36403
36422
3643
*36936
36400
36401
36402
36403
36422
3643
*36937
36400
36401
36402
36403
36422
3643
*36938
36400
36401
36402
36403
36422
3643
*36939
36400
36401
36402
36403
36422
3643
*36940
36400
36401
36402
36403
36422
3643
*36941
36400
36401
36402
36403
36422
3643
*36942
36400
36401
36402
36403
36422
3643
*36943
36400
36401
36402
36403
36422
3643
*36944
36400
36401
36402
36403
36422
3643
*36945
36400
36401
36402
36403
36422
3643
*36946
36400
36401
36402
36403
36422
3643
*36947
36400
36401
36402
36403
36422
3643
*36948
36400
36401
36402
36403
36422
3643
*36949
36400
36401
36402
36403
36422
3643
*36950
36400
36401
36402
36403
36422
3643
*36951
36400
36401
36402
36403
36422
3643
*36952
36400
36401
36402
36403
36422
3643
*36953
36400
36401
36402
36403
36422
3643
*36954
36400
36401
36402
36403
36422
3643
*36955
36400
36401
36402
36403
36422
3643
*36956
36400
36401
36402
36403
36422
3643
*36957
36400
36401
36402
36403
36422
3643
*36958
36400
36401
36402
36403
36422
3643
*36959
36400
36401
36402
36403
36422
3643
*36960
36400
36401
36402
36403
36422
3643
*36961
36400
36401
36402
36403
36422
3643
*36962
36400
36401
36402
36403
36422
3643
*36963
36400
36401
36402
36403
36422
3643
*36964
36400
36401
36402
36403
36422
3643
*36965
36400
36401
36402
36403
36422
3643
*36966
36400
36401
36402
36403
36422
3643
*36967
36400
36401
36402
36403
36422
3643
*36968
36400
36401
36402
36403
36422
3643
*36969
36400
36401
36402
36403
36422
3643
*36970
36400
36401
36402
36403
36422
3643
*36971
36400
36401
36402
36403
36422
3643
*36972
36400
36401
36402
36403
36422
3643
*36973
36400
36401
36402
36403
36422
3643
*36974
36400
36401
36402
36403
36422
3643
*36975
36400
36401
36402
36403
36422
3643
*36976
36400
36401
36402
36403
36422
3643
*36977
36400
36401
36402
36403
36422
3643
*36978
36400
36401
36402
36403
36422
3643
*36979
36400
36401
36402
36403
36422
3643
*36980
36400
36401
36402
36403
36422
3643
*36981
36400
36401
36402
36403
36422
3643
*36982
36400
36401
36402
36403
36422
3643
*36983
36400
36401
36402
36403
36422
3643
*36984
36400
36401
36402
36403
36422
3643
*36985
36400
36401
36402
36403
36422
3643
*36986
36400
36401
36402
36403
36422
3643
*36987
36400
36401
36402
36403
36422
3643
*36988
36400
36401
36402
36403
36422
3643
*36989
36400
36401
36402
36403
36422
3643
*36990
36400
36401
36402
36403
36422
3643
*36991
36400
36401
36402
36403
36422
3643
*36992
36400
36401
36402
36403
36422
3643
*36993
36400
36401
36402
36403
36422
3643
*36994
36400
36401
36402
36403
36422
3643
*36995
36400
36401
36402
36403
36422
3643
*36996
36400
36401
36402
36403
36422
3643
*36997
36400
36401
36402
36403
36422
3643
*36998
36400
36401
36402
36403
36422
3643
*36999
36400
36401
36402
36403
36422
3643

3643
*36404
36400
36401
36402
36403
36422
3643
*36405
36000
36001
36002
36013
36019
36400
36401
36402
36403
36422
3643
*36410
36400
36401
36402
36403
36422
3643
*36411
36400
36401
36402
36403
36422
3643
*36421
36400
36401
36402
36403
36422
3643
*36422
36400
36401
36402
36403
36422
3643
*36423
36400
36401
36402
36403
36422

3643
*36424
36400
36401
36402
36403
36422
3643
*3643
36400
36401
36402
36403
36422
3643
*36522
36522
*36810
36811
36812
*36811
36811
36812
*36812
36811
36812
*36816
36811
36812
*37600
37601
*37601
37601
*37602
37601
37602
*37603
37601
37603
*37604
37601
*37730
37730
37731
37732
37739
*37731
37730
37731
37732
37739
*37732
09485

37730
37731
37732
37739
*37733
37730
37731
37732
37739
*37734
37730
37731
37732
37739
*37739
37730
37731
37732
37739
*37751
37751
37752
37753
37754
37761

37762
37763
*37752
37751
37752
37753
37754
37761
37762
37763
*37753
37751
37752
37753
37754
37761
37762
37763
*37754
37751
37752
37753
37754
37761
37762
37763
*37761
37751

37752
37753
37754
37761
37762
37763
*37762
37751
37752
37753
37754
37761
37762
37763
*37763
37751
37752
37753
37754
37761
37762
37763
*37771
37771
37772
37773
*37772
37771
37772
37773
*37773
37771
37772
37773
*37775
37771
37772
37773
*37900
0950
*37901
0950
*37902
0950
*37909
0950
*38014
38014
*3824
0498

0499
0869
3239
7712
*38300
38014
38300
38302
*38301
38014
38300
38302
*38302
38014
38300
38302
*3831
38014
38300
38302
*38320
38300
38302
*38321
38300
38302
*38322
38300
38302
*38330
38300
38302
*38331
38300
38302
*38332
38300
38302
*38333
38300
38302
*38381
38300
38302
*38389
38300
38302
*3839
38300
38302
*38845
29500
29501
29502

29503
29504
29510
29511
29512
29513
29514
29520
29521
29522
29523
29524
29530
29531
29532
29533
29534
29540
29541
29542
29543
29544
29560
29561
29562
29563
29564
29571
29572
29573
29574
29580
29581
29582
29583
29584
29591
29592
29593
29594
29600
29601
29602
29604
29610
29611
29612
29614
29620
29634
29640
29641
29642
29644

29650
29651
29652
29654
29660
29661
29662
29664
29689
29699
2980
2981
2983
2984
29900
29901
29910
29911
29980
29981
29990
29991
30151
*3885
09486
*38861
38861
*38869
38861
*38871
38300
38302
*38872
38300
38302
*3888
38300
38302
*3889
38300
38302
*390
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
393
4233
4238
4239
*3911
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3912
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
*3913
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3914
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3915
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3916
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3917
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3918
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
*3919
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
*3920
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3929
3918
3919
3920
3929
*393
07421
09883
3910
3918
3919
3920
3929
393
4233
4238
4239
*3940
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3941
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3942
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3949
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3950
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3951
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3952
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3959
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3960
3918
3919
3920
3929
*3961
3918
3919
3920
3929
*3962
07423
09884
09885
3911
3912
3918
3919
3920
3929
*3963
3918
3919
3920
3929
*3968
3918
3919
3920
3929
*3969
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3970
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3971
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3979
07422
09884
09885
3911
3912
3918
3919
3920
3929
*3980
03282
07420
07423
09884
09885
3911
3912
3918
3919
3920
3929
*3990
07422
09884
09885
3911
3912
3918
3919
3920
3929
*39890
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
*39891
3918
3919
3920
3929
*39899
03282
07420
07422
07423
09884
09885
3911
3912
3918
3919
3920
3929
*40201
4111
4250
4251
4252
4253

4254
4255
4257
4258
4259
42983
*40211
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
42983
*40291
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
42983
*40401
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
42983
*40403
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*40411
4111

4250
4251
4252
4253
4254
4255
4257
4258
4259
*40413
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*40491
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*40493
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41400
4111
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41401
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41402
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41403
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41404
41402
41403
41404
41406

41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41405
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41406
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41407
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41410
41410
41419
*4160

*41411
41410
41419
*41412
41412
4472
*41419
41410
41419
*4142
4111
41402
41403
41404
41406
41407
4250
4251
4252
4253
4254
4255
4257
4258
4259
*4148
4250
4251
4252
4253
4254
4255
4257
4258
4259
*4149
4250
4251
4252
4253
4254
4255
4257
4258
4259
*41511
41512
*41512
41511
41512
41519
*41519
41512

4161
74783
*4161
4161
*4168
4161
74783
*4169
4161
74783
*4170
4170
4171
*4171
4170
4171
*4178
4170
4171
*4179
4170
4171
*4200
07421
09883
3910
393
4233
4238
4239
*42090
07421
09883
3910
393
4233
4238
4239
*42091
07421
09883
3910
393
4233
4238
4239
*42099
07421
09883
3910
393
4233
4238
4239

*4210
07422
09884
09885
3911
*4211
07422
09884
09885
3911
*4219
07422
09884
09885
3911
*4220
03282
07420
07423
09885
3912
*42290
03282
07420
07423
09885
3912
*42291
03282
07420
07423
09885
3912
*42292
03282
07420
07423
09885
3912
*42293
03282
07420
07423
09885
3912
*42299
03282
07420
07423
09885
3912
*4233
07421
09883
3910
393
4200
42090
42091
42099
4230
4231
4232
4233
4238
4239
*4238
07421
09883
3910
393
4233
4238
4239
*4239
07421
09883
3910
393
4233
4238
4239
*4240
07422
09884
09885
3911
*4241
07422
09884
09885
3911
*4242
07422
09884
09885
3911
*4243
07422
09884
09885
3911
*42490
07422
09884
09885
3911
*42491
07422
09884
09885
3911
*42499
07422
09884
09885
3911
*4253
07422
09884
09885
3911
*42610
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42611
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42612
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42613
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42650
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42651
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42652
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42653
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42654
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42681
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42682
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42689
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42731
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42732
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42741
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42760
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42761
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42769
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42781
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42742
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42760
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42761
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42769
4250
4251
4252
4253
4254
4255
4257
4258
4259
*42781
4250
4251
4252
4253
4254
4255
4257
4258
4259

4255	*42830	09885	4353	4351	4359
4257	3918	3912	4358	4352	4371
4258	3920	7455	4359	4353	*4352
4259	42983	74561	7843	4358	
*42789	*42831	*42979	*43311	4359	4350
4250	3918	03282	4350	7843	4351
4251	3920	07420	4351	*43390	4352
4252	42983	07423	4352	4350	4353
4253	*42832	09885	4353	4351	4358
4254	3918	3912	4358	4352	4359
4255	3920	7455	4359	4353	4371
4257	42983	74561	7843	4358	*4353
4258	*42833	*42983	*43320	4359	4350
4259	3918	42983	4350	7843	4351
*4280	3920	*4299	4351	*43391	4352
4111	42983	42983	4352	4350	4353
4250	*42840	*430	4353	4351	4358
4251	3918	4329	4358	4352	4359
4252	3920	4371	4359	4353	4371
4253	42983	*431	7843	4358	*4358
4254	*42841	4329	*43321	4359	4350
4255	3918	4371	4350	7843	4351
4257	3920	*4320	4351	*43400	4352
4258	42983	4329	4352	4371	4353
4259	*42842	4371	4353	7843	4358
42983	3918	7843	4358	*43401	4359
*4281	3920	*4321	4359	4371	4371
4111	42983	4329	7843	7843	*4359
4250	*42843	4371	*43330	*43410	4350
4251	3918	7843	4350	4371	4351
4252	3920	*4329	4351	7843	4352
4253	42983	4329	4352	*43411	4353
4254	*4289	4371	4353	4371	4358
4255	4111	7843	4358	7843	4359
4257	4250	*43300	4359	*43490	4371
4258	4251	4350	7843	4371	*436
4259	4252	4351	*43331	7843	4371
42983	4253	4352	4350	*43491	7843
*42820	4254	4353	4351	4371	*4371
3918	4255	4358	4352	7843	4371
3920	4257	4359	4353	*4350	*43820
42983	4258	7843	4358	4350	43820
*42821	4259	*43301	4359	4351	*43821
3918	42983	4350	7843	4352	43821
3920	*4290	4351	*43380	4353	*43822
42983	03282	4352	4350	4358	43822
*42822	07420	4353	4351	4359	*44322
3918	07423	4358	4352	4371	4472
3920	09885	4359	4353	*4351	*44323
42983	3912	7843	4358	4350	4472
*42823	*42971	*43310	4359	4351	*44324
3918	03282	4350	7843	4352	4472
3920	07420	4351	*43381	4353	*44329
42983	07423	4352	4350	4358	41412

4472
*44489
449
*4449
449
*4460
4461
*4461
4461
*44620
4461
*44621
4461
*44629
4461
*4464
4461
*4465
4461
*4466
4461
*4467
4461
*4472
41412
44321
44322
44323
44324
44329
4472
*4474
4474
*4475
41412
44321
44322
44323
44324
44329
4475
*4476
41412
44321
44322
44323
44324
44329
*4478
41412
44321
44322
44323
44324
44329
*4479
41412
44321
44322
44323
44324
44329
*449
4440
4441
44421
44422
44481
44489
4449
44501
44502
44581
44589
449
*4510
45183
45189
45911
45913
*45111
45183
45189
45911
45913
*45119
45183
45189
45911
45913
*45181
45911
45913
*45182
45911
45913
*45183
45183
45189
45911
45913
*45184
45911
45913
*45189
45183
45189
45911
45913
*4519
45183
45189
45911
45913
*4540
4542
45931
45933
*4541
4542
45931
45933
*4542
4542
45931
45933
*4549
4542
45931
45933
*4560
4561
45621
53130
53230
53330
53430
538
*4561
4561
*45620
4561
45621
*45621
45621
*4592
4592
*45981
45931
45933
*45989
03282
07420
07421
07422
07423
09883
09884
09885
3910
3911
3912
393
41512
4233
4238
4239
42983
4329
4350
4351
4352
4353
4358
4359
4371
4461
449
4561
45621
*4599
03282
07420
07421
07422
07423
09883
09884
09885
3910
3911
3912
393
41512
4233
4238
4239
42983
4329
4350
4351
4352
4353
4358
4359
4371
4461
449
4561
45621
45931
45933
*46400
46401
46451
*46401
46401
46430
46451
*46410
46401
46451
*46411
46401
46451
*46420
46401
46451
*46421
46401
46451
*46430
46401
46430
46451
*46431
46401
46430
46451
*46451
46430
*4660
46619
*46611
46611
46619
*46619
46619
*47870
47871
*47871
47871
*47879
47871
*4800
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4801
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4803
0203
0204
0205
0213
0221
0391
0730
1221
4800
4801
4802
4808
4809
*4808
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4809
00322
0203
0221
0730

4800
4801
4802
4808
4809
5183
*481
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4820
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4821
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*4822
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48230
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48231
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48232
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48239
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48240
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48241
00322
0203
0221
0730
4800
4801
4802
4808
4809
5183
*48249
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*48281
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*48282
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*48283
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*48284
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*48289
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4829
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4830
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4831
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4838
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4841
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4843
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4845
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4846
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4847
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4848
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*485
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*486
00322
0203

0212
0221
0730
4800
4801
4802
4808
4809
5183
*4870
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4871
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4878
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
1230
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*488
00322
01100
01101
01102
01103
01104
01105
01106
01110
01111
01112
01113
01114
01115
01116
01120
01121
01122
01123
01124
01125
01126
01130
01131
01132
01133
01134
01135
01136
01140
01141
01142
01143
01144
01145
01146
01150
01151
01152
01153
01154
01155
01156
01160
01161
01162
01163
01164
01165
01166
01170
01171
01172
01173
01174
01175
01176
01180
01181
01182
01183
01184
01185
01186
01190
01191
01192
01193
01194
01195
01196
01200
01201
01202
01203
01204
01205
01206
01210
01211
01212
01213
01214
01215
01216
0203
0212
0221
0310
0730
07982
11505
11515
1304
1363
4800
4801
4802
4803
4808
4809
481
4820
4821
4822
48230
48231
48232
48239
48240
48241
48249
48281
48282
48283
48284
48289
4829
4830
4831
4838
4841
4843
4845
4846
4847
4848
485
486
4870
4941
4957
4958
4959
5060
5061
5070
5071
5078
5080
5081
5171
5183
*49381
7483
*4940
0221
5183
*4941
0221
5183
*4950
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
4801
4802
4808
4809
5183
*4951
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4952
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4953
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4954
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4955

00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4956
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4957
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4958
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*4959
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*500
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*501
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*502
00322
0203
0212
0221
0730
4800
4801
4802
4808
4809
5183
*503
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*504
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*505
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5060
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5061
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5062
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5063
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5064
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5069
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5070
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5071
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5078
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5080
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5081
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5088
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5089
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5130
0064
*514
514
*5171
00322
0212
0221
0730
4800
4801
4802
4808
4809
5183
*5173
2828
2829
28481
28489
7765
7766
*5178
00322
0212
0221
0730
4800
4801
4802
4808
4809
514
5183
*5183
5183
*51889
00322
0212
0221
0730
4800
4801
4802
4808
4809
514
5183
*51919
7483
*5198
00322
0212

0221	5224	5224	5224	5224	5220
0730	*52100	*52122	*52189	*52322	
46401	5220	5220	5220	5220	5224
46451	5224	5224	5224	5224	*52403
4800	*52101	*52123	*5219	*52323	5220
4801	5220	5220	5220	5220	5224
4802	5224	5224	5224	5224	*52404
4808	*52102	*52124	*5220	*52324	5220
4809	5220	5220	5220	5220	5224
514	5224	5224	5224	5224	*52405
5183	*52103	*52125	*5221	*52325	5220
*5199	5220	5220	5220	5220	5224
00322	5224	5224	5224	5224	*52406
0212	*52104	*52130	*5222	*52330	5220
0221	5220	5220	5220	5220	5224
0730	5224	5224	5224	5224	*52407
46401	*52105	*52131	*5223	*52331	5220
46451	5220	5220	5220	5220	5224
4800	5224	5224	5224	5224	*52409
4801	*52106	*52132	*5224	*52332	5220
4802	5220	5220	5220	5220	5224
4808	5224	5224	5224	5224	*52410
4809	*52107	*52133	*5225	*52333	5220
514	5220	5220	5220	5220	5224
5183	5224	5224	5224	5224	*52411
*5200	*52108	*52134	*5226	*52340	5220
5220	5220	5220	5220	5220	5224
5224	5224	5224	5224	5224	*52412
*5201	*52109	*52135	*5227	*52341	5220
5220	5220	5220	5220	5220	5224
5224	5224	5224	5224	5224	*52419
*5202	*52110	*52140	*5228	*52342	5220
5220	5220	5220	5220	5220	5224
5224	5224	5224	5224	5224	*52420
*5203	*52111	*52141	*5229	*5235	
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5204	*52112	*52142	*52300	*5236	*52421
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5205	*52113	*52149	*52301	*5238	*52422
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5206	*52114	*5215	*52310	*5239	*52423
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5207	*52115	*5216	*52311	*52400	*52424
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5208	*52120	*5217	*52320	*52401	*52425
5220	5220	5220	5220	5220	5220
5224	5224	5224	5224	5224	5224
*5209	*52121	*52181	*52321	*52402	*52426
5220	5220	5220	5220		5220

5224
*52427
5220
5224
*52428
5220
5224
*52429
5220
5224
*52430
5220
5224

*52431
5220
5224
*52432
5220
5224
*52433
5220
5224
*52434
5220
5224
*52435
5220
5224
*52436
5220
5224
*52437
5220
5224
*52439
5220
5224
*5244
5220
5224
*52450
5220
5224
*52451
5220
5224
*52452
5220
5224
*52453
5220
5224
*52454

5220
5224
*52455
5220
5224
*52456
5220
5224
*52457
5220
5224
*52459
5220
5224
*52460
5220
5224
*52461
5220
5224
*52462
5220
5224
*52463
5220
5224
*52464
5220
5224
*52469
5220
5224
*52470
5220
5224
*52471
5220
5224
*52472
5220
5224
*52473
5220
5224
*52474
5220
5224
*52475
5220
5224
*52476
5220
5224
*52479

5220
5224
*52481
5220
5224
*52482
5220
5224
*52489
5220
5224
*5249
5220
5224
*5250
5220
5224
*52510
5220
5224
*52511
5220
5224
*52512
5220
5224
*52513
5220
5224
*52519
5220
5224
*52520
5220
5224
*52521
5220
5224
*52522
5220
5224
*52523
5220
5224
*52524
5220
5224
*52525
5220
5224
*52526
5220
5224
*5253

5220
5224
*52540
5220
5224
*52541
5220
5224
*52542
5220
5224
*52543
5220
5224
*52544
5220
5224
*52550
5220
5224
*52551
5220
5224
*52552
5220
5224
*52553
5220
5224
*52554
5220
5224
*52560
5220
5224
*52561
5220
5224
*52562
5220
5224
*52563
5220
5224
*52564
5220
5224
*52565
5220
5224
*52566
5220
5224
*52567

5220
5224
*52569
5220
5224
*52571
5220
5224
*52572
5220
5224
*52573
5220
5224
*52579
5220
5224
*5258
5220
5224
*5259
5220
5224
*53010
53012
*53011
53012
*53012
53012
*53019
53012
*53020
53012
53130
53330
53430
538
*53021
53012
53020
53130
53330
53430
538
*5304
53012
*5307
4561
45621
53012
53130
53330
53430

538
*53082
4561
45621
53012
53130
53230
53330
53430
538
*53084
7503
*53085
53012
53130
53330
53430
538
*53086
53012
*53087
53012
*53089
53012
53020
*5309
53020
*53100
4561
45621
53130
53230
53330
53430
538
*53101
4561
45621
53130
53230
53330
53430
538
*53110
4561
45621
53130
53230
53330
53430
538
*53111
4561
45621

53130
53230
53330
53430
538
*53120
4561
45621
53130
53230
53330
53430
538
*53121
4561
45621
53130
53230
53330
53430
538
*53130
4561
45621
53130
53230
53330
53430
538
*53131
4561
45621
53130
53230
53330
53430
538
*53140
4561
45621
53130
53230
53330
53430
538
*53141
4561
45621
53130
53230
53330
53430
538
*53150
4561
45621
53130
53230
53330
53430
538
*53151
4561
45621
53130
53230
53330
53430
538
*53160
4561
45621
53130
53230
53330
53430
538
*53161
4561
45621
53130
53230
53330
53430
538
*53170
4561
45621
53130
53230
53330
53430
538
*53171
4561
45621
53130
53230
53330
53430
538
*53190
4561
45621
53130
53230
53330
53430
538
*53191
4561
45621
53130
53230
53330
53430
538
*53200
4561
45621
53130
53230
53330
53430
538
*53201
4561
45621
53130
53230
53330
53430
538
*53210
4561
45621
53130
53230
53330
53430
538
*53211
4561
45621
53130
53230
53330
53430
538
*53220
4561
45621
53130
53230
53330
53430
538
*53221
4561
45621
53130
53230
53330
53430
538
*53230
4561
45621
53130
53230
53330
53430
538
*53231
4561
45621
53130
53230
53330
53430
538
*53240
4561
45621
53130
53230
53330
53430
538
*53241
4561
45621
53130
53230
53330
53430
538
*53250
4561
45621
53130
53230
53330
53430
538
*53251
4561
45621
53130
53230
53330
53430
538
*53260
4561
45621
53130
53230
53330
53430
538
*53261
4561
45621
53130
53230
53330
53430
538
*53270
4561
45621
53130
53230
53330
53430
538
*53271
4561
45621
53130
53230
53330
53430
538
*53290
4561
45621
53130
53230
53330
53430
538
*53291
4561
45621
53130
53230
53330
53430
538
*53300
4561
45621
53130
53230
53330
53430
538
*53301
4561
45621
53130
53230
53330
53430
538
*53310
4561
45621
53130
53230
53330
53430
538
*53311
4561
45621
53130
53230
53330
53430
538
*53320
4561
45621
53130
53230
53330
53430
538
*53321
4561
45621
53130
53230
53330
53430
538
*53330
4561
45621
53130
53230
53330
53430
538
*53331
4561
45621
53130
53230
53330
53430
538

53430
538
*53340
4561
45621
53130
53230
53330
53430
538
*53341
4561
45621
53130
53230
53330
53430
538
*53350
4561
45621
53130
53230
53330
53430
538
*53351
4561
45621
53130
53230
53330
53430
538
*53360
4561
45621
53130
53230
53330
53430
538
*53361
4561
45621
53130
53230
53330
53430
538
*53370
4561
45621
53130

53230
53330
53430
538
*53371
4561
45621
53130
53230
53330
53430
538
*53390
4561
45621
53130
53230
53330
53430
538
*53391
4561
45621
53130
53230
53330
53430
538
*53400
4561
45621
53130
53230
53330
53430
538
*53401
4561
45621
53130
53230
53330
53430
538
*53410
4561
45621
53130
53230
53330
53430
538
*53411
4561

45621
53130
53230
53330
53430
538
*53420
4561
45621
53130
53230
53330
53430
538
*53421
4561
45621
53130
53230
53330
53430
538
*53430
4561
45621
53130
53230
53330
53430
538
*53431
4561
45621
53130
53230
53330
53430
538
*53440
4561
45621
53130
53230
53330
53430
538
*53441
4561
45621
53130
53230
53330
53430
538

*53450
4561
45621
53130
53230
53330
53430
538
*53451
4561
45621
53130
53230
53330
53430
538
*53460
4561
45621
53130
53230
53330
53430
538
*53461
4561
45621
53130
53230
53330
53430
538
*53470
4561
45621
53130
53230
53330
53430
538
*53471
4561
45621
53130
53230
53330
53430
538
*53490
4561
45621
53130
53230
53330

53430
538
*53491
4561
45621
53130
53230
53330
53430
538
*53501
4561
45621
53130
53230
53330
53430
538
*53511
4561
45621
53130
53230
53330
53430
538
*53521
4561
45621
53130
53230
53330
53430
538
*53531
4561
45621
53130
53230
53330
53430
538
*53541
4561
45621
53130
53230
53330
53430
538
*53551
4561
45621
53130

53230
53330
53430
538
*53561
4561
45621
53130
53230
53330
53430
538
*5363
0040
0052

0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
*5368
0030
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800

00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
*5373
53230
53330
*53783
4561
45621
53130
53230
53330
53430
538
*53784
53020
53230
*53789
53130
53230
53330
53430
538
*5379
53130
53230
53330
53430
538
*538
53130
53230
53330
53430
538
*5400
03283
0952
09886
09956
*5401
03283
0952
09886
09956
*5550
0040
0062
5550
5551
5552
5559
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5560
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5561
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5562
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5563
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5564
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5565
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5566
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5568
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5569
0040
0062
5550
5551
5552
5560
5561
5562
5563
5564
5565
5566
5568
5569
*5570
0040
0062
5571
5579
*5571
0040
0062
5571
5579
*5579
0040
0062
5571
5579
*5582
0030
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
*5583
0030
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085

00861
00862
00863
00864
00865
00866
00867
00869
1230
*5589
0030
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
*56200
56201
*56201
56201
*56202
53130
53230
53330
53430
538
56201
*56203
53130
53230
53330
53430
538
56211
*56210
56211
*56211
56211
*56212
53130
53230
53330
53430
538
56211
*56213
53130
53230
53330
53430
538
56211
*5641
0030
0040
0052
0062
0071
0072
0074
0075
0078
0079
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
*5642
5647
56481
*5643
5647
56481
*5644
5647
56481
*5645
5647
56481
*5646
5647
56481
*5647
5647
56481
*56481
5647
56481
*56489
5647
56481
*5649
5647
56481
*5670
03283
0952
09886
09956
*5671
03283
0952
09886
09956
*56721
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*56722
03283
0952
09886
09956
*56723
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*56729
03283
0952
09886
09956
*56731
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*56738
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*56739
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*56781
03283
0952
09886
09956
*56789
0030
0052
0075
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
*5679
03283
0952
09886
09956
*56882
56882
*5693
53130
53230
53330
53430
538
*56941
56941
*56981
56981
*56982
56982
*56985
53130
53230
53330
53430
538
*56989
03283
0952
09886
09956
*5699

03283
0952
09886
09956
*57149
09162
*5715
09162
*5716
09162
*5718
09162
*5719
09162
*5720
0063
*5722
5723
*5723
5723
*5731
09162
*5732
09162
*5733
09162
*5738
09162
5723
*5739
09162
5723
*57431
5762
*57441
5762
*57451
5762
*5762
5762
*5768
5762
*5769
5762
*5770
5771
*5771
5771
*5772
5771
*5778
03283
0952
09886
09956
5771
*5779
5771
*5780
4561
45621
53130
53230
53330
53430
538
*5781
4561
45621
53130
53230
53330
53430
538
*5789
4561
45621
53130
53230
53330
53430
538
*5790
5791
5792
5794
5798
5799
*5791
5791
5792
5794
5798
5799
*5792
5791
5792
5794
5798
5799
*5793
5791
5792
5794
5798
5799
*5794
5791
5792
5794
5798
5799
*5798
5791
5792
5794
5798
5799
*5799
5791
5792
5794
5798
5799
*5800
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5804
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*58081
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*58089
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5809
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5810
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5811
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5812
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5813
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5820
0786
27411
5820
5821
5822
5824
*58181
0786
27411
5820
5821
5822
5824
*58189
0786
27411
5820
5821
5822
5824
*5819
0786
27411
5820
5821
5822
5824
*5820
0786
27411
5820
5821
5822
5824

58281
58289
5829
5830
5831
5832
5881
58881
59001
*5821
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5822
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5824
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001

5881
58881
59001
*58281
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*58289
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5829
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5830
0786
27411

5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5831
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5832
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5834
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832

5829
5830
5831
5832
5881
58881
59001
*5836
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5836
5881
58881
59001
*5837
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5837
5881
58881
59001
*58381
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832

5881
58881
59001
*58389
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5839
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5845
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5846
0786
27411

5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5847
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5848
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5849
0786
27411
5820
5821
5822
5824
58281
58289

5829
5830
5831
5832
5881
58881
59001
*5853
5881
*5854
5881
*5855
5881
*5856
5881
*586
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*587
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5880
0786
27411
5820
5821
5822
5824

58281
58289
5829
5830
5831
5832
5836
5837
5881
58881
59001
*5881
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*58881
0786
09889
1122
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5836
5837
5881
59001
*58889
0786
09889
1122
5820
5821
5822
5824
58281
58289
5829

5830
5831
5832
5836
5837
5881
58881
59001
*5889
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5890
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5891
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001

58881
59001
*5899
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*59000
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*59001
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*59010
0786

27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*59011
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*5902
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*5903
0786
27411
5820

5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*59080
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*59081
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*5909
0786
27411
5820
5821
5822
5824

58281
58289
5829
5830
5831
5832
5881
58881
59001
77182
*591
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5930
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5931
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5932
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5933
5934
*5934
5934
*5935
5934
*59370
59381
*59371
59381
*59372
59381
*59373
59381
*59381
59381
*59382
59382
*59389
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
*5970
5934
5991
59382
77182
*5939
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
59381
59382
77182
*5950
5934
77182
*5951
5934
77182
*5952
5934
77182
*5953
5934
77182
*5954
5934
77182
*59581
5934
77182
*59582
5934
*59589
5934
77182
*5959
5934
77182
*5968
5934
*5969
5934
*59780
5991
*59781
5991
*59789
5991
*59800
5991
*59801
5991
*5981
5991
*5982
5991
*5988
5991
*5989
5991
*5990
5934
77182
*5991
5991
*5992
5991
*5993
5991
*5994
5991
*5995
5991
*59960
27411
34461
5934
5991
7530
75310
75311
75312
75313
75314
75315
75316
75317
75319
75320
75321
75322
75323
75329
7535
7536
*59969
27411
34461
5934
5991
7530
75310
75311
75312
75313
75314
75315
75316
75317
75319
75320
75321
75322
75323
75329
7535
7536
*5997
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
*59981
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
*59982
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
*59983
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
*59984
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881

58881
59001
5934
5991
*59989
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
*5999
0786
27411
5820
5821
5822
5824
58281
58289
5829
5830
5831
5832
5881
58881
59001
5934
5991
77182
*6070
6073
*6071
5991
6073
*6072
5991
6073
*6073
5991
6073
*60781
5991
6073
*60782
5991
6073
60782
*60783
5991
6073
60782
*60784
6073
*60785
5991
6073
*60789
5991
6073
*6079
5991
6073
*60820
60820
60821
60822
60823
60824
*60821
60820
60821
60822
60823
60824
*60822
60820
60821
60822
60823
60824
*60823
60820
60821
60822
60823
60824
*6084
5991
*60881
5991
*60885
5991
*60887
5991
*60889
5991
*6140
6147
*6141
6147
*6142
6147
*6143
6147
*6144
6147
*6145
03283
0952
09886
09956
6147
*6146
03283
0952
09886
09956
6147
*6147
03283
0952
09886
09956
6147
*6148
6147
*6149
6147
*6150
6147
*6151
6147
*6159
6147
*6160
61681
*61681
6147
61681
*61689
6147
61681
*6169
6147
6147
61681
*6190
6190
6191
6192
6198
6199
*6191
6190
6191
6192
6198
6199
*6192
6190
6191
6192
6198
6199
*6198
6190
6191
6192
6198
6199
*6199
6190
6191
6192
6198
6199
*6200
6205
*6201
6205
*6202
6205
*6203
6205
*6204
6205
*6205
6205
*6206
6205
*6207
6205
*6208
6205
*6209
6205
*6258
6259
*6190
6147
*62920
6147
*62921
6147
*62922
6147
*62923
6147
*62929
6147
*62981
6147
*62989
6147
*6299
6147
*63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63301
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63310
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63311
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63320
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63321
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63380
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63381
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63390
63300

63301
63310
63311
63320
63321
63380
63381
63390
63391
*63391
63300
63301
63310
63311
63320
63321
63380
63381
63390
63391
*63400
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63401
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63402
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63410
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772

63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63411
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671

63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63412
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682

63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63420
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682

6381
6382
6383
6384
6385
6386
6387
6388
*63421
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581

63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63422
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682

6385	63721	63602	6387	63722	63620
6386	63722	63620	6388	63730	63621
6387	63730	63621	*63431	63731	63622
6388	63731	63622	63500	63732	63630
*63422	63732	63630	63501	63740	63631
63500	63740	63631	63502	63741	63632
63501	63741	63632	63520	63742	63640
63502	63742	63640	63521	63750	63641
63520	63750	63641	63532	63751	63642
63521	63751	63642	63540	63752	63650
63532	63752	63650	63541	63760	63651
63540	63760	63651	63542	63761	63652
63541	63761	63652	63550	63762	63660
63542	63762	63660	63551	63770	63661
63550	63770	63661	63552	63771	63662
63551		63662	63560	63772	63670
63552	63771	63670	63561	63780	63671
63560	63772	63671	63562	63781	63672
63561	63780	63672	63570	63782	63680
63562	63781	63680	63571	6380	63681
63570	63782		63572	6381	63682
63571	6380	63681	63580	6382	63700
63572	6381	63682	63581	6383	63701
63580	6382	63700	63582	6384	63702
63581	6383	63701	63600	6385	63720
63582	6384	63702		6386	63721
63600	6385	63720	63601	6387	63722
63601	6386	63721	63602	6388	63730
63602	6387	63722	63620	*63432	63731
63620	6388	63730	63621	63500	63732
63621	*63430	63731	63622		63740
63622	63500	63732	63630	63501	63741
63630	63501	63740	63631	63502	63742
63631	63502	63741	63632	63520	63750
63632	63520	63742	63640	63521	63751
63640	63521	63750	63641	63532	63752
63641	63532	63751	63642	63540	63760
63642	63540	63752	63650	63541	63761
63650	63541	63760	63651	63542	63762
63651	63542	63761	63652	63550	63770
63652	63550	63762	63660	63551	63771
63660	63551	63770	63661	63552	63772
63661	63552	63771	63662	63560	63780
63662	63560	63772	63670	63561	63781
63670	63561	63780	63671	63562	63782
63671	63562	63781	63672	63570	6380
63672	63570	63782	63680	63571	6381
63680	63571	6380	63681	63572	6382
63681	63572	6381	63682	63580	6383
63682	63580	6382	63700	63581	6384
63700	63581	6383	63701	63582	6385
63701	63582	6384	63702	63600	6386
63702	63600	6385	63720	63601	6387
63720	63601	6386	63721	63602	6388

*63440	63732	63631	63520	63750	63642
63500	63740	63632	63521	63751	63650
63501	63741	63640	63532	63752	63651
63502	63742	63641	63540	63760	63652
63520	63750	63642	63541	63761	63660
63521	63751	63650	63542	63762	63661
63532	63752	63651	63550	63770	63662
63540	63760	63652	63551	63771	63670
63541	63761	63660	63552	63772	63671
63542	63762	63661	63560	63780	63672
63550	63770	63662	63561	63781	63680
63551	63771	63670	63562	63782	63681
63552	63772	63671	63570	6380	63682
63560	63780	63672	63571	6381	63700
63561	63781	63680	63572	6382	63701
63562	63782	63681	63580	6383	63702
63570	6380	63682	63581	6384	63720
63571	6381	63700	63582	6385	63721
63572	6382	63701	63600	6386	63722
63580	6383	63702	63601	6387	63730
63581	6384	63720	63602	6388	63731
63582	6385	63721	63620	*63450	63732
63600	6386	63722	63621	63500	63740
63601	6387	63730	63622	63501	63741
63602	6388	63731	63630	63502	63742
63620	*63441	63732	63631	63520	63750
63621	63500	63740	63632	63521	63751
63622	63501	63741	63640	63532	63752
63630	63502	63742	63641	63540	63760
63631	63520	63750	63642	63541	63761
63632	63521	63751	63650	63542	63762
63640	63532	63752	63651	63550	63770
63641	63540	63760	63652	63551	63771
63642	63541	63761	63660	63552	63772
63650	63542	63762	63661	63560	63780
63651	63550	63770	63662	63561	63781
63652	63551	63771	63670	63562	63782
63660	63552	63772	63671	63570	6380
63661	63560	63780	63672	63571	6381
63662	63561	63781	63680	63572	6382
63670	63562	63782	63681	63580	6383
63671	63570	6380	63682	63581	6384
63672	63571	6381	63700	63582	6385
63680	63572	6382	63701	63600	6386
63681	63580	6383	63702	63601	6387
63682	63581	6384	63720	63602	6388
63700	63582	6385	63721	63620	*63451
63701	63600	6386	63722	63621	63500
63702	63601	6387	63730	63622	63501
63720	63602	6388	63731	63630	63502
63721	63620	*63442	63732	63631	63520
63722	63621	63500	63740	63632	63521
63730	63622	63501	63741	63640	63532
63731	63630	63502	63742	63641	63540

63541	63761	63660	63552	63772	63671
63542	63762	63661	63560	63780	63672
63550	63770	63662	63561	63781	63680
63551	63771	63670	63562	63782	63681
63552	63772	63671	63570	6380	63682
63560	63780	63672	63571	6381	63700
63561	63781	63680	63572	6382	63701
63562	63782	63681	63580	6383	63702
63570	6380	63682	63581	6384	63720
63571	6381	63700	63582	6385	63721
63572	6382	63701	63600	6386	63722
63580	6383	63702	63601	6387	63730
63581	6384	63720	63602	6388	63731
63582	6385	63721	63620	*63461	63732
63600	6386	63722	63621	63500	63740
63601	6387	63730	63622	63501	63741
63602	6388	63731	63630	63502	63742
63620	*63452	63732	63631	63520	63750
63621	63500	63740	63632	63521	63751
63622	63501	63741	63640	63532	63752
63630	63502	63742	63641	63540	63760
63631	63520	63750	63642	63541	63761
63632	63521	63751	63650	63542	63762
63640	63532	63752	63651	63550	63770
63641	63540	63760	63652	63551	63771
63642	63541	63761	63660	63552	63772
63650	63542	63762	63661	63560	63780
63651	63550	63770	63662	63561	63781
63652	63551	63771	63670	63562	63782
63660	63552	63772	63671	63570	6380
63661	63560	63780	63672	63571	6381
63662	63561	63781	63680	63572	6382
63670	63562	63782	63681	63580	6383
63671	63570	6380	63682	63581	6384
63672	63571	6381	63700	63582	6385
63680	63572	6382	63701	63600	6386
63681	63580	6383	63702	63601	6387
63682	63581	6384	63720	63602	6388
63700	63582	6385	63721	63620	*63462
63701	63600	6386	63722	63621	63500
63702	63601	6387	63730	63622	63501
63720	63602	6388	63731	63630	63502
63721	63620	*63460	63732	63631	63520
63722	63621	63500	63740	63632	63521
63730	63622	63501	63741	63640	63532
63731	63630	63502	63742	63641	63540
63732	63631	63520	63750	63642	63541
63740	63632	63521	63751	63650	63542
63741	63640	63532	63752	63651	63550
63742	63641	63540	63760	63652	63551
63750	63642	63541	63761	63660	63552
63751	63650	63542	63762	63661	63560
63752	63651	63550	63770	63662	63561
63760	63652	63551	63771	63670	63562

63570	63782	63681	63572	6381	63682
63571	6380	63682	63580	6382	63700
63572	6381	63700	63581	6383	63701
63580	6382	63701	63582	6384	63702
63581	6383		63600	6385	63720
63582	6384	63702	63601	6386	63721
63600	6385	63720	63602	6387	63722
63601	6386	63721	63620	6388	63730
63602	6387	63722	63621	*63472	63731
63620	6388	63730		63500	63732
63621	*63470	63731	63622	63501	63740
63622	63500	63732	63630	63502	63741
63630	63501	63740	63631	63520	63742
63631	63502	63741	63632	63521	63750
63632	63520	63742	63640		63751
63640	63521	63750	63641	63532	63752
63641	63532	63751	63642	63540	63760
63642	63540	63752	63650	63541	63761
63650	63541	63760	63651	63542	63762
63651	63542	63761	63652	63550	63770
63652	63550	63762	63660	63551	63771
63660	63551	63770	63661	63552	63772
63661	63552	63771	63662	63560	63780
63662	63560	63772	63670	63561	63781
63670	63561	63780	63671	63562	63782
63671	63562	63781	63672	63570	6380
63672	63570	63782	63680	63571	6381
63680	63571	6380	63681	63572	6382
63681	63572	6381	63682	63580	6383
63682	63580	6382	63700	63581	6384
63700	63581	6383	63701	63582	6385
63701	63582	6384	63702	63600	6386
63702	63600	6385	63720	63601	6387
63720	63601	6386	63721	63602	6388
63721	63602	6387	63722	63620	*63480
63722	63620	6388	63730	63621	63500
63730	63621	*63471	63731	63622	63501
63731	63622	63500	63732	63630	63502
63732	63630	63501	63740	63631	63520
63740	63631	63502	63741	63632	63521
63741	63632	63520	63742	63640	63532
63742	63640	63521	63750	63641	63540
63750	63641	63532	63751	63642	63541
63751	63642	63540	63752	63650	63542
63752	63650	63541	63760	63651	63550
63760	63651	63542	63761	63652	63551
63761	63652	63550	63762	63660	63552
63762	63660	63551	63770	63661	63560
63770	63661	63552	63771	63662	63561
63771	63662	63560	63772	63670	63562
63772	63670	63561	63780	63671	63570
63780	63671	63562	63781	63672	63571
63781	63672	63570	63782	63680	63572
	63680	63571	6380	63681	63580

63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63481
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63482
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63490
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63491
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622

63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63492
63500
63501
63502
63520
63521
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63500
63500
63501
63502
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63501
63500
63501
63502
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
6385
6386
6387
6388
*63502
63500
63501
63502
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741

63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63510
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63511
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63512
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63520
63500
63501
63502
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63521
63500
63501
63502
63520
63521
63540
63541
63542
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621

63622	63500	63752	63672	63602	6387
63630	63501	63760	63680	63620	6388
63631	63502	63761	63681	63621	*63532
63632	63520	63762	63682	63622	63520
63640	63521	63770	63700	63630	63521
63641	63522	63771	63701	63631	63530
	63540	63772	63702	63632	63531
63642	63541	63780	63720	63640	63532
63650	63542	63781	63721	63641	63540
63651	63570	63782	63722	63642	63541
63652	63571	6380	63730	63650	63542
63660		6381	63731	63651	63570
63661	63572	6382	63732	63652	63571
63662	63580	6383	63740	63660	63572
63670	63581	6384	63741	63661	63580
63671	63582	6385	63742	63662	63581
63672	63600	6386	63750	63670	63582
63680	63601	6387	63751	63671	63600
63681	63602	6388	63752	63672	63601
63682	63620	*63530	63760	63680	63602
63700	63621	63520	63761	63681	63620
63701	63622	63521	63762	63682	63621
63702	63630	63530	63770	63700	63622
63720	63631	63531	63771	63701	63630
63721	63632	63532	63772	63702	63631
63722	63640	63540	63780	63720	63632
63730	63641	63541	63781	63721	63640
63731	63642	63542	63782	63722	63641
63732	63650	63570	6380	63730	63642
63740	63651	63571	6381	63731	63650
63741	63652	63572	6382	63732	63651
63742	63660	63580	6383	63740	63652
63750	63661	63581	6384	63741	63660
63751	63662	63582	6385	63742	63661
63752	63670	63600	6386	63750	63662
63760	63671	63601	6387	63751	63670
63761	63672	63602	6388	63752	63671
63762	63680	63620	*63531	63760	63672
63770	63681	63621	63520	63761	63680
63771	63682	63622	63521	63762	63681
63772	63700	63630	63530	63770	63682
63780	63701	63631	63531	63771	63700
63781	63702	63632	63532	63772	63701
63782	63720	63640	63540	63780	63702
6380	63721	63641	63541	63781	63720
6381	63722	63642	63542	63782	63721
6382	63730	63650	63570	6380	63722
6383	63731	63651	63571	6381	63730
6384	63732	63652	63572	6382	63731
6385	63740	63660	63580	6383	63732
6386	63741	63661	63581	6384	63740
6387	63742	63662	63582	6385	63741
6388	63750	63670	63600		63742
*63522	63751	63671	63601	6386	63750

63751	63681	63632	63542	63782	63722
63752	63682	63640	63570	6380	63730
63760	63700	63641	63571	6381	63731
63761	63701	63642	63572	6382	63732
63762	63702	63650	63580	6383	63740
63770	63720	63651	63581	6384	63741
63771	63721	63652	63582	6385	63742
63772	63722	63660	63600	6386	63750
63780	63730	63661	63601	6387	63751
63781	63731	63662	63602	6388	63752
63782	63732	63670	63620	*63550	63760
6380	63740	63671	63621	63520	63761
6381	63741	63672	63622	63521	63762
6382	63742	63680	63630	63540	63770
6383	63750	63681	63631	63541	63771
6384	63751	63682	63632	63542	63772
6385	63752	63700	63640	63550	63780
6386	63760	63701	63641	63551	63781
6387	63761	63702	63642	63552	63782
6388	63762	63720	63650	63570	6380
*63540	63770	63721	63651	63571	6381
63520	63771	63722	63652	63572	6382
63521	63772	63730	63660	63580	6383
63540	63780	63731	63661	63581	6384
63541	63782	63732	63662	63582	6385
63542	6380	63740	63670	63600	6386
63570	6381	63741	63671	63601	6387
63571	6382	63742	63672	63602	6388
63572	6383	63750	63680	63620	*63551
63580	6384	63751	63681	63621	63520
63581	6385	63752	63682	63622	63521
63582	6386	63760	63700	63630	63540
63600	6387	63761	63701	63631	63541
63601	6388	63762	63702	63632	63542
63602	*63541	63770	63720	63640	63550
63620	63520	63771	63721	63641	63551
63621	63521	63772	63722	63642	63552
63622	63540	63780	63730	63650	63570
63630	63541	63781	63731	63651	63571
63631	63542	63782	63732	63652	63572
63632	63570	6380	63740	63660	63580
63640	63571	6381	63741	63661	63581
63641	63572	6382	63742	63662	63582
63642	63580	6383	63750	63670	63600
63650	63581	6384	63751	63671	63601
63651	63582	6385	63752	63672	63602
63652	63600	6386	63760	63680	63620
63660	63601	6387	63761	63681	63621
63661	63602	6388	63762	63682	63622
63662	63620	*63542	63770	63700	63630
63670	63621	63520	63771	63701	63631
63671	63622	63521	63772	63702	63632
63672	63630	63540	63780	63720	63640
63680	63631	63541	63781	63721	63641

63642	63552	63782	63721	63641	63561
63650	63570	6380	63722	63642	63562
63651	63571	6381	63730	63650	63570
63652	63572	6382	63731	63651	63571
63660	63580		63732	63652	63572
63661	63581	6383	63740	63660	63580
63662	63582	6384	63741	63661	63581
63670	63600	6385	63742	63662	63582
63671	63601	6386	63750	63670	63600
63672	63602	6387	63751	63671	63601
63680	63620	6388	63752	63672	63602
63681	63621	*63560	63760	63680	63620
63682	63622	63520	63761	63681	63621
63700	63630	63521	63762	63682	63622
63701	63631	63540	63770	63700	63630
63702	63632	63541	63771	63701	63631
63720	63640	63542	63772	63702	63632
63721	63641	63560	63780	63720	63640
63722	63642	63561	63781	63721	63641
63730	63650	63562	63782	63722	63642
63731	63651	63570	6380	63730	63650
63732	63652	63571	6381	63731	63651
63740	63660	63572	6382	63732	63652
63741	63661	63580	6383	63740	63660
63742	63662	63581	6384	63741	63661
63750	63670	63582	6385	63742	63662
63751	63671	63600	6386	63750	63670
63752	63672	63601	6387	63751	63671
63760	63680	63602	6388	63752	63672
63761	63681	63620	*63561	63760	63680
63762	63682	63621	63520	63761	63681
63770	63700	63622	63521	63762	63682
63771	63701	63630	63540	63770	63700
63772	63702	63631	63541	63771	63701
63780	63720	63632	63542	63772	63702
63781	63721	63640	63560	63780	63720
63782	63722	63641	63561	63781	63721
6380	63730	63642	63562	63782	63722
6381	63731	63650	63570	6380	63730
6382	63732	63651	63571	6381	63731
6383	63740	63652	63572	6382	63732
6384	63741	63660	63580	6383	63740
6385	63742	63661	63581	6384	63741
6386	63750	63662	63582	6385	63742
6387	63751	63670	63600	6386	63750
6388	63752	63671	63601	6387	63751
*63552	63760	63672	63602	6388	63752
63520	63761	63680	63620	*63562	63760
63521	63762	63681	63621	63520	63761
63540	63770	63682	63622	63521	63762
63541	63771	63700	63630	63540	63770
63542	63772	63701	63631	63541	63771
63550	63780	63702	63632	63542	63772
63551	63781	63720	63640	63560	63780

63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63570
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680

63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63571
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63580

63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383

6384
6385
6386
6387
6388
*63572
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720

63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63580
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602

63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387

6388	63731	63631	63520	63751	63651
*63581	63732	63632	63532	63752	63652
63500	63740	63640	63540	63760	63660
63501	63741	63641	63541	63761	63661
63502	63742	63642	63542	63762	63662
63520	63750	63650	63550	63770	63670
63532	63751	63651	63551	63771	63671
63540	63752	63652	63552	63772	63672
63541	63760	63660	63560	63780	63680
63542	63761	63661	63561	63781	63681
63550	63762	63662	63562	63782	63682
63551	63770	63670	63570	6380	63700
63552	63771	63671	63571	6381	63701
63560	63772	63672	63572	6382	63702
63561	63780	63680	63580	6383	63720
63562	63781	63681	63581	6384	63721
	63782	63682	63582	6385	63722
63570	6380	63700	63600	6386	63730
63571	6381	63701	63601	6387	63731
63572	6382	63702	63602	6388	63732
63580	6383	63720	63620	*63591	63740
63581	6384	63721	63621	63500	63741
63582	6385	63722	63622	63501	63742
63600	6386	63730	63630	63502	63750
63601	6387	63731	63631	63520	63751
63602	6388	63732	63632	63532	63752
63620	*63582	63740	63640	63540	63760
63621	63500	63741	63641	63541	63761
63622	63501	63742	63642	63542	63762
63630	63502	63750	63650	63550	63770
63631	63520	63751	63651	63551	63771
63632	63532	63752	63652	63552	63772
63640	63540	63760	63660	63560	63780
63641	63541	63761	63661	63561	63781
63642	63542	63762	63662	63562	63782
63650	63550	63770	63670	63570	6380
63651	63551	63771	63671	63571	6381
63652	63552	63772	63672	63572	6382
63660	63560	63780	63680	63580	6383
63661	63561	63781	63681	63581	6384
63662	63562	63782	63682	63582	6385
63670	63570	6380	63700	63600	6386
63671	63571	6381	63701	63601	6387
63672	63572	6382	63702	63602	6388
63680	63580	6383	63720	63620	*63592
63681	63581	6384	63721	63621	63500
63682	63582	6385	63722	63622	63501
63700	63600	6386	63730	63630	63502
63701	63601	6387	63731	63631	63520
63702	63602	6388	63732	63632	63532
63720	63620	*63590	63740	63640	63540
63721	63621	63500	63741	63641	63541
63722	63622	63501	63742	63642	63542
63730	63630	63502	63750	63650	63550

63551	63771	63721	63621	63551	6384
63552	63772	63722	63622	63552	6385
63560	63780	63730	63640	63560	6386
63561	63781	63731	63641	63561	6387
63562	63782	63732	63642	63562	6388
63570	6380	63740	63670	63570	*63610
63571	6381	63741	63671	63571	63500
63572	6382	63742	63672	63572	63501
63580	6383	63750	63680	63580	63502
63581	6384	63751	63681	63581	63520
63582	6385	63752	63682	63582	63532
63600	6386	63760	63700	63600	63540
63601	6387	63761	63701	63601	63541
63602	6388	63762	63702	63602	63542
63620	*63600	63770	63720	63620	63550
63621	63500	63771	63721	63621	63551
63622	63501	63772	63722	63622	63552
63630	63502	63780	63730	63640	63560
63631	63520	63781	63731	63641	63561
63632	63532	63782	63732	63642	63562
63640	63540	6380	63740	63670	63570
63641	63541	6381	63741	63671	63571
63642	63542	6382	63742	63672	63572
63650	63550	6383	63750	63680	63580
63651	63551	6384	63751	63681	63581
63652	63552	6385	63752	63682	63582
63660	63560	6386	63760	63700	63620
63661	63561	6387	63761	63701	63621
63662	63562	6388	63762	63702	63622
63670	63570	*63601	63770	63720	63640
63671	63571	63500	63771	63721	63641
63672	63572	63501	63772	63722	63642
63680	63580	63502	63780	63730	63670
63681	63581	63520	63781	63731	63671
63682	63582	63532	63782	63732	63672
63700	63600	63540	6380	63740	63680
63701	63601	63541	6381	63741	63681
63702	63602	63542	6382	63742	63682
63720	63620	63550	6383	63750	63700
63721	63621	63551	6384	63751	63701
63722	63622	63552	6385	63752	63702
63730	63640	63560	6386	63760	63720
63731	63641	63561	6387	63761	63721
63732	63642	63562	6388	63762	63722
63740	63670	63570	*63602	63770	63730
63741	63671	63571	63500	63771	63731
63742	63672	63572	63501	63772	63732
63750	63680	63580	63502	63780	63740
63751	63681	63581	63520	63781	63741
63752	63682	63582	63532	63782	63742
63760	63700	63600	63540	6380	63750
63761	63701	63601	63541	6381	63751
63762	63702	63602	63542	6382	63752
63770	63720	63620	63550	6383	63760

63761	63722	63642	63562	63501	63782
63770	63730	63670	63570	63502	6380
63771	63731	63671	63571	63520	6381
63772	63732	63672	63572	63532	6382
63780	63740	63680	63580	63540	6383
63781	63741	63681	63581	63541	6384
63782	63742	63682	63582	63542	6385
6380	63750	63700	63620	63550	6386
6381	63751	63701	63621	63551	6387
6382	63752	63702	63622	63552	6388
6383	63760	63720	63640	63560	*63622
6384	63761	63721	63641	63561	63500
6385	63762	63722	63642	63562	63501
6386	63770	63730	63670	63570	63502
6387	63771	63731	63671	63571	63520
6388	63772	63732	63672	63572	63532
*63611	63780	63740	63680	63580	63540
63500	63781	63741	63681	63581	63541
63501	63782	63742	63682	63582	63542
63502	6380	63750	63700	63620	63550
63520	6381	63751	63701	63621	63551
63532	6382	63752	63702	63622	63552
63540	6383	63760	63720	63640	63560
63541	6384	63761	63721	63641	63561
63542	6385	63762	63722	63642	63562
63550	6386	63770	63730	63670	63570
63551	6387	63771	63731	63671	63571
63552	6388	63772	63732	63672	63572
63560	*63612	63780	63740	63680	63580
63561	63500	63781	63741	63681	63581
63562	63501	63782	63742	63682	63582
63570	63502	6380	63750	63700	63620
63571	63520	6381	63751	63701	63621
63572	63532	6382	63752	63702	63622
63580	63540	6383	63760	63720	63640
63581	63541	6384	63761	63721	63641
63582	63542	6385	63762	63722	63642
63620	63550	6386	63770	63730	63670
63621	63551	6387	63771	63731	63671
63622	63552	6388	63772	63732	63672
63640	63560	*63620	63780	63740	63680
63641	63561	63500	63781	63741	63681
63642	63562	63501	63782	63742	63682
63670	63570	63502	6380	63750	63700
63671	63571	63520	6381	63751	63701
63672	63572	63532	6382	63752	63702
63680	63580	63540	6383	63760	63720
63681	63581	63541	6384	63761	63721
63682	63582	63542	6385	63762	63722
63700	63620	63550	6386	63770	63730
63701	63621	63551	6387	63771	63731
63702	63622	63552	6388	63772	63732
63720	63640	63560	*63621	63780	63740
63721	63641	63561	63500	63781	63741

63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63630
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63630
63631
63632
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63631
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63630
63631
63632
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63632
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63630
63631
63632
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63640
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63641
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63642
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63643
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63644
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63645
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63646
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63647
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63648
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63649
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63650
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63651
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63652
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63653
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63654
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63655
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63656
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63657
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63658
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63659
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63660
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63661
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63662
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63663
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63664
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63665
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63666
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63667
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63668
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63669
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63670
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63671
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63672
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63673
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63674
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63675
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63676
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63677
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63678
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63679
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63680
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63681
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63682
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63683
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63684
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63685
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63686
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63687
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63688
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63689
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63690
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63691
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63692
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63693
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63694
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63695
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63696
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63697
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63698
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63699
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63700
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63701
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63702
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63703
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63704
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63705
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63706
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63707
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63708
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63709
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63710
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63711
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63712
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63713
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63714
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63715
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63716
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63670
63671
63672
63680
63681
63682
63700
63701

63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63642
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570

63571
63572
63580
63581
63582
63620
63621
63622
63640
63641
63642
63650
63651
63652
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732

63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63650
63500
63501

63502
63520
63532
63540
63541
63542
63550
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621

63622
63640
63641
63642
63650
63651
63652
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771

63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63651
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621

63622
63640
63641
63642
63650
63651
63652
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720

63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63652
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552

63560
63561
63562
63570
63571
63572
63580
63581
63582
63620
63621
63622

63640
63641
63642
63650
63651
63652
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63660

63500
63501
63502
63520
63532
63540
63541

63542	6382	63742	63672	63572	6382
63550	6383	63750	63680	63580	6383
63551	6384	63751	63681	63581	6384
63552	6385	63752	63682	63582	6385
63560	6386	63760	63700	63600	6386
63561	6387	63761	63701	63601	6387
63562	6388	63762	63702	63602	6388
63570	*63661	63770	63720	63620	*63671
63571	63500	63771	63721	63621	63500
63572	63501	63772	63722	63622	63501
63580	63502	63780	63730	63630	63502
63581	63520	63781	63731	63631	63520
63582	63532	63782	63732	63632	63532
63620	63540	6380	63740	63640	63540
63621	63541	6381	63741	63641	63541
63622	63542	6382	63742	63642	63542
63640	63550	6383	63750	63650	63550
63641	63551	6384	63751	63651	63551
63642	63552	6385	63752	63652	63552
63660	63560	6386	63760	63660	63560
63661	63561	6387	63761	63661	63561
63662	63562	6388	63762	63662	63562
63670	63570	*63662	63770	63670	63570
63671	63571	63500	63771	63671	63571
63672	63572	63501	63772	63672	63572
63680	63580	63502	63780	63680	63580
63681	63581	63520	63781	63681	63581
63682	63582	63532	63782	63682	63582
63700	63620	63540	6380	63700	63600
63701	63621	63541	6381	63701	63601
63702	63622	63542	6382	63702	63602
63720	63640	63550	6383	63720	63620
63721	63641	63551	6384	63721	63621
63722	63642	63552	6385	63722	63622
63730	63660	63560	6386	63730	63630
63731	63661	63561	6387	63731	63631
63732	63662	63562	6388	63732	63632
63740	63670	63570	*63670	63740	63640
63741	63671	63571	63500	63741	63641
63742	63672	63572	63501	63742	63642
63750	63680	63580	63502	63750	63650
63751	63681	63581	63520	63751	63651
63752	63682	63582	63532	63752	63652
63760	63700	63620	63540	63760	63660
63761	63701	63621	63541	63761	63661
63762	63702	63622	63542	63762	63662
63770	63720	63640	63550	63770	63670
63771	63721	63641	63551	63771	63671
63772	63722	63642	63552	63772	63672
63780	63730	63660	63560	63780	63680
63781	63731	63661	63561	63781	63681
63782	63732	63662	63562	63782	63682
6380	63740	63670	63570	6380	63700
6381	63741	63671	63571	6381	63701

63702	63602	6388	63732	63632	63532
63720	63620	*63680	63740	63640	63540
63721	63621	63500	63741	63641	63541
63722	63622	63501	63742	63642	63542
63730	63630	63502	63750	63650	63550
63731	63631	63520	63751	63651	63551
63732	63632	63532	63752	63652	63552
63740	63640	63540	63760	63660	63560
63741	63641	63541	63761	63661	63561
63742	63642	63542	63762	63662	63562
63750	63650	63550	63770	63670	63570
63751	63651	63551	63771	63671	63571
63752	63652	63552	63772	63672	63572
63760	63660	63560	63780	63680	63580
63761	63661	63561	63781	63681	63581
63762	63662	63562	63782	63682	63582
63770	63670	63570	6380	63700	63600
63771	63671	63571	6381	63701	63601
63772	63672	63572	6382	63702	63602
63780	63680	63580	6383	63720	63620
63781	63681	63581	6384	63721	63621
63782	63682	63582	6385	63722	63622
6380	63700	63600	6386	63730	63630
6381	63701	63601	6387	63731	63631
6382	63702	63602	6388	63732	63632
6383	63720	63620	*63681	63740	63640
6384	63721	63621	63500	63741	63641
6385	63722	63622	63501	63742	63642
6386	63730	63630	63502	63750	63650
6387	63731	63631	63520	63751	63651
6388	63732	63632	63532	63752	63652
*63672	63740	63640	63540	63760	63660
63500	63741	63641	63541	63761	63661
63501	63742	63642	63542	63762	63662
63502	63750	63650	63550	63770	63670
63520	63751	63651	63551	63771	63671
63532	63752	63652	63552	63772	63672
63540	63760	63660	63560	63780	63680
63541	63761	63661	63561	63781	63681
63542	63762	63662	63562	63782	63682
63550	63770	63670	63570	6380	63700
63551	63771	63671	63571	6381	63701
63552	63772	63672	63572	6382	63702
63560	63780	63680	63580	6383	63720
63561	63781	63681	63581	6384	63721
63562	63782	63682	63582	6385	63722
63570	6380	63700	63600	6386	63730
63571	6381	63701	63601	6387	63731
63572	6382	63702	63602	6388	63732
63580	6383	63720	63620	*63682	63740
63581	6384	63721	63621	63500	63741
63582	6385	63722	63622	63501	63742
63600	6386	63730	63630	63502	63750
63601	6387	63731	63631	63520	63751

63752	63652	63552	63772	63672	63571
63760	63660	63560	63780	63680	63572
63761	63661	63561	63781	63681	63580
63762	63662	63562	63782	63682	63581
63770	63670	63570	6380	63700	63582
63771	63671	63571	6381	63701	63600
63772	63672	63572	6382	63702	63601
63780	63680	63580	6383	63720	63602
63781	63681	63581	6384	63721	63620
63782	63682	63582	6385	63722	63621
6380	63700	63600	6386	63730	63622
6381	63701	63601	6387	63731	63630
6382	63702	63602	6388	63732	63631
6383	63720	63620	*63692	63740	63632
6384	63721	63621	63500	63741	63640
6385	63722	63622	63501	63742	63641
6386	63730	63630	63502	63750	63642
6387	63731	63631	63520	63751	63650
6388	63732	63632	63532	63752	63651
*63690	63740	63640	63540	63760	63660
63500	63741	63641	63541	63761	63661
63501	63742	63642	63542	63762	63662
63502	63750	63650	63550	63770	63670
63520	63751	63651	63551		63671
63532	63752	63652	63552	63771	63672
63540	63760	63660	63560	63772	63680
63541	63761	63661	63561	63780	63681
63542	63762	63662	63562	63781	63682
63550	63770	63670	63570	63782	
63551	63771	63671	63571	6380	63700
63552	63772	63672	63572	6381	63701
63560	63780	63680	63580	6382	63702
63561	63781	63681	63581	6383	63720
63562	63782	63682	63582	6384	63721
63570	6380	63700	63600	6385	63722
63571	6381	63701	63601	6386	63740
63572	6382	63702	63602	6387	63741
63580	6383	63720	63620	6388	63742
63581	6384	63721	63621	*63700	63770
63582	6385	63722	63622	63500	63771
63600	6386	63730	63630	63501	63772
63601	6387	63731	63631	63502	63780
63602	6388	63732	63632	63520	63781
63620	*63691	63740	63640	63532	63782
63621	63500	63741	63641	63540	6380
63622	63501	63742	63642	63541	6381
63630	63502	63750	63650	63542	6382
63631	63520	63751	63651	63550	6383
63632	63532	63752	63652	63551	6384
63640	63540	63760	63660	63552	6385
63641	63541	63761	63661	63560	6386
63642	63542	63762	63662	63561	6387
63650	63550	63770	63670	63562	6388
63651	63551	63771	63671	63570	*63701

63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63740
63741
63742
63770

63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63702
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602

63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670

63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63710
63500
63501
63502
63520
63532
63540
63541
63542
63550
63551
63552
63560
63561

63562
63570
63571
63572
63580
63581
63582
63600
63601
63602

63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63711
63500
63501
63502
63520
63531
63532

63540
63541
63542
63550
63551

63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772
*63712
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772

63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63720
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63721
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63722
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63730
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63731
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720

63721
63722
63730
63731
63732
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63732
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632

63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63730
63731
63732
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63740
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562

63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63741
63500
63501
63502

63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
6380

6381
6382
6383
6384
6385
6386
6387
6388
*63742
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63720
63721

63721
63722
63740
63741
63742
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63750
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642

63650	63572	63501	63771	63671	63620
63651	63580	63502	63772	63672	63621
63652	63581	63520	63780	63680	63622
63660	63582	63531	63781	63681	63630
63661	63600	63532	63782	63682	63631
63662	63601	63540	6380	63720	63632
63670	63602	63541	6381	63721	63640
63671	63620	63542	6382	63722	63641
63672	63621	63550	6383	63740	63642
63680	63622	63551	6384	63741	63650
63681	63630	63552	6385	63742	63651
63682	63631	63560	6386	63760	63660
63720	63632	63561	6387	63761	63661
63721	63640	63562	6388	63762	63662
63722	63641	63570	*63760	63770	63670
63740	63642	63571	63500	63771	63671
63741	63650	63572	63501	63772	63672
63742	63651	63580	63502	63780	63680
63750	63652	63581	63520	63781	63681
63751	63660	63582	63531	63782	63682
63752	63661	63600	63532	6380	63720
63770	63662	63601	63540	6381	63721
63771	63670	63602	63541	6382	63722
63772	63671	63620	63542	6383	63740
63780	63672	63621	63550	6384	63741
63781	63680	63622	63551	6385	63742
63782	63681	63630	63552	6386	63760
6380	63682	63631	63560	6387	63761
6381	63720	63632	63561	6388	63762
6382	63721	63640	63562	*63761	63770
6383	63722	63641	63570	63500	63771
6384	63740	63642	63571	63501	63772
6385	63741	63650	63572	63502	63780
6386	63742	63651	63580	63520	63781
6387	63750	63652	63581	63531	63782
6388	63751	63660	63582	63532	6380
*63751	63752	63661	63600	63540	6381
63500	63770	63662	63601	63541	6382
63501	63771	63670	63602	63542	6383
63502	63772	63671	63620	63550	6384
63520	63780	63672	63621	63551	6385
63531	63781	63680	63622	63552	6386
63532	63782	63681	63630	63560	6387
63540	6380	63682	63631	63561	6388
63541	6381	63720	63632	63562	*63762
63542	6382	63721	63640	63570	63500
63550	6383	63722	63641	63571	63501
63551	6384	63740	63642	63572	63502
63552	6385	63741	63650	63580	63520
63560	6386	63742	63651	63581	63531
63561	6387	63750	63660	63582	63532
63562	6388	63751	63661	63600	63540
63570	*63752	63752	63662	63601	63541
63571	63500	63770	63670	63602	63542

63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63770
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63771
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63772
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63780
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602

63620	*63781	63732	63631	63520	63750
63621	63500	63740	63632	63531	63751
63622	63501	63741	63640	63532	63752
63630	63502	63742	63641	63540	63760
63631	63520	63750	63642	63541	63761
63632	63531	63751	63650	63542	63762
63640	63532	63752	63651	63550	63770
63641	63540	63760	63652	63551	63771
63642	63541	63761	63660	63552	63772
63650	63542	63762	63661	63560	63780
63651	63550	63770	63662	63561	63781
63652	63551	63771	63670	63562	63782
63660	63552	63772	63671	63570	6380
63661	63560	63780	63672	63571	6381
63662	63561	63781	63680	63572	6382
63670	63562	63782	63681	63580	6383
63671	63570	6380	63682	63581	6384
63672	63571	6381	63700	63582	6385
63680	63572	6382	63701	63600	6386
63681	63580	6383	63702	63601	6387
63682	63581	6384	63720	63602	6388
63700	63582	6385	63721	63620	*63791
63701	63600	6386	63722	63621	63500
63702	63601	6387	63730	63622	63501
63720	63602	6388	63731	63630	63502
63721	63620	*63782	63732	63631	63520
63722	63621	63500	63740	63632	63531
63730	63622	63501	63741	63640	63532
63731	63630	63502	63742	63641	63540
63732	63631	63520	63750	63642	63541
63740	63632	63531	63751	63650	63542
63741	63640	63532	63752	63651	63550
63742	63641	63540	63760	63652	63551
63750	63642	63541	63761	63660	63552
63751	63650	63542	63762	63661	63560
63752	63651	63550	63770	63662	63561
63760	63652	63551	63771	63670	63562
63761	63660	63552	63772	63671	63570
63762	63661	63560	63780	63672	63571
63770	63662	63561	63781	63680	63572
63771	63670	63562	63782	63681	63580
63772	63671	63570	6380	63682	63581
63780	63672	63571	6381	63700	63582
63781	63680	63572	6382	63701	63600
63782	63681	63580	6383	63702	63601
6380	63682	63581	6384	63720	63602
6381	63700	63582	6385	63721	63620
6382	63701	63600	6386	63722	63621
6383	63702	63601	6387	63730	63622
6384	63720	63602	6388	63731	63630
6385	63721	63620	*63790	63732	63631
6386	63722	63621	63500	63740	63632
6387	63730	63622	63501	63741	63640
6388	63731	63630	63502	63742	63641

63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*63792
63500
63501
63502
63520
63531
63532
63540

63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760

63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
*6380
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660

63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6384
6387
6388
*6381
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571

63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6381
6384
6387

6388
*6382
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731

63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6382
6384
6387
6388
*6383
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6383
6384
6387
6388
*6384
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
6384
6385
6387
6388
*6385
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6384
6385
6387
6388
*6386
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6384
6386
6387
6388
*6387
63500
63501
63502
63520
63521
63531
63532
63540

63541	63761	63651	63542	63762	63640
63542	63762	63652	63550	63770	63641
63550	63770	63660	63551	63771	63642
63551	63771	63661	63552		63650
63552	63772	63662	63560	63772	63651
63560	63780	63670	63561	63780	63652
63561	63781	63671	63562	63781	63660
63562	63782	63672	63570	63782	63661
63570	6380	63680	63571	6380	63662
63571	6381	63681	63572	6381	63670
63572	6382	63682	63580	6382	63671
63580	6383	63700	63581	6383	63672
63581	6384	63701	63582	6384	63680
63582	6385	63702	63600	6385	63681
63600	6386	63720	63601	6386	63682
63601	6387	63721	63602	6387	63700
63602	6388	63722	63620	6388	63701
63620	*6388	63730	63621	*6390	63702
63621	63500	63731	63622	03283	63720
63622	63501	63732	63630	0952	63721
63630	63502	63740	63631	09886	63722
63631	63520	63741	63632	09956	63730
63632	63521	63742	63640	*64000	63731
63640	63531	63750	63641	63500	63732
63641	63532	63751	63642	63501	63740
63642	63540	63752	63650	63502	63741
63650	63541	63760	63651	63520	63742
63651	63542	63761	63652	63521	63750
63652	63550	63762	63660	63531	63751
63660	63551	63770	63661	63532	63752
63661	63552	63771	63662	63540	63760
63662	63560	63772	63670	63541	63761
63670	63561	63780	63671	63542	63762
63671	63562	63781	63672	63550	63770
63672	63570	63782	63680	63551	63771
63680	63571	6380	63681	63552	63772
63681	63572	6381	63682	63560	63780
63682	63580	6382	63700	63561	63781
63700	63581	6383	63701	63562	63782
63701	63582	6384	63702	63570	6380
63702	63600	6385	63720	63571	6381
63720	63601	6386	63721	63572	6382
63721	63602	6387	63722	63580	6383
63722	63620	6388	63730	63581	6384
63730	63621	*6389	63731	63582	6385
63731	63622	63500	63732	63600	6386
63732	63630	63501	63740	63601	6387
63740	63631	63502	63741	63602	6388
63741	63632	63520	63742	63620	64121
63742		63521	63750	63621	64123
63750	63640	63531	63751	63622	*64001
63751	63641	63532	63752	63630	63500
63752	63642	63540	63760	63631	63501
63760	63650	63541	63761	63632	63502

63520	63742	63631	63501	63740	63622
63521	63750	63632	63502	63741	63630
63531	63751	63640	63520	63742	63631
63532	63752	63641	63521	63750	63632
63540	63760	63642	63531	63751	63640
63541	63761	63650	63532	63752	63641
63542	63762	63651	63540	63760	63642
63550	63770	63652	63541	63761	63650
63551	63771	63660	63542	63762	63651
63552	63772	63661	63550	63770	63652
63560	63780	63662	63551	63771	63660
63561	63781	63670	63552	63772	63661
63562	63782	63671	63560	63780	63662
63570	6380	63672	63561	63781	63670
63571	6381	63680	63562	63782	63671
63572	6382	63681	63570	6380	63672
63580	6383	63682	63571	6381	63680
63581	6384	63700	63572	6382	63681
63582	6385	63701	63580	6383	63682
63600	6386	63702	63581	6384	63700
63601	6387	63720	63582	6385	63701
63602	6388	63721	63600	6386	63702
63620	64121	63722	63601	6387	63720
63621	64123	63730	63602	6388	63721
63622	*64003	63731	63620	64121	63722
63630	63500	63732	63621	64123	63730
63631	63501	63740	63622	*64081	63731
63632	63502	63741	63630	63500	63732
63640	63520	63742	63631	63501	63740
63641	63521	63750	63632	63502	63741
63642	63531	63751	63640	63520	63742
63650	63532	63752	63641	63521	63750
63651	63540	63760	63642	63531	63751
63652	63541	63761	63650	63532	63752
63660	63542	63762	63651	63540	63760
63661	63550	63770	63652	63541	63761
63662	63551	63771	63660	63542	63762
63670	63552	63772	63661	63550	63770
63671	63560	63780	63662	63551	63771
63672	63561	63781	63670	63552	63772
63680	63562	63782	63671	63560	63780
63681	63570	6380	63672	63561	63781
63682	63571	6381	63680	63562	63782
63700	63572	6382	63681	63570	6380
63701	63580	6383	63682	63571	6381
63702	63581	6384	63700	63572	6382
63720	63582	6385	63701	63580	6383
63721	63600	6386	63702	63581	6384
63722	63601	6387	63720	63582	6385
63730	63602	6388	63721	63600	6386
63731	63620	64121	63722	63601	6387
63732	63621	64123	63730	63602	6388
63740	63622	*64080	63731	63620	64121
63741	63630	63500	63732	63621	64123

*64083
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
*64090
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
*64091
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
*64093
63500
63501
63502
63520
63521
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383

6384	63700	63580	6383	63700	63580
6385	63701	63581	6384	63701	63581
6386	63702	63582	6385	63702	63582
6387	63720	63600	6386	63720	63600
6388	63721	63601	6387	63721	63601
64121	63722	63602	6388	63722	63602
64123	63730	63620	64121	63730	63620
*64100	63731	63621	64123	63731	63621
63500	63732	63622	*64103	63732	63622
63501	63740	63630	63500	63740	63630
63502	63741	63631	63501	63741	63631
63520	63742	63632	63502	63742	63632
63521	63750	63640	63520	63750	63640
63531	63751	63641	63531	63751	63641
63532	63752	63642	63532	63752	63642
63540	63760	63650	63540	63760	63650
63541	63761	63651	63541	63761	63651
63542	63762	63652	63542	63762	63652
63550	63770	63660	63550	63770	63660
63551	63771	63661	63551	63771	63661
63552	63772	63662	63552	63772	63662
63560	63780	63670	63560	63780	63670
63561	63781	63671	63561	63781	63671
63562	63782	63672	63562	63782	63672
63570	6380	63680	63570	6380	63680
63571	6381	63681	63571	6381	63681
63572	6382	63682	63572	6382	63682
63580	6383	63700	63580	6383	63700
63581	6384	63701	63581	6384	63701
63582	6385	63702	63582	6385	63702
63600	6386	63720	63600	6386	63720
63601	6387	63721	63601	6387	63721
63602	6388	63722	63602	6388	63722
63620	64121	63730	63620	64121	63730
63621	64123	63731	63621	64123	63731
63622	*64101	63732	63622	*64110	63732
63630	63500	63740	63630	63500	63740
63631	63501	63741	63631	63501	63741
63632	63502	63742	63632	63502	63742
63640	63520	63750	63640	63520	63750
63641	63531	63751	63641	63531	63751
63642	63532	63752	63642	63532	63752
63650	63540	63760	63650	63540	63760
63651	63541	63761	63651	63541	63761
63652	63542	63762	63652	63542	63762
63660	63550	63770	63660	63550	63770
63661	63551	63771	63661	63551	63771
63662	63552	63772	63662	63552	63772
63670	63560	63780	63670	63560	63780
63671	63561	63781	63671	63561	63781
63672	63562	63782	63672	63562	63782
63680	63570	6380	63680	63570	6380
63681	63571	6381	63681	63571	6381
63682	63572	6382	63682	63572	6382

6383	63700	63572	6382	63682	63581
6384	63701	63580	6383	63700	63582
6385	63702	63581	6384	63701	63600
6386	63720	63582	6385	63702	63601
6387	63721	63600	6386	63720	63602
6388	63722	63601	6387	63721	63620
64121	63730	63602	6388	63722	63621
64123	63731	63620	64121	63730	63622
*64111	63732	63621	64123	63731	63630
63500	63740	63622	*64120	63732	63631
63501	63741	63630	63500	63740	63632
63502	63742	63631	63501	63741	63640
63520	63750	63632	63502	63742	63641
63531	63751	63640	63520	63750	63642
63532	63752	63641	63531	63751	63650
63540	63760	63642	63532	63752	63651
63541	63761	63650	63540	63760	63652
63542	63762	63651	63541	63761	63660
63550	63770	63652	63542	63762	63661
63551	63771	63660	63550	63770	63662
63552	63772	63661	63551	63771	63670
63560	63780	63662	63552	63772	63671
63561	63781	63670	63560	63780	63672
63562	63782	63671	63561	63781	63680
63570	6380	63672	63562	63782	63681
63571	6381	63680	63570	6380	63682
63572	6382	63681	63571	6381	63700
63580		63682	63572	6382	63701
63581	6383	63700	63580	6383	63702
63582	6384	63701	63581	6384	63720
63600	6385	63702	63582	6385	63721
63601	6386	63720	63600	6386	63722
63602	6387	63721	63601	6387	63730
63620	6388	63722	63602	6388	63731
63621	64121	63730	63620	*64121	63732
63622	64123	63731	63621	63500	63740
63630	*64113	63732	63622	63501	63741
63631	63500	63740	63630	63502	63742
63632	63501	63741	63631	63520	63750
63640	63502	63742	63632	63531	63751
63641	63520	63750	63640	63532	63752
63642	63531	63751	63641	63540	63760
63650	63532	63752	63642	63541	63761
63651	63540	63760	63650	63542	63762
63652	63541	63761	63651	63550	63770
63660	63542	63762	63652	63551	63771
63661	63550	63770	63660	63552	63772
63662	63551	63771	63661	63560	63780
63670	63552	63772	63662	63561	63781
63671	63560	63780	63670	63562	63782
63672	63561	63781	63671	63570	6380
63680	63562	63782	63672	63571	6381
63681	63570	6380	63680	63572	6382
63682	63571	6381	63681	63580	6383

6384
6385
6386
6387
6388
64121
*64123
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64123
*64200
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64201
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64210
64201
64202
64203
64211
64212
64213
64232
64291
64292
64293
64294
*64202
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64203
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64204
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64210
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64211
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64212
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64213
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64214
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64220
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64221
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64222
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64223
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64224
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64230
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64231
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293

64294
*64232
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292

64293
64294
*64233
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64234
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64240
64201
64202
64203
64211
64212
64213
64214
64231
64232

64291
64292
64293
64294
*64241
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64242
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64243
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294

*64244
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291

64214
64231
64232
64291
64292
*64250
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64251
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64252
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64253
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291

64292
*64254
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64260
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64261
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64262
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64263

64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64264
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64270
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64271
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293

64294
*64272
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64273
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64274
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64290
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291

64292
64293
64294
*64291
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64292
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64293
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64293
64294
*64294
64201
64202
64203
64211
64212
64213
64214
64231

64232
64291
64292
64293
64294
*64400
64420
64421
*64403
64420

64421
*64410
64420
64421
*64413
64420
64421
*64420
64420
64421
*64421
64420
64421
*64610
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64611
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64612
64201
64202
64203
64211
64212

64213
64214
64231
64232
64291
64292
*64613
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64614
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*64621
64621
64622
64623
64624
*64622
64621
64622
64623
64624
*64623
64621
64622
64623
64624
*64624
64621
64622
64623
64624
*64631
64631
*64661
59001

*64662
59001
*64663
59001
*64664
59001
*64680
09483
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700

63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522

66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64681
09483
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621

63622	64201	67190	63720	64721	63570
63630	64202	67191	63721	64722	63571
63631	64203	67192	63722	64723	63572
63632	64211	67202	63730	64724	63580
63640	64212	*64682	63731	66003	63581
63641	64213	09483	63732	66211	63582
63642	64214	63500	63740	66421	63600
63650	64231	63501	63741	66431	63601
63651	64232	63502	63742	66461	63602
63652	64291	63520	63750	66464	63620
63660	64292	63531		66522	63621
63661	64420	63532	63751	66531	63622
63662	64421	63540	63752	66541	63630
63670	64701	63541	63760	66551	63631
63671	64702	63542	63761	66561	63632
63672	64703	63550	63762	66571	63640
63680	64704	63551	63770	66572	63641
63681	64711	63552	63771	66602	63642
63682	64712	63560	63772	66604	63650
63700	64713	63561	63780	66612	63651
63701	64714	63562	63781	66622	63652
63702	64721	63570	63782	66921	63660
63720	64722	63571	6380	66922	63661
63721	64723	63572	6381	66924	63662
63722	64724	63580	6382	67150	63670
63730	66003	63581	6383	67151	63671
63731	66211	63582	6384	67152	63672
63732	66421	63600	6385	67153	63680
63740	66431	63601	6386	67154	63681
63741	66461	63602	6387	67180	63682
63742	66464	63620	6388	67181	63700
63750	66522	63621	64121	67182	63701
63751	66531	63622	64123	67183	63702
63752	66541	63630	64201	67190	63720
63760	66551	63631	64202	67191	63721
63761	66561	63632	64203	67192	63722
63762	66571	63640	64211	67202	63730
63770	66572	63641	64212	*64683	63731
63771	66602	63642	64213	09483	63732
63772	66604	63650	64214	63500	63740
63780	66612	63651	64231	63501	63741
63781	66622	63652	64232	63502	63742
63782	66921	63660	64291	63520	63750
6380	66922	63661	64292	63531	63751
6381	66924	63662	64420	63532	63752
6382	67150	63670	64421	63540	63760
6383	67151	63671	64701	63541	63761
6384	67152	63672	64702	63542	63762
6385	67153	63680	64703	63550	63770
6386	67154	63681	64704	63551	63771
6387	67180	63682	64711	63552	63772
6388	67181	63700	64712	63560	63780
64121	67182	63701	64713	63561	63781
64123	67183	63702	64714	63562	63782

6380	66922	63661	64420	63540	63760
6381	66924	63662	64421	63541	63761
6382	67150	63670	64701	63542	63762
6383	67151	63671	64702	63550	63770
6384	67152	63672	64703	63551	63771
6385	67153	63680	64704	63552	63772
6386	67154	63681	64711	63560	63780
6387	67180	63682	64712	63561	63781
6388	67181	63700	64713	63562	63782
64121	67182	63701	64714	63570	
64123	67183	63702	64721	63571	6380
64201	67190	63720	64722	63572	6381
64202	67191	63721	64723	63580	6382
64203	67192	63722	64724	63581	6383
64211	67202	63730	66003	63582	6384
64212	*64684	63731	66211	63600	6385
64213	09483	63732	66421	63601	6386
64214	63500	63740	66431	63602	6387
64231	63501	63741	66461	63620	6388
64232	63502	63742	66464	63621	64121
64291	63520	63750	66522	63622	64123
64292	63531	63751	66531	63630	64201
64420	63532	63752	66541	63631	64202
64421	63540	63760	66551	63632	64203
64701	63541	63761	66561	63640	64211
64702	63542	63762	66571	63641	64212
64703	63550	63770	66572	63642	64213
64704	63551	63771	66602	63650	64214
64711	63552	63772	66604	63651	64231
64712	63560	63780	66612	63652	64232
64713	63561	63781	66622	63660	64291
64714	63562	63782	66921	63661	64292
64721	63570	6380	66922	63662	64420
64722	63571	6381	66924	63670	64421
64723	63572	6382	67150	63671	64701
64724	63580	6383	67151	63672	64702
66003	63581	6384	67152	63680	64703
66211	63582	6385	67153	63681	64704
66421	63600	6386	67154	63682	64711
66431	63601	6387	67180	63700	64712
66461	63602	6388	67181	63701	64713
66464	63620	64121	67182	63702	64714
66522	63621	64123	67183	63720	64721
66531	63622	64201	67190	63721	64722
66541	63630	64202	67191	63722	64723
66551	63631	64203	67192	63730	64724
66561	63632	64211	67202	63731	66003
66571	63640	64212	*64690	63732	66211
66572	63641	64213	63500	63740	66421
66602	63642	64214	63501	63741	66431
66604	63650	64231	63502	63742	66461
66612	63651	64232	63520	63750	66464
66622	63652	64291	63531	63751	66522
66921	63660	64292	63532	63752	66531

66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64691
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64693
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64700
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64701
64701
64702
64703
64704
64711
64712
64713

64714
64721
64722
64723
64724
*64702
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64703
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64704
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64710
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64711
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64712
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64713
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64714
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64720
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64721
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64722
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64723
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64724
64701
64702
64703
64704
64711
64712
64713
64714
64721
64722
64723
64724
*64751
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64752
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64753
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64754
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64760
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64761
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64762
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64763
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64764
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794

64783
64784
64791
64792
64793
64794
*64780
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64781
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64782
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64783
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64784
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64790
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64791
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64792
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64793
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64794
64751
64752
64753
64754
64761
64762
64763
64764
64781
64782
64783
64784
64791
64792
64793
64794
*64871
64871
64872
64873
64874
*64872
64871
64872
64873
64874
*64873
64871
64872
64873
64874
*64874
64871
64872
64873
64874
*64890
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
64930
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202

*64891
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
64931
64932
64933
64934
64941
64942
64943
64944
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64892
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
64931
64932
64933
64934
64941
64942
64943
64944
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64893
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722

63730	66461	63620	64121	67191	63722
63731	66464	63621	64123	67192	63730
63732	66522	63622	64201	67202	
63740	66531	63630	64202	*64900	63731
63741	66541	63631	64203	63500	63732
63742	66551	63632	64211	63501	63740
63750	66561	63640	64212	63502	63741
63751	66571	63641	64213	63520	63742
63752	66572	63642	64214	63531	63750
63760	66602	63650	64231	63532	63751
63761	66604	63651	64232	63540	63752
63762	66612	63652	64291	63541	63760
63770	66622	63660	64292	63542	63761
63771	66921	63661	64420	63550	63762
63772	66922	63662	64421	63551	63770
63780	66924	63670	64931	63552	63771
63781	67150	63671	64932	63560	63772
63782	67151	63672	64933	63561	63780
6380	67152	63680	64934	63562	63781
6381	67153	63681	64941	63570	63782
6382	67154	63682	64942	63571	6380
6383	67180	63700	64943	63572	6381
6384	67181	63701	64944	63580	6382
6385	67182	63702	66003	63581	6383
6386	67183	63720	66211	63582	6384
6387	67190	63721	66421	63600	6385
6388	67191	63722	66431	63601	6386
64121	67192	63730	66461	63602	6387
64123	67202	63731	66464	63620	6388
64201	*64894	63732	66522	63621	64121
64202	63500	63740	66531	63622	64123
64203	63501	63741	66541	63630	64201
64211	63502	63742	66551	63631	64202
64212	63520	63750	66561	63632	64203
64213	63531	63751	66571	63640	64211
64214	63532	63752	66572	63641	64212
64231	63540	63760	66602	63642	64213
64232	63541	63761	66604	63650	64214
64291	63542	63762	66612	63651	64231
64292	63550	63770	66622	63652	64232
64420	63551	63771	66921	63660	64291
64421	63552	63772	66922	63661	64292
64931	63560	63780	66924	63662	64420
64932	63561	63781	67150	63670	64421
64933	63562	63782	67151	63671	66003
64934	63570	6380	67152	63672	66211
64941	63571	6381	67153	63680	66421
64942	63572	6382	67154	63681	66431
64943	63580	6383	67180	63682	66461
64944	63581	6384	67181	63700	66464
66003	63582	6385	67182	63701	66522
66211	63600	6386	67183	63702	66531
66421	63601	6387		63720	66541
66431	63602	6388	67190	63721	66551

66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64901
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64902
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64903
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700

63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64904
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64910
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924

67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64911
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64912
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64913
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732

63740	66612	63652	64291	63571	6381
63741	66622	63660	64292	63572	6382
63742	66921	63661	64420	63580	6383
63750	66922	63662	64421	63581	6384
63751	66924	63670	66003	63582	6385
63752	67150	63671	66211	63600	6386
63760	67151	63672	66421	63601	6387
63761	67152	63680	66431	63602	6388
63762	67153	63681	66461	63620	64121
63770	67154	63682	66464	63621	64123
63771	67180	63700	66522	63622	64201
63772	67181	63701	66531	63630	64202
63780	67182	63702	66541	63631	64203
63781	67183	63720	66551	63632	64211
63782	67190	63721	66561	63640	64212
6380	67191	63722	66571	63641	64213
6381	67192	63730	66572	63642	64214
6382	67202	63731	66602	63650	64231
6383	*64914	63732	66604	63651	64232
6384	63500	63740	66612	63652	64291
6385	63501	63741	66622	63660	64292
6386	63502	63742	66921	63661	64420
6387	63520	63750	66922	63662	64421
6388	63531	63751	66924	63670	66003
64121	63532	63752	67150	63671	66211
64123	63540	63760	67151	63672	66421
64201	63541	63761	67152	63680	66431
64202	63542	63762	67153	63681	66461
64203	63550	63770	67154	63682	66464
64211	63551	63771	67180	63700	66522
64212	63552	63772	67181	63701	66531
64213	63560	63780	67182	63702	66541
64214	63561	63781	67183	63720	66551
64231	63562	63782	67190	63721	66561
64232	63570	6380	67191	63722	66571
64291	63571	6381	67192	63730	66572
64292	63572	6382	67202	63731	66602
64420	63580	6383	*64920	63732	66604
64421	63581	6384	63500	63740	66612
66003	63582	6385	63501	63741	66622
66211	63600	6386	63502	63742	66921
66421	63601	6387	63520	63750	66922
66431	63602	6388	63531	63751	66924
66461	63620	64121	63532	63752	67150
66464	63621	64123	63540	63760	67151
66522	63622	64201	63541	63761	67152
66531	63630	64202	63542	63762	67153
66541	63631	64203	63550	63770	67154
66551	63632	64211	63551	63771	67180
66561	63640	64212	63552	63772	67181
66571	63641	64213	63560	63780	67182
66572	63642	64214	63561	63781	67183
66602	63650	64231	63562	63782	67190
66604	63651	64232	63570	6380	67191

67192
67202
*64921
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64922
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64923
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552

63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64924
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64930
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
*64931
63500
63501
63502
63520
63531
63532
63540
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202

63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760

63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151

67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64932
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672

63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421

66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64933
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601

63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387

6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292

64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64934
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582

63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64940
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64941
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572

63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64942
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
*64943
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602

64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64944
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64950
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64951
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631

63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64953
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64960
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461

66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64961
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620

63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121

64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64962
63500
63501
63502
63520
63531

63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750

63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922

66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64963
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662

63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*64964
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*650
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
66003
66211
66421
66431
66461

66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*65100
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65101
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65103
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65110
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65111
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65113
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65120
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65121
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65123
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65130
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65131
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65133
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65140
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65141
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65143
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65150
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65151
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65153
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65160
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65161
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65163
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65171
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65173
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65180
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65181
65101
65111
65113
65121
65123

65143
65151
65153
65181
65183
*65183
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65190
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65191
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65193
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65200
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65201
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65203
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65210
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65211
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65220
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65221
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65223
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65230
65141
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65231
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65233
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65240
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65241
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65243
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65250
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65251
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65253
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65260
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65261
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65263
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65270
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65271
65101
65111
65113
65121
65123

65141
65143
65151
65153
65181
65183
*65273
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65280
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65281
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65283
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65290
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65291
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65293
65101
65111
65113
65121
65123
65141
65143
65151
65153
65181
65183
*65451
65451
65452
65453
65454
*65452
65451
65452
65453
65454
*65453
65451
65452
65453
65454
*65454
65451
65452
65453
65454
65453
65454
*65570
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*65571
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*65573
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*65611
65613
*65613
65613
*65631
65631
*65633
65631
*65641
65641
*65643
65641
65643
*65651
65651
*65653
65651
*65701
65701
*65703
65701
*65801
65801
65803
*65803
65801
65803
*65841
65841
65843
*65843
65841
65843
*65881
65881
*65921
65921
*65923
65921
*65971
65631
*66003
66003
*66211
66211
*66421
66421
66461
66464
*66431
66431
*66460
66612
66622
*66461
66464
*66464
66461
66464
*66500
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66501
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66503
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66510
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66511
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66522
66522
*66531
66531
*66541
66541
*66550
66003

66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66551
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66554
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66561
66561

*66571
66571
*66572
66572
*66580
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66581
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66582
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572

66602
66604
66612
66622
*66583
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66584
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66590
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572

66602
66604
66612
66622
*66591
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66592
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66593
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572

66602
66604
66612
66622
*66594
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
*66602
66602
*66604
66604
*66610
66614
*66612
66612
66614
*66614
66614
*66620
66624
*66622
66622
66624
*66624
66624
*66910
66921
66922
66924
*66911
66921
66922
66924
*66912
66921
66922
66924
*66913
66921

66922
66924
*66914
66921
66922
66924
*66921
66921
*66922
66922
*66924
66924
*66940
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671

63672	66421	63601	6387	63520	63750
63680	66431	63602	6388	63531	63751
63681	66461	63620	64121	63532	63752
63682	66464	63621	64123	63540	63760
63700	66522	63622	64201	63541	63761
63701	66531	63630	64202	63542	63762
63702	66541	63631	64203	63550	63770
63720	66551	63632	64211	63551	63771
63721	66561	63640	64212	63552	63772
63722	66571	63641	64213	63560	63780
63730	66572	63642	64214	63561	63781
63731	66602	63650	64231	63562	63782
63732	66604	63651	64232	63570	6380
63740	66612	63652	64291	63571	6381
63741	66622	63660	64292	63572	6382
63742	66921	63661	64420	63580	6383
63750	66922	63662	64421	63581	6384
63751	66924	63670	66003	63582	6385
63752	67150	63671	66211	63600	6386
63760	67151	63672	66421	63601	6387
63761	67152	63680	66431	63602	6388
63762	67153	63681	66461	63620	64121
63770	67154	63682	66464	63621	64123
63771	67180	63700	66522	63622	64201
63772	67181	63701	66531	63630	64202
63780	67182	63702	66541	63631	64203
63781	67183	63720	66551	63632	64211
63782	67190	63721	66561	63640	64212
6380	67191	63722	66571	63641	64213
6381	67192	63730	66572	63642	64214
6382	67202	63731	66602	63650	64231
6383	*66941	63732	66604	63651	64232
6384	63500	63740	66612	63652	64291
6385	63501	63741	66622	63660	64292
6386	63502	63742	66921	63661	64420
6387	63520	63750	66922	63662	64421
6388	63531	63751	66924	63670	66003
64121	63532	63752	67150	63671	66211
64123	63540	63760	67151	63672	66421
64201	63541	63761	67152	63680	66431
64202	63542	63762	67153	63681	66461
64203	63550	63770	67154	63682	66464
64211	63551	63771	67180	63700	66522
64212	63552	63772	67181	63701	66531
64213	63560	63780	67182	63702	66541
64214	63561	63781	67183	63720	66551
64231	63562	63782	67190	63721	66561
64232	63570	6380	67191	63722	66571
64291	63571	6381	67192	63730	66572
64292	63572	6382	67202	63731	66602
64420	63580	6383	*66942	63732	66604
64421	63581	6384	63500	63740	66612
66003	63582	6385	63501	63741	66622
66211	63600	6386	63502	63742	66921

66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66943
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66944
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
*66980
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731

63732	66604	63650	64214	63561	63781
63740	66612	63651	64231	63562	63782
63741	66622	63652	64232	63570	6380
63742	66921	63660	64291	63571	6381
63750	66922	63661	64292	63572	6382
63751	66924	63662	64420	63580	6383
63752	67150	63670	64421	63581	6384
63760	67151	63671	66003	63582	6385
63761	67152	63672	66211	63600	6386
63762	67153	63680	66421	63601	6387
63770	67154	63681	66431	63602	6388
63771	67180	63682	66461	63620	64121
63772	67181	63700	66464	63621	64123
63780	67182	63701	66522	63622	64201
63781	67183	63702	66531	63630	64202
63782	67190	63720	66541	63631	64203
6380	67191	63721	66551	63632	64211
6381	67192	63722	66561	63640	64212
6382	67202	63730	66571	63641	64213
6383		63731	66572	63642	64214
6384	*66981	63732	66602	63650	64231
6385	63500	63740	66604	63651	64232
6386	63501	63741	66612	63652	64291
6387	63502		66622	63660	64292
6388	63520	63742	66921	63661	64420
64121	63531	63750	66922	63662	64421
64123	63532	63751	66924	63670	66003
64201	63540	63752	67150	63671	66211
64202	63541	63760	67151	63672	66421
64203	63542	63761	67152	63680	66431
64211	63550	63762	67153	63681	66461
64212	63551	63770	67154	63682	66464
64213	63552	63771	67180	63700	66522
64214	63560	63772	67181	63701	66531
64231	63561	63780	67182	63702	66541
64232	63562	63781	67183	63720	66551
64291	63570	63782	67190	63721	66561
64292	63571	6380	67191	63722	66571
64420	63572	6381	67192	63730	66572
64421	63580	6382	67202	63731	66602
66003	63581	6383	*66982	63732	66604
66211	63582	6384	63500	63740	66612
66421	63600	6385	63501	63741	66622
66431	63601	6386	63502	63742	66921
66461	63602	6387	63520	63750	66922
66464	63620	6388	63531	63751	66924
66522	63621	64121	63532	63752	67150
66531	63622	64123	63540	63760	67151
66541	63630	64201	63541	63761	67152
66551	63631	64202	63542	63762	67153
66561	63632	64203	63550	63770	67154
66571	63640	64211	63551	63771	67180
66572	63641	64212	63552	63772	67181
66602	63642	64213	63560	63780	67182

67183
67190
67191
67192
67202
*66983
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702

63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541

66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66984
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631

63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203

64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572

66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66990
63500
63501
63502
63520
63531
63532
63540
63541
63542

63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63642
63650
63651
63652

63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761

63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66991
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66992
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
*66993
63500
63501
63502
63520
63531

63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
63662
63670
63671
63672
63680
63681
63682
63700
63701
63702
63720
63721
63722
63730
63731
63732
63740
63741
63742
63750
63751
63752
63760
63761
63762
63770
63771
63772
63780
63781
63782
6380
6381
6382
6383
6384
6385
6386
6387
6388
64121
64123
64201
64202
64203
64211
64212
64213
64214
64231
64232
64291
64292
64420
64421
66003
66211
66421
66431
66461
66464
66522
66531
66541
66551
66561
66571
66572
66602
66604
66612
66622
66921
66922
66924
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*66994
63500
63501
63502
63520
63531
63532
63540
63541
63542
63550
63551
63552
63560
63561
63562
63570
63571
63572
63580
63581
63582
63600
63601
63602
63620
63621
63622
63630
63631
63632
63640
63641
63642
63650
63651
63652
63660
63661
*67000
03283
0952
09886
09956
*67002
03283
0952
09886
09956
*67004
03283
0952
09886
09956
*67120
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67121
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67122
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67123
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67124
67150
67151
67152

67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67130
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67131
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67133
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67140
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67142
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67144
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67150
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67151
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67152
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67153
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67154
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67180
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67181
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67182
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
*67183
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67184
67150
67151
67152
67153
67154
67180
67181
67182
67183
67184
67190
67191
67192
67202
*67190
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67191
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67192
67150
67151
67152
67153
67154
67180
67181
67182
67183
67184
67190
67191
67192
67202
*67193
67150
67151
67152
67153
67154
67180
67181
67182
67183
67184
67190
67191
67192
67202
*67194
67150
67151
67152
67153
67154
67180
67181
67182
67183
67190
67191
67192
67202
*67202
67202
67204
*67204
67204
*6824
6824
*6828
6824
*6829
6824
*68600
6824
68601
*68601
6824
68601
*68609
6824
68601
*6861
6824
*6868
6824

*6869
6824
*6950
6951
*6951
6951
*6952
6951
*6953
6951
*6954
6951
*69581
6951
*69589
6951
*6959
6951
*70583
6824
*7098
6824
6951
*7100
0498
0499
3239
7712
*71100
00323
09850
09851
09852
09853
09859
09884
09885
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71101
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71102
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71103
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135

71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71104
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71105
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71106
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71107
00323
09850
09851
09852
09853

09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71108
00323
09850
09851
09852
09853
09859
09884
09885
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71109
00323
09850
09851
09852
09853
09859
09884
09885
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
*71110
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71111
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71112
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71113
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71114
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71115
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71116
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71117
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71118
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71119
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71120
00323

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71121
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124

71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187

71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71122
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71123
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71124
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71125
00323
09850
09851
09852
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152

71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71126
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71127
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71128
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71129
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127

71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71130
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123

71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71131
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71132
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134

71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198

71199
*71133
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71134
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71135
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71136
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174

71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71137
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71138
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71139
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71140
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71141
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71142
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71143
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71144
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114

71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71145
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71146
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71147
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184

71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71148
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71149
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71150
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71151
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150

71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71152
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71153
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71154
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182

71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71155
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125

71126	71189	71145	71112	71176	71133
71127	71190	71146	71113	71177	71134
71128	71191	71147	71114	71178	71135
71129	71192	71148	71115	71179	71136
71130	71193	71149	71116	71180	71137
71131	71194	71150	71117	71181	71138
71132	71195	71151	71118	71182	71139
71133	71196	71152	71119	71183	71140
71134	71197	71153	71120	71184	71141
71135	71198	71154	71121	71185	71142
71136	71199	71155	71122	71186	71143
71137	*71156	71156	71123	71187	71144
71138	00323	71157	71124	71188	71145
71139	09850	71158	71125	71189	71146
71140	09851	71159	71126	71190	71147
71141	09852	71170	71127	71191	71148
71142	09853	71171	71128	71192	71149
	09859	71172	71129	71193	71150
71143	71110	71173	71130	71194	71151
71144	71111	71174	71131	71195	71152
71145	71112	71175	71132	71196	71153
71146		71176	71133	71197	71154
71147	71113	71177	71134	71198	71155
71148	71114	71178	71135	71199	71156
71149	71115	71179	71136	*71158	71157
71150	71116	71180	71137	00323	71158
71151	71117	71181	71138	09850	71159
71152	71118	71182	71139	09851	71170
71153	71119	71183	71140	09852	71171
71154	71120	71184	71141	09853	71172
71155	71121	71185	71142	09859	71173
71156	71122	71186	71143	71110	71174
71157	71123	71187	71144	71111	71175
71158	71124	71188	71145	71112	71176
71159	71125	71189	71146	71113	71177
71170	71126	71190	71147	71114	71178
71171	71127	71191	71148	71115	71179
71172	71128	71192	71149	71116	71180
71173	71129	71193	71150	71117	71181
71174	71130	71194	71151	71118	71182
71175	71131	71195	71152	71119	71183
71176	71132	71196	71153	71120	71184
71177	71133	71197	71154	71121	71185
71178	71134	71198	71155	71122	71186
71179	71135	71199	71156	71123	71187
71180	71136	*71157	71157	71124	71188
71181	71137	00323	71158	71125	71189
71182	71138	09850	71159	71126	71190
71183	71139	09851	71170	71127	71191
71184	71140	09852	71171	71128	71192
71185	71141	09853	71172	71129	71193
71186	71142	09859	71173	71130	71194
71187	71143	71110	71174	71131	71195
71188	71144	71111	71175	71132	71196

71197
71198
71199
*71159
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153

71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71160
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120

71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184

71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71161
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141

71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71162
00323
09850
09851
09852
09853

09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172

71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198

71199
*71163
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128

71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191

71192
71193
71194
71195
71196
71197
71198
71199
*71164
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128

71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71160
71161
71162
71163
71164
71165
71166
71167
71168
71169
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71165
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114

71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71160
71161
71162
71163
71164
71165
71166
71167
71168
71169
71170
71171
71172
71173
71174
71175
71176
71177
71178

71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71166
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135

71136	*71167	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71169	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71168	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193
71185	71142	09859	71173	71130	71194
71186	71143	71110	71174	71131	71195
71187	71144	71111	71175	71132	71196
71188	71145	71112	71176	71133	71197
71189	71146	71113	71177	71134	71198
71190	71147	71114	71178	71135	71199
71191	71148	71115	71179	71136	*71170
71192	71149	71116	71180	71137	00323
71193	71150	71117	71181	71138	09850
71194	71151	71118	71182	71139	09851
71195	71152	71119	71183	71140	09852
71196	71153	71120	71184	71141	09853
71197	71154	71121	71185	71142	09859
71198	71155	71122	71186	71143	71110
71199	71156	71123	71187	71144	71111

71112	71176	71133	71196	71152	71118
71113	71177	71134	71197	71153	71119
71114	71178	71135	71198	71154	71120
71115	71179	71136	71199	71155	71121
71116	71180	71137	*71172	71156	71122
71117	71181	71138	00323	71157	71123
71118	71182	71139	09850	71158	71124
71119	71183	71140	09851	71159	71125
71120	71184	71141	09852	71170	71126
71121	71185	71142	09853	71171	71127
71122	71186	71143	09859	71172	71128
71123	71187	71144	71110	71173	71129
71124	71188	71145	71111	71174	71130
71125	71189	71146	71112	71175	71131
71126	71190	71147	71113	71176	71132
71127	71191	71148	71114	71177	71133
71128	71192	71149	71115	71178	71134
71129	71193	71150	71116	71179	71135
71130	71194	71151	71117	71180	71136
71131	71195	71152	71118	71181	71137
71132	71196	71153	71119	71182	71138
71133	71197	71154	71120	71183	71139
71134	71198	71155	71121	71184	71140
71135	71199	71156	71122	71185	71141
71136	*71171	71157	71123	71186	71142
71137	00323	71158	71124	71187	71143
71138	09850	71159	71125	71188	71144
71139	09851	71170	71126	71189	71145
71140	09852	71171	71127	71190	71146
71141	09853	71172	71128	71191	71147
71142	09859	71173	71129	71192	71148
71143	71110	71174	71130	71193	71149
71144	71111	71175	71131	71194	71150
71145	71112	71176	71132	71195	71151
71146	71113	71177	71133	71196	71152
71147	71114	71178	71134	71197	71153
71148	71115	71179	71135	71198	71154
71149	71116	71180	71136	71199	71155
71150	71117	71181	71137	*71173	71156
71151	71118	71182	71138	00323	71157
71152	71119	71183	71139	09850	71158
71153	71120	71184	71140	09851	71159
71154	71121		71141	09852	71170
71155	71122	71185	71142	09853	71171
71156	71123	71186	71143	09859	71172
71157	71124	71187	71144	71110	71173
71158	71125	71188		71111	71174
71159	71126	71189	71145	71112	71175
71170	71127	71190	71146	71113	71176
71171	71128	71191	71147	71114	71177
71172	71129	71192	71148		71178
71173	71130	71193	71149	71115	71179
71174	71131	71194	71150	71116	71180
71175	71132	71195	71151	71117	71181

71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71174
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71175
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71176
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71177
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71178
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114

71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178

71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71179
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135

71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199

*71180
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156

71157
71158
71159
71170

71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71181
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122

71123	71186	71143	71110	71174	71131
71124	71187	71144	71111	71175	71132
71125	71188	71145	71112	71176	71133
71126	71189	71146	71113	71177	71134
71127	71190	71147	71114	71178	71135
71128	71191	71148	71115	71179	71136
71129	71192	71149	71116	71180	71137
71130	71193	71150	71117	71181	71138
	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71182	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71184	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71183	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193
71185	71142	09859	71173	71130	71194

71195
71196
71197
71198
71199
*71185
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71186
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71187
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71188
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170

71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71189
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126

71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71190
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145

71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71191
00323
09850
09851
09852
09853
09859
71110
71111
71112

71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176

71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71192
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133

71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71193	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71195	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71194	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193
71185	71142	09859	71173	71130	71194
71186	71143	71110	71174	71131	71195
71187	71144	71111	71175	71132	71196
71188	71145	71112	71176	71133	71197
71189	71146	71113	71177	71134	71198
71190	71147	71114	71178	71135	71199
71191	71148	71115	71179	71136	*71196
71192	71149	71116	71180	71137	00323
71193	71150	71117	71181	71138	09850
71194	71151	71118	71182	71139	09851
71195	71152	71119	71183	71140	09852
71196	71153	71120	71184	71141	09853
71197	71154	71121	71185	71142	09859

71110	71174	71131	71194	71150	71117
71111	71175	71132	71195	71151	71118
71112	71176	71133	71196	71152	71119
71113	71177	71134	71197	71153	71120
71114	71178	71135	71198	71154	71121
71115	71179	71136	71199	71155	71122
71116	71180	71137	*71198	71156	71123
71117	71181	71138	00323	71157	71124
71118	71182	71139	09850	71158	71125
71119	71183	71140	09851	71159	71126
71120	71184	71141	09852	71170	71127
71121	71185	71142	09853	71171	71128
71122	71186	71143	09859	71172	71129
71123	71187	71144	71110	71173	71130
71124	71188	71145	71111	71174	71131
71125	71189	71146	71112	71175	71132
71126	71190	71147	71113	71176	71133
71127	71191	71148	71114	71177	71134
71128	71192	71149	71115	71178	71135
71129	71193	71150	71116	71179	71136
71130	71194	71151	71117	71180	71137
71131	71195	71152	71118	71181	71138
71132	71196	71153	71119	71182	71139
71133	71197	71154	71120	71183	71140
71134	71198	71155	71121	71184	71141
71135	71199	71156	71122	71185	71142
71136	*71197	71157	71123	71186	71143
71137	00323	71158	71124	71187	71144
71138	09850	71159	71125	71188	71145
71139	09851	71170	71126	71189	71146
71140	09852	71171	71127	71190	71147
71141	09853	71172	71128	71191	71148
71142	09859		71129	71192	71149
71143	71110	71173	71130	71193	71150
71144	71111	71174	71131	71194	71151
71145	71112	71175	71132	71195	71152
71146	71113	71176		71196	71153
71147	71114	71177	71133	71197	71154
71148	71115	71178	71134	71198	71155
71149	71116	71179	71135	71199	71156
71150	71117	71180	71136	*71199	71157
71151	71118	71181	71137	00323	71158
71152	71119	71182	71138	09850	71159
71153	71120	71183	71139	09851	71170
71154	71121	71184	71140	09852	71171
71155	71122	71185	71141	09853	71172
71156	71123	71186	71142	09859	71173
71157	71124	71187	71143	71110	71174
71158	71125	71188	71144	71111	71175
71159	71126	71189	71145	71112	71176
71170	71127	71190	71146	71113	71177
71171	71128	71191	71147	71114	71178
71172	71129	71192	71148	71115	71179
71173	71130	71193	71149	71116	71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71210
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71211
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
*71212
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71213
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71214
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71215
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134

71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188

71189
71190
71191
71192
71193
71194
71195
71196
71197

71198
71199
*71216
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148

71149
71150
71151
71152
71153

71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
*71217
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118

71119

71120	71184	71141	09853	71172	71129
71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71218	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71220	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71219	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192

71193
71194
71195
71196
71197
71198
71199
*71221
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149

71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71222
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71223
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71224
00323

71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71225
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71226
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71227
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71228
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131

71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71229	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71231	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71230	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193
71185	71142	09859	71173	71130	71194
71186	71143	71110	71174	71131	71195
71187	71144	71111	71175	71132	71196
71188	71145	71112	71176	71133	71197
71189	71146	71113	71177	71134	71198
71190	71147	71114	71178	71135	71199
71191	71148	71115	71179	71136	*71232
71192	71149	71116	71180	71137	00323
71193	71150	71117	71181	71138	09850
71194	71151	71118	71182	71139	09851
71195	71152	71119	71183	71140	09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71233
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127

71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150

71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71234
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120

71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71235
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71236
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71237
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71238
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71239
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143

71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71280
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
*71281
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71282
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71283
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117	71181	71138	09850	71159	71126
71118	71182	71139	09851	71170	71127
71119	71183	71140	09852	71171	71128
71120	71184	71141	09853	71172	71129
71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71284	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71286	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71285	71157	71124	71188
71180	71137	00323	71158	71125	71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71287
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71288
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
*71289
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71290
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153

71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71291
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120

71121
71122

71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183

71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71292
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71293
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71294
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128

71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71295
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71296
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71297
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71298
00323

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178

71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71299
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7130
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175

71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7131
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174

71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7132
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7133
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7134
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7135
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7136
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7137
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7138
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7140
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115

71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71500
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71509
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
*71510
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186

71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71518
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71520
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
*71521
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71522
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152

71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71523
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71524
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71525
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71526
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125

71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71527
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71528
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71530
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134

71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198

71199
*71531
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71532
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194

71195
71196
71197
71198
71199
*71533
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154

71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71534
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124

71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71535
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71536
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71537
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71538
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71580
00323

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71589
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125

71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71590
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
*71591
00323
09850
09851
09852
09853
09859
71110
71111
71112

71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71592
00323
09850
09851
09852
09853
09859
71110

71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71593
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71594
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183

71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71595
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71596
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
*71597
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71598
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149

71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71600
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
*71601
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71602
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71603
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122

71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186

71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71604
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143

71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71605
00323
09850
09851
09852
09853
09859
71110

71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174

71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71606
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131

71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195

71196
71197
71198
71199
*71607
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71608
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71609
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
*71610
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159

71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71611
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126

71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71612
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71613
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114

71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178

71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71614
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135

71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199

*71615
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156

71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71616
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123

71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187

71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199

*71617
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143

71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159

71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71618
00323
09850
09851
09852
09853
09859

71110	71173	71130	71194	71151	71118
71111	71174	71131	71195	71152	71119
71112	71175	71132	71196	71153	71120
71113	71176	71133	71197	71154	71121
71114	71177	71134	71198	71155	71122
71115	71178	71135	71199	71156	71123
71116	71179	71136	*71620	71157	71124
71117	71180	71137	00323	71158	71125
71118	71181	71138	09850	71159	71126
71119	71182	71139	09851	71170	71127
71120	71183	71140	09852	71171	71128
71121	71184	71141	09853	71172	71129
71122	71185	71142	09859	71173	71130
71123	71186	71143	71110	71174	71131
71124	71187	71144	71111	71175	71132
71125	71188	71145	71112	71176	71133
71126	71189	71146	71113	71177	71134
71127	71190	71147	71114	71178	71135
71128	71191	71148	71115	71179	71136
71129	71192	71149	71116	71180	71137
	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71619	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71621	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181

71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71622
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71623
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
*71624
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71625
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185

71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71626
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145

71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176

71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71627
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115

71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132

71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196

71197
71198
71199
*71628
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153

71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71629
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120

71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71630	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71632	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71631	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193

71194
71195
71196
71197
71198
71199
*71633
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150

71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71634
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117

71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71635
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131

71132
71133
71134
71135
71136

71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157

71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71637
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71638
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71639
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71640
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133

71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71641
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71642
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
*71643
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
*71644
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71645
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71646
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71647
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179

71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71648
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71649
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71650
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71651
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145

71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71652
00323
09850
09851
09852
09853
09859
71110
71111

71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174

71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71653
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130

71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194

71195
71196
71197
71198
71199
*71654
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151

71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71655
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118

71119	71183	71140	09852	71171	71128
71120	71184	71141	09853	71172	71129
71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71139
71130	71194	71151	71118	71182	71140
71131	71195	71152	71119	71183	71141
71132	71196	71153	71120	71184	71142
71133	71197	71154	71121	71185	71143
71134	71198	71155	71122	71186	71144
71135	71199	71156	71123	71187	71145
71136	*71656	71157	71124	71188	71146
71137	00323	71158	71125	71189	71147
71138	09850	71159	71126	71190	71148
71139	09851	71170	71127	71191	71149
71140	09852	71171	71128	71192	71150
71141	09853	71172	71129	71193	71151
71142	09859	71173	71130	71194	71152
71143	71110	71174	71131	71195	71153
71144	71111	71175	71132	71196	71154
71145	71112	71176	71133	71197	71155
71146	71113	71177	71134	71198	71156
71147	71114	71178	71135	71199	71157
71148	71115	71179	71136	*71658	71158
71149	71116	71180	71137	00323	71159
71150	71117	71181	71138	09850	71170
71151	71118	71182	71139	09851	71171
71152	71119	71183	71140	09852	71172
71153	71120	71184	71141	09853	71173
71154	71121	71185	71142	09859	71174
71155	71122	71186	71143	71110	71175
71156	71123	71187	71144	71111	71176
71157	71124	71188	71145	71112	71177
71158	71125	71189	71146	71113	71178
71159	71126	71190	71147	71114	71179
71170	71127	71191	71148	71115	71180
71171	71128	71192	71149	71116	71181
71172	71129	71193	71150	71117	71182
71173	71130	71194	71151	71118	71183
71174	71131	71195	71152	71119	71184
71175	71132	71196	71153	71120	71185
71176	71133	71197	71154	71121	71186
71177	71134	71198	71155	71122	71187
71178	71135	71199	71156	71123	71188
71179	71136	*71657	71157	71124	71189
71180	71137	00323	71158	71125	71190
71181	71138	09850	71159	71126	71191
71182	71139	09851	71170	71127	71192

71193
71194
71195
71196
71197
71198
71199
*71659
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71660
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71661
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190

71191
71192
71193
71194
71195
71196
71197
71198
71199
*71662
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155

71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71663
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71664
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71665
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71666
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131

71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195

71196
71197
71198
71199
*71667
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152

71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71668
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119

71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176

71177
71178
71179
71180
71181
71182

71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71680
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136

71137
71138

71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71681
00323
09850

09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71682
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71683
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71684
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71685
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71686
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71687
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142

71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71689
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71690
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71691
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71692
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117	71181	71138	09850	71159	71126
71118	71182	71139	09851	71170	71127
71119	71183	71140	09852	71171	71128
71120	71184	71141	09853	71172	71129
71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71693	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71695	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71694	71157	71124	71188
71180	71137	00323	71158	71125	71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71696
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178

71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71697
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138

71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71698
00323
09850
09851
09852
09853

09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71699
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152

71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*7170
83660
*7171
83660
*7172
83660
*7173
83660
*71740
83660
*71741
83660
*71742
83660
*71743
83660
*71749
83660
*7175
83660
*7176
83660
*7177
83660
*71781
83660
*71782
83660
*71783
83660
*71784
83660
*71785
83660
*71789
83660
*7179
83660
*71800
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71801
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71802
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187

71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71803
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189

71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71804
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149

71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71805
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119

71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71807
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150

71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71808
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
*71826
83660
*71836
83660
*71900
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71901
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
*71902
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120

71121	71185	71142	09859	71173	71130
71122	71186	71143	71110	71174	71131
71123	71187	71144	71111	71175	71132
71124	71188	71145	71112	71176	71133
71125	71189	71146	71113	71177	71134
71126	71190	71147	71114	71178	71135
71127	71191	71148	71115	71179	71136
71128	71192	71149	71116	71180	71137
71129	71193	71150	71117	71181	71138
71130	71194	71151	71118	71182	71139
71131	71195	71152	71119	71183	71140
71132	71196	71153	71120	71184	71141
71133	71197	71154	71121	71185	71142
71134	71198	71155	71122	71186	71143
71135	71199	71156	71123	71187	71144
71136	*71903	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71905	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71904	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193

71194
71195
71196
71197
71198
71199
*71906
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150

71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71907
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117

71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181

71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195

71196
71197
71198
71199
*71908
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155

71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71909

00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125

71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156

71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71910
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
71910
71911
71912
71913
71914
71915
71916
71917
71918
71919
*71911
71910
71911
71912
71915
71918
71919
*71912
71910
71911
71912
71913
71915
71918
71919
*71913
71910
71911
71913
71914
71915
71918
71919
*71914
71910
71913
71914
71915
71918
71919
*71915
71910
71915
71916
71917
71918
71919
*71916
71910
71915
71916
71917
71918
71919
*71917
71910
71915
71916
71917
71918
71919
*71918
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
71910
71911
71912
71913
71914
71915
71916
71917
71918
71919
*71919
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
71910
71911
71912
71913
71914
71915
71916
71917
71918
71919
*71920
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71921
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71922
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71923
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71924
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134

71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198

71199
*71925
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155

71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185

71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71926
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121

71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145

71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184

71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71927
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71928
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
*71929
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71930
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149

71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
71931
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71932
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71933
00323

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71934
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125

71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71935
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71936
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71937
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196

71197
71198
71199
*71938
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71939
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71940
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71941
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153

71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71942
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71943
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71944
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71945
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71946
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71947
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71948
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71949
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71950
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71951
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71952
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184

71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71953
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71954
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71955
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128

71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192

71193
71194
71195
71196
71197
71198
71199
*71956
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149

71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71957
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116

71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71958
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71959
00323

09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158

71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191

71192
71193
71194
71195
71196
71197
71198
71199
*71960
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124

71125	71188	71144	71111	71175	71132
71126	71189	71145	71112	71176	71133
71127	71190	71146	71113	71177	71134
71128	71191	71147	71114	71178	71135
71129	71192	71148	71115	71179	71136
71130	71193	71149	71116	71180	71137
71131	71194	71150	71117	71181	71138
71132	71195	71151	71118	71182	71139
71133	71196	71152	71119	71183	71140
71134	71197	71153	71120	71184	71141
71135	71198	71154	71121	71185	71142
71136	71199	71155	71122	71186	71143
71137	*71961	71156	71123	71187	71144
71138	00323	71157	71124	71188	71145
71139	09850	71158	71125	71189	71146
71140	09851	71159	71126	71190	71147
71141	09852	71170	71127	71191	71148
71142	09853	71171	71128	71192	71149
71143	09859	71172	71129	71193	71150
71144	71110	71173	71130	71194	71151
71145	71111	71174	71131	71195	71152
71146	71112	71175	71132	71196	71153
71147	71113	71176	71133	71197	71154
71148	71114	71177	71134	71198	71155
71149	71115	71178	71135	71199	71156
71150	71116	71179	71136	*71963	71157
71151	71117	71180	71137	00323	71158
	71118	71181	71138	09850	71159
71152	71119	71182	71139	09851	71170
71153	71120	71183	71140	09852	71171
71154	71121	71184	71141	09853	71172
71155		71185	71142	09859	71173
71156	71122	71186	71143	71110	71174
71157	71123	71187	71144	71111	71175
71158	71124	71188	71145	71112	71176
71159	71125	71189	71146	71113	71177
71170	71126	71190	71147	71114	71178
71171	71127	71191	71148	71115	71179
71172	71128	71192	71149	71116	71180
71173	71129	71193	71150	71117	71181
71174	71130	71194	71151	71118	71182
71175	71131	71195	71152	71119	71183
71176	71132	71196	71153	71120	71184
71177	71133	71197	71154	71121	71185
71178	71134	71198	71155	71122	71186
71179	71135	71199	71156	71123	71187
71180	71136	*71962	71157	71124	71188
71181	71137	00323	71158	71125	71189
71182	71138	09850	71159	71126	71190
71183	71139	09851	71170	71127	71191
71184	71140	09852	71171	71128	71192
71185	71141	09853	71172	71129	71193
71186	71142	09859	71173	71130	71194
71187	71143	71110	71174	71131	71195

71196
71197
71198
71199
*71964
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152

71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71965
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119

71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183

71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71966
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71967
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71968
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128

71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191

71192
71193
71194
71195
71196
71197
71198
71199
*71969
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137

71138
71139
71140
71141
71142
71143
71144
71145
71146
71147

71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71980
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113

71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71177

71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71981
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134

71135	71199	71156	71123	71187	71144
71136	*71982	71157	71124	71188	71145
71137	00323	71158	71125	71189	71146
71138	09850	71159	71126	71190	71147
71139	09851	71170	71127	71191	71148
71140	09852	71171	71128	71192	71149
71141	09853	71172	71129	71193	71150
71142	09859	71173	71130	71194	71151
71143	71110	71174	71131	71195	71152
71144	71111	71175	71132	71196	71153
71145	71112	71176	71133	71197	71154
71146	71113	71177	71134	71198	71155
71147	71114	71178	71135	71199	71156
71148	71115	71179	71136	*71984	71157
71149	71116	71180	71137	00323	71158
71150	71117	71181	71138	09850	71159
71151	71118	71182	71139	09851	71170
71152	71119	71183	71140	09852	71171
71153	71120	71184	71141	09853	71172
71154	71121	71185	71142	09859	71173
71155	71122	71186	71143	71110	71174
71156	71123	71187	71144	71111	71175
71157	71124	71188	71145	71112	71176
71158	71125	71189	71146	71113	71177
71159	71126	71190	71147	71114	71178
71170	71127	71191	71148	71115	71179
71171	71128	71192	71149	71116	71180
71172	71129	71193	71150	71117	71181
71173	71130	71194	71151	71118	71182
71174	71131	71195	71152	71119	71183
71175	71132	71196	71153	71120	71184
71176	71133	71197	71154	71121	71185
71177	71134	71198	71155	71122	71186
71178	71135	71199	71156	71123	71187
71179	71136	*71983	71157	71124	71188
71180	71137	00323	71158	71125	71189
71181	71138	09850	71159	71126	71190
71182	71139	09851	71170	71127	71191
71183	71140	09852	71171	71128	71192
71184	71141	09853	71172	71129	71193
71185	71142	09859	71173	71130	71194
71186	71143	71110	71174	71131	71195
71187	71144	71111	71175	71132	71196
71188	71145	71112	71176	71133	71197
71189	71146	71113	71177	71134	71198
71190	71147	71114	71178	71135	71199
71191	71148	71115	71179	71136	*71985
71192	71149	71116	71180	71137	00323
71193	71150	71117	71181	71138	09850
71194	71151	71118	71182	71139	09851
71195	71152	71119	71183	71140	09852
71196	71153	71120	71184	71141	09853
71197	71154	71121	71185	71142	09859
71198	71155	71122	71186	71143	71110

71111	71175	71132	71195	71152	71118
71112	71176	71133	71196	71153	71119
71113	71177	71134	71197		71120
71114	71178	71135	71198	71154	71121
71115	71179	71136	71199	71155	71122
71116	71180	71137	*71987	71156	71123
71117	71181	71138	00323	71157	
71118	71182	71139	09850	71158	71124
71119	71183	71140	09851	71159	71125
71120	71184	71141	09852	71170	71126
71121	71185	71142	09853	71171	71127
71122	71186	71143	09859	71172	71128
71123	71187	71144	71110	71173	71129
71124	71188	71145	71111	71174	71130
71125	71189	71146	71112	71175	71131
71126	71190	71147	71113	71176	71132
71127	71191	71148	71114	71177	71133
71128	71192	71149	71115	71178	71134
71129	71193	71150	71116	71179	71135
71130	71194	71151	71117	71180	71136
71131	71195	71152	71118	71181	71137
71132	71196	71153	71119	71182	71138
71133	71197	71154	71120	71183	71139
71134	71198	71155	71121	71184	71140
71135	71199	71156	71122	71185	71141
71136	*71986	71157	71123	71186	71142
71137	00323	71158	71124	71187	71143
71138	09850	71159	71125	71188	71144
71139	09851	71170	71126	71189	71145
71140	09852	71171	71127	71190	71146
71141	09853	71172	71128	71191	71147
71142	09859	71173	71129	71192	71148
71143	71110	71174	71130	71193	71149
71144	71111	71175	71131	71194	71150
71145	71112	71176	71132	71195	71151
71146	71113	71177	71133	71196	71152
71147	71114	71178	71134	71197	71153
71148	71115	71179	71135	71198	71154
71149	71116	71180	71136	71199	71155
71150	71117	71181	71137	*71988	71156
71151	71118	71182	71138	00323	71157
71152	71119	71183	71139	09850	71158
71153	71120	71184	71140	09851	71159
71154	71121	71185	71141	09852	71170
71155	71122	71186	71142	09853	71171
71156	71123	71187	71143	09859	71172
71157	71124	71188	71144	71110	71173
71158	71125	71189	71145	71111	71174
71159	71126	71190	71146	71112	71175
71170	71127	71191	71147	71113	71176
71171	71128	71192	71148	71114	71177
71172	71129	71193	71149	71115	71178
71173	71130		71150	71116	71179
71174	71131	71194	71151	71117	71180

71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71989
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71990
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
*71991
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71992
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146

71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71993
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71994
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71995
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71996
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121

71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184

71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71997
00323
09850
09851
09852
09853
09859

71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140

71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71998
00323
09850
09851
09852

09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129
71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171

71172
71173
71174
71175
71176
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193
71194
71195
71196
71197
71198
71199
*71999
00323
09850
09851
09852
09853
09859
71110
71111
71112
71113
71114
71115
71116
71117
71118
71119
71120
71121
71122
71123
71124
71125
71126
71127
71128
71129

71130
71131
71132
71133
71134
71135
71136
71137
71138
71139
71140
71141
71142
71143
71144
71145
71146
71147
71148
71149
71150
71151
71152
71153
71154
71155
71156
71157
71158
71159
71170
71171
71172
71173
71174
71175
71176
71177
71178
71179
71180
71181
71182
71183
71184
71185
71186
71187
71188
71189
71190
71191
71192
71193

71194
71195
71196
71197
71198
71199
*7210
7211
72191
*7211
7211
72191
*7212
72191
*7213
72142
72191
*72141
72141
72191
*72142
72142
72191
*7215
72191
*7216
72191
*7217
7217
72191
*7218
72191
*72190
72191
*72191
72191
*7220
72271
*72210
72142
*72211
72272
72273
*7222
72142
*72232
72142
*72252
72142
*7226
72142
*72270
72142
*72271
72271
*72272
72272
*72273
72142
72273
*72283
72142
*72290
72142
*72293
72142
*72971
9049
*72972
9047
9048
9049
*72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
*72981
72971
72972
95891
95892
*72989
72971
72972
95891
95892
*7299
72971
72972
95891
95892
*73000
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73001
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73002
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73003
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73004
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73005
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73006
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73007
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
*73008
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026
*73009
00324
37602
37603
73011
73012
73013
73014
73015
73016
73017
73018
73019
73021
73022
73023
73024
73025
73026

73027
73028
73029
*73010
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73011
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73012
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73013
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73014
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73015
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73016
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73017
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73018
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73019
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73020
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73021
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73022
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028

73029
*73023
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73024
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73025
00324
37602
37603
73010

73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73026
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73027
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016

73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73028
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73029
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022

73023
73024
73025
73026
73027
73028
73029
*73030
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73031
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026

73027
*73034
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73032
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73033
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029

*73035
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73036
00324
09161
37602

37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73037
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73038
00324
09161
37602
37603
73010
73011
73012

73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73039
00324
09161
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73080
00324
37602
37603
73010

73011
73012
73013
73014
73015
73016

73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73081
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73082
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73083
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73084
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73085
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73086
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73087
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73088
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73089
00324
37602
37603
73010
73011
73012
73013
73014
73015

73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73090
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73091
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73092
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73093
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73094
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73095
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73096
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73097
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73098
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*73099
00324
37602
37603
73010
73011
73012
73013
73014
73015
73016
73017
73018
73019
73020
73021
73022
73023
73024
73025
73026
73027
73028
73029
*7310
73010
73020
*7311
73010
73020
*73310
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*73314
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
*73315
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
*73316

82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
*73319
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249

8251
82531
82532
82533
82534
82535
*73340
73340
73341
73342
73343
73344
73345
73349
*73341
73340
73341
73345
73349
*73342
73340
73342
73345
73349
*73343
73340
73343
73345
73349
*73344
73340
73344
73345
73349
*73345
73340
73341
73342
73343
73344
73345
73349
*73349
73340
73341
73342
73343
73344
73345
73349
*73399
09161
*7400
7400

7401
7402
*7401
7400
7401
7402
*7402
7400
7401
7402
*7420
7420
7422
*7421
7420
7422
*7422
7420
7422
*7424
7420
7422
7424
*74400
38300
38302
*74402
38300
38302
*74409
38300
38302
*74429
38300
38302
*7443
38300
38302
*7450
7455
74561
74789
7479
*74510
7455
74561
74789
7479
*74511
7455
74561
74789
7479
*74512

7455
74561
74789
7479
*74519
7455
74561
74789
7479
*7452
7455
74561
74789
7479
*7453
7455
74561
74789
7479
*7454
74789
7479
*7455
7455
74561
74789
7479
*74560
7455
74561
74789
7479
*74561
7455
74561
74789
7479
*7457
7455
74561
74789
7479
*7458
7455
74561
74789
7479
*7459
7455

74561
74789
7479
*74600
74600
74609
7479
*74601
74600
74609
7479
*74602
74600
74609
7479
*74609
07422
09884
09885
3911
74600
74609
7479
*7461
7479
*7462
7479
*7463
7479
*7464
7479
*7465
7479
*7466
7479
*7467
7479
*74681
74687
7479
*74682
74687
7479
*74683
74687
7479
*74684
74687
7479
*74685
74685
7479
*74686
4250

4251
4252
4253
4254
4255
4257
4258
4259
7479
*74687
74687
7479
*74689
07422
09884
09885
3911
7455
74561
74600
74609
74685
74687
7479
*7469
7455
74561
74600
74609
74685
74687
7479
*7470
7470
7479
*74710
74710
74720
74721
74729
7479
*74711
74710
74720
74721
74729
7479
*74720
74710
74720
74721
74729
7479
*74721

74710
74720
74721
74729
7479
*74722
74710
74720
74721
74729
7479
*74729
74729
7479
*7473
7473
7479
*74740
74740
7479
*74741
74741
7479
*74742
74742
7479
*74749
74749
7479
*7475
7479
*74760
7479
*74761
7479
*74762
7479
*74763
7479
*74764
7479
*74769
7479
*74781
74781
7479
*74782
74782
7479
*74789
7455
74561
74600
74609
74687
7470
74710
74720
74721
74729
7473
74740
74741
74742
74749
74781
74782
7479
*7479
7455
74561
74600
74609
74687
74710
74720
74721
74729
7473
74740
74741
74742
74749
74781
74782
7479
*7483
7483
*74861
5183
*7488
7483
*7489
7483
*7503
7503
*7504
7503
7504
*7506
7566
*7510
7515
*7511
7511
7515
*7512
7512
7515
*7513
7513
7515
*7514
7514
7515
*7515
7514
7515
*75160
75160
75169
*75161
5762
75161
75169
*75162
75162
75169
*75169
75162
75169
*7517
7517
*7518
7503
7504
7511
7512
7513
75161
7517
*7519
7503
7504
7511
7512
7513
75161
7517
*75261
5991
*75262
5991
*75263
5991
*75264
5991
*75265
5991
*75269
5991
*75281
5991
6147
*75289
5991
6147
*7529
5991
6147
*7530
7530
*75310
75310
*75311
75311
*75312
75312
75313
75314
*75313
75312
75313
75314
*75314
75312
75313
75314
*75315
75315
*75316
75316
75317
75319
*75317
75316
75317
75319
*75320
75320
75321
75322
75323
75329
*75321
75320
75321
75322
75323
75329
*75322
75320
75321
75322
75323
75329
*7534
5934
*7535
5934
7535
*7536
7536
*7539
5934
5991
7535
7536
*7542
7542
*75481
75489
*75482
75489
*75489
75489
*75550
75555
*75555
75555
*75559
75555
*75610
75613
*75611
75613
*75612
75613
*75613
75613
*75614
75613
*75615
75613
*75616
75613
*75617
75613
*75619
75613
*7562
7563
*7563
7563
*75650
75651
75652
*75651
75651
75652
*75652
75651
75652
*75653
75651
75652
*75654
75651
75652
*75655
75651
75652
*75656
75651
75652
*75659
75651
75652
*7566
7566
*75670
75670
75671
75679
*75671
75670
75671
75679
*75683
75683
*75689
75683
*7580
7581
7582
75831

75832
75833
75839
*7581
7581
7582
75831
75832
75833
75839
*7582
7581
7582
75831
75832
75833
75839
*75831
7581
7582
75832
75833
75839
*75832
7581
7582
75831
75833
75839
*75833
7581
7582
75831
75832
75839
*7584
7581
7582
75831
75832
75833
*7585
7581
7582
75831
75832
75833
75839
*7586
7581
7582
75831
75832
75833
75839
*7587
7581
7582
75831
75832
75833
75839
*7589
7581
7582
75831
75832
75833
75839
*7590
7590
*7593
7593
7597
*7594
7594
*7595
7595
*7596
7595
7596
75981
75982
*7597
7455
74561
74600
74609
74687
74710
74720
74721
74729
7593
7594
7595
7597
75981
75982
*75981
75981
75982
75989
*75982
75981
75982
75989
*75983
75981
75982
75989
*75989
7455
74561
74600
74609
74687
74710
74720
74721
74729
75981
75982
75989
*7599
7590
7593
7594
7595
7596
7597
75981
75982
*76382
65631
*7685
7687
*7686
7687
*7689
7687
*77011
77087
*77013
77087
*77015
77087
*77017
77087
*7706
77087
*77081
77082
77083
77087
*77082
77081
77082
77083
77087
*77083
77081
77082
77083
77087
*77084
77087
*77085
77087
*77087
77081
77082
77083
*77088
77081
77082
77083
77087
*77089
77081
77082
77083
77087
*7709
77081
77082
77083
77087
*7712
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
06640
06641
06642
06649
0737
0819
0869
124
32301
32302
3231
3232
32341
32342
32351
32352
32361
32362
32363
32371
32372
32381
32382
3239
7712
*77181
0031
0202
0223
*77182
77189
*77183
0031
0202
0223
77189
*77189
0031
0202
0223
7714
7715
77182
77189
*7740
7824
*7741
7824
*7742
7824
*77430
7824
*77431
7824
*77439
7824
*7744
7824
*7745
7824
*7746
7824
*7747
7824
*7750
0040
77589
*7751
0040
77589
*7752
0040
77589
*7753
0040
77589
*7754
0040
77589
*7755
0040
77581
77589
*7756
0040
77589
*7757
0040
77581

*80004	*80039	*80072	*80105	*80140	*80173
4329	4329	4329	4329	4329	4329
*80005	*80040	*80073	*80106	*80141	*80174
4329	4329	4329	4329	4329	4329
*80006	*80041	*80074	*80109	*80142	*80175
4329	4329	4329	4329	4329	4329
*80009	*80042	*80075	*80110	*80143	*80176
4329	4329	4329	4329	4329	4329
*80010	*80043	*80076	*80111	*80144	*80179
4329	4329	4329	4329	4329	4329
*80011	*80044	*80079	*80112	*80145	*80180
4329	4329	4329	4329	4329	4329
*80012	*80045	*80080	*80113	*80146	*80181
4329	4329	4329	4329	4329	4329
*80013	*80046	*80081	*80114	*80149	*80182
4329	4329	4329	4329	4329	4329
*80014	*80049	*80082	*80115	*80150	*80183
4329	4329	4329	4329	4329	4329
*80015	*80050	*80083	*80116	*80151	*80184
4329	4329	4329	4329	4329	4329
*80016	*80051	*80084	*80119	*80152	*80185
4329	4329	4329	4329	4329	4329
*80019	*80052	*80085	*80120	*80153	*80186
4329	4329	4329	4329	4329	4329
*80020	*80053	*80086	*80121	*80154	*80189
4329	4329	4329	4329	4329	4329
*80021	*80054	*80089	*80122	*80155	*80190
4329	4329	4329	4329	4329	4329
*80022	*80055	*80090	*80123	*80156	*80191
4329	4329	4329	4329	4329	4329
*80023	*80056	*80091	*80124	*80159	*80192
4329	4329	4329	4329	4329	4329
*80024	*80059	*80092	*80125	*80160	*80193
4329	4329	4329	4329	4329	4329
*80025	*80060	*80093	*80126	*80161	*80194
4329	4329	4329	4329	4329	4329
*80026	*80061	*80094	*80129	*80162	*80195
4329	4329	4329	4329	4329	4329
*80029	*80062	*80095	*80130	*80163	*80196
4329	4329	4329	4329	4329	4329
*80030	*80063	*80096	*80131	*80164	*80199
4329	4329	4329	4329	4329	4329
*80031	*80064	*80099	*80132	*80165	*80300
4329	4329	4329	4329	4329	4329
*80032	*80065	*80100	*80133	*80166	*80301
4329	4329	4329	4329	4329	4329
*80033	*80066	*80101	*80134	*80169	*80302
4329	4329	4329	4329	4329	4329
*80034	*80069	*80102	*80135	*80170	*80303
4329	4329	4329	4329	4329	4329
*80035	*80070	*80103	*80136	*80171	*80304
4329	4329	4329	4329	4329	4329
*80036	*80071	*80104	*80139	*80172	*80305
4329	4329	4329	4329	4329	4329

77589
*7759
0040
77581
77589
*7765
2828
2829
28401
28409
5173
7765
7766
*7766
2828
2829
28401
28409
2841
2842
5173
7765
7766
*7767
7767
*7768
7767
*7769
7767
*7771
7774
*7772
7774
*7773
7774
*7774
7774
*7775
0030
0040
0052
0062
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
7774
*7776
03283
0952
09886
09956
7774
*7778
0030
0040
0052
0062
00800
00801
00802
00803
00804
00809
0081
0082
0083
0085
00861
00862
00863
00864
00865
00866
00867
00869
1230
7774
*7779
7774
*7781
7781
7785
*7782
7785
*7783
7785
*7784
7785
*7785
7781
7785
*7790
7792
*7791
7792
*7792
7792
*7794
7795
*7795
7795
*77985
77087
*7799
77189
*78001
4329
*78002
4329
*78003
4329
*78009
4329
*78091
78951
78959
*78092
78951
78959
*78093
78951
78959
*78094
78951
78959
*78095
78951
78959
*78096
78951
78959
*78097
78951
78959
*78099
78951
78959
*7814
7814
*7816
7816
*7818
7818
*78191
7818
*78192
7818
*78194
7814
7816
7818
*78199
7818
*7824
7824
*7825
77083
*7829
7824
*7843
7843
*78440
7843
*78441
7843
*78449
7843
*7845
7843
*7850
4250
4251
4252
4253
4254
4255
4257
4258
4259
*7851
4250
4251
4252
4253
4254
4255
4257
4258
4259
*78550
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*78551
4111
4250
4251
4252
4253
4254
4255
4257
4258
4259
*78603
77081
77082
77083
77087
*7881
5991
77182
*7888
7888
*7889
7888
*78930
78951
78959
*78931
78951
78959
*78932
78951
78959
*78933
78951
78959
*78934
78951
78959
*78935
78951
78959
*78936
78951
78959
*78937
78951
78959
*78939
78951
78959
*78940
78951
78959
*78941
78951
78959
*78942
78951
78959
*78943
78951
78959
*78944
78951
78959
*78945
78951
78959
*78946
78951
78959
*78947
78951
78959
*78949
78951
78959
*78951
78951
78959
*78959
78951
78959
*7899
78951
78959
*7903
2939
*7907
77189
*7991
77087
*79981
78951
78959
*79989
78951
78959
*80000
4329
*80001
4329
*80002
4329
*80003
4329

*80306	*80341	*80374	*80409	*80442	*80475
4329	4329	4329	4329	4329	4329
*80309	*80342	*80375	*80410	*80443	*80476
4329	4329	4329	4329	4329	4329
*80310	*80343	*80376	*80411	*80444	*80479
4329	4329	4329	4329	4329	4329
*80311	*80344	*80379	*80412	*80445	*80480
4329	4329	4329	4329	4329	4329
*80312	*80345	*80380	*80413	*80446	*80481
4329	4329	4329	4329	4329	4329
*80313	*80346	*80381	*80414	*80449	*80482
4329	4329	4329	4329	4329	4329
*80314	*80349	*80382	*80415	*80450	*80483
4329	4329	4329	4329	4329	4329
*80315	*80350	*80383	*80416	*80451	*80484
4329	4329	4329	4329	4329	4329
*80316	*80351	*80384	*80419	*80452	*80485
4329	4329	4329	4329	4329	4329
*80319	*80352	*80385	*80420	*80453	*80486
4329	4329	4329	4329	4329	4329
*80320	*80353	*80386	*80421	*80454	*80489
4329	4329	4329	4329	4329	4329
*80321	*80354	*80389	*80422	*80455	*80490
4329	4329	4329	4329	4329	4329
*80322	*80355	*80390	*80423	*80456	*80491
4329	4329	4329	4329	4329	4329
*80323	*80356	*80391	*80424	*80459	*80492
4329	4329	4329	4329	4329	4329
*80324	*80359	*80392	*80425	*80460	*80493
4329	4329	4329	4329	4329	4329
*80325	*80360	*80393	*80426	*80461	*80494
4329	4329	4329	4329	4329	4329
*80326	*80361	*80394	*80429	*80462	*80495
4329	4329	4329	4329	4329	4329
*80329	*80362	*80395	*80430	*80463	*80496
4329	4329	4329	4329	4329	4329
*80330	*80363	*80396	*80431	*80464	*80700
4329	4329	4329	4329	4329	80700
*80331	*80364	*80399	*80432	*80465	80701
4329	4329	4329	4329	4329	80702
*80332	*80365	*80400	*80433	*80466	80703
4329	4329	4329	4329	4329	8190
*80333	*80366	*80401	*80434	*80469	8191
4329	4329	4329	4329	4329	*80701
*80334	*80369	*80402	*80435	*80470	80700
4329	4329	4329	4329	4329	80701
*80335	*80370	*80403	*80436	*80471	80702
4329	4329	4329	4329	4329	80703
*80336	*80371	*80404	*80439	*80472	8190
4329	4329	4329	4329	4329	8191
*80339	*80372	*80405	*80440	*80473	*80702
4329	4329	4329	4329	4329	80700
*80340	*80373	*80406	*80441	*80474	80701
4329	4329	4329	4329	4329	80702

80703
8190
8191
*80703
80700
80701
80702
80703
8190
8191
*80704
80700
80701
80702
80703
8190
8191
*80705
80700
80701
80702
80703
8190
8191
*80706
80700
80701
80702
80703
8190
8191
*80707
80700
80701
80702
80703
8190
8191
*80708
80700
80701
80702
80703
8190
8191
*80709
80700
80701
80702
80703
8190
8191
*80710
80700
80701

80702
80703
8190
8191
*80711
80700
80701
80702
80703
8190
8191
*80712
80700
80701
80702
80703
8190
8191
*80713
80700
80701
80702
80703
8190
8191
*80714
80700
80701
80702
80703
8190
8191
*80715
80700
80701
80702
80703
8190
8191
*80716
80700
80701
80702
80703
8190
8191
*80717
80700
80701
80702
80703
8190

8191
*80718
80700
80701
80702
80703
8190
8191
*80719
80700
80701
80702
80703
8190
8191
*8072
80700
80701
80702
80703
8190
8191
*8073
80700
80701
80702
80703
8190
8191
*8074
80700
80701
80702
80703
8190
8191
*8080
80841
8090
8091
*8081
80841
8090
8091
*8082
80841
8090
8091
*8083
80841
8090
8091
*80841
80841
8090
8091

*80842
80841
80842
8090
8091
*80843
80841
8090
8091
*80849
80841
8090
8091
*80851
80841
8090
8091
*80852
80841
8090
8091
*80853
80841
8090
8091
*80859
80841
8090
8091
*8088
80841
8090
8091
*8089
80841
8090
8091
*8090
80841
8090
8091
*8091
80841
8090
8091
*81000
81010
81011
81012
81013
*81001
81010
81011
81012

81013
*81002
81010
81011
81012
81013
*81003
81010
81011
81012
81013
*81010
81010
81011
81012
81013
*81011
81010
81011
81012
81013
*81012
81010
81011
81012
81013
*81013
81010
81011
81012
81013
*81100
81110
81111
81112
81113
*81101
81110
81111
81112
81113
*81102
81110
81111
81112
81113
*81103
81110
81111
81112
81113

81119
*81109
81110
81111
81112
81113
81119
*81110
81110
81111
81112
81113
81119
*81111
81110
81111
81112
81113
81119
*81112
81110
81111
81112
81113
81119
*81113
81110
81111
81112
81113
81119
*81119
81110
81111
81112
81113
81119
*81200
81200
81201
81202
81203
81209
81220
81240
81241
81242
81243
81244
81249
8181
8190
8191
*81201

81200
81201
81202
81203
81209
81220
81240
81241
81242
81243
81244
81249
8181
8190
8191
*81202
81200
81201
81202
81203
81209
81220
81240
81241
81242
81243
81244
81249
8181
8190
8191
*81203
81200
81201
81202
81203
81209
81220
81240
81241
81242
81243
81244
81249
8181
8190
8191
*81209
81200
81201
81202
81203
81209
81220
81240
81241
81242
81243
81244
81249
8181
8190
8191
*81210
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81211
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81212
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81213
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81219
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81220
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81221
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81230
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81231
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181

8190
8191
*81240
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81241
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81242
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81243
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81244
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81249
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81250
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81251
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81252
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81253
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81254
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81259
81200

81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
8181
8190
8191
*81300
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81301
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81302
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81303
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81304
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81305
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81306
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81307
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81308
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
8181
8190
8191
*81310
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81311
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81312
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81313
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352

81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81314
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81315
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81316
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81317
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81318
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81320
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81321
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
*81322
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190

8191
*81323
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81330
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81331
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81332
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81333
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81340
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81341
81310
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81342
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81343
81310
81311
81312
81313
81314
81315
81316
81317
81318

81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81344
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81345
81320
81321
81322
81323
81340
81341
81342
81343
81344
81345
81380
81382
81383
*81350
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
*81352
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
8181
8190
8191
*81351
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81353
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81354
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
8181
8190
8191
*81380
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
8181
8190
8191
*81381
81310
81311
81312
81313
81314

81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81382
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321

81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81383
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81390
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81391
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81392
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81393
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
8181
8190
8191
*81400
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81401
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81402
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81403
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419

8171
8181
8190
8191
*81404
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81405
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81406
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81407
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81408
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81409
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81410
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81411
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81412
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81413
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81414
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81415
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81416
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81417
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81418
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81419
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
8171
8181
8190
8191
*81500
81510
81511
81512
81513
81514
81515
81516
81517
81518
81519
8171
8181
8190
8191
*81501
81510
81511
81512
81513
81514
81515
81516
81517
81518
81519
8171
8181
8190
8191
*81502
81510
81511
81512
81513
81514
81515
81516
81517
81518
81519
8171
8181
8190
8191
*81503
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81504
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81509
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81510
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81511
81510

81511
81512
81513
81514
81519
8171
8181
8190
8191
*81512
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81513
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81514
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81519
81510
81511
81512
81513
81514
81519
8171
8181
8190
8191
*81600
81610
81611
81612
81613
8171
8181
8190
8191
*81601
81610
81611
81612
81613
8171
8181
8190
8191
*81602
81610
81611
81612
81613
8171
8181
8190
8191
*81603
81610
81611
81612
81613
8171
8181
8190
8191
*81610
81610
81611
81612
81613
8171
8181
8190
8191
*81611
81610
81611
81612
81613
8171
8181
8190
8191
*81612
81610
81611
81612
81613
8171
8181
8190
8191
*81613
81610
81611
81612
81613
8171
8181
8190
8191
*8170
81510
81511
81512
81513
81514
81519
81610
81611
81612
8171
8181
8190
8191
*8171
81510
81511
81512
81513
81514
81519
81610
81611
81612
8171
8181
8190
8191
*8180
81010
81011
81012
81013
81110
81111
81112
81113
81119
81210
81211
81212
81213
81219
81230
81231
81250
81251
81252
81253
81254
81259
81310
81311
81312
81313
81314
81315
81316
81317
81318
81330
81331
81332
81333
81350
81351
81352
81353
81354
81390
81391
81392
81393
81613
8171
8181
8190
8191
*8181
81010
81011
81012
81013
81110
81111
81112
81113
81119
81210
81211
81212
81213
81219
81230
81231
81250
81251
81252
81253
81254
81259
81310
81311
81312
81313
81314
81315
81316
81317
81318
81330
81331
81332
81333
81350
81351
81352
81353
81354
81390
81391
81392
81393
81613
8171
8181
8190
8191
*8190
80700
80701
80702
80703
81010
81011
81012
81013
81110
81111
81112
81113
81119
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382

81383
81390
81391
81392
81393
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
81613
8171
8181
8190
8191
*8191
80700
80701
80702
80703
81010
81011
81012
81013
81110
81111
81112
81113
81119
81200
81201
81202
81203
81209
81210
81211
81212
81213
81219
81220
81230
81231
81240
81241
81242
81243
81244
81249
81250
81251
81252
81253
81254
81259
81310
81311
81312
81313
81314
81315
81316
81317
81318
81320
81321
81322
81323
81330
81331
81332
81333
81340
81341
81342
81343
81344
81345
81350
81351
81352
81353
81354
81380
81382
81383
81390
81391
81392
81393
81410
81411
81412
81413
81414
81415
81416
81417
81418
81419
81613
8171
8181
8190
8191
*82000
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82001
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82002
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82003
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82009
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82010
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82011
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82012
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82013
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82019
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82020
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82021
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82022
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82030
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82031
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82032
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*8208
82120
82121
82122
82123
82129

82130
82131
82132
82133
8271
8280
8281
*8209
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82100
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82101
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82110
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
82132
82133
8271
8280
8281
*82111
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82120
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82121
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82122
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
8271
8280
8281
*82123
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82129
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82130
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82131
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
8281
*82132
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82133
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*82139
82120
82121
82122
82123
82129
82130
82131
82132
82133
8271
8280
8281
*8220
82139
8220
8271
8280
8281
*8221
82139
8220
8221
8271
8280
8281
*82300
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82301
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82302
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82310
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82311
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271

8280
8281
*82312
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82320
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82321
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82322
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82330
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82331
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82332
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82340
82340
82342
82380
*82341
82340
82342
82380
*82342
82340
82342
82380
*82380
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82381
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82382
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82390
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*8240
8271
8280
8281
*8241
8241
8243
8245
8247
8249
8271
8280
8281
*8242
8241
8243
8245
8247
8249
8271
8280
8281
*8243
8241
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*82392
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82340
82342
82380
82382
82390
82391
82392
8271
8280
8281
*8240
8271
8280
8281
*8241
8241
8243
8245
8247
8249
8271
8280
8281
*8242
8241
8243
8245
8247
8249
8271
8280
8281
*8243
8241

8243
8245
8247
8249
8271
8280
8281
*8244
8241
8243
8245
8247
8249
8271
8280
8281
*8245
8241
8243
8245
8247
8249
8271
8280
8281
*8246
8241
8243
8245
8247
8249
8271
8280
8281
*8247
8241
8243
8245
8247
8249
8271
8280
8281
*8248
8241
8243
8245
8247
8249
8271
8280
8281
*8249
8241

8243
8245
8247
8249
8271
8280
8281
*8250
82530
82539
8271
8280
8281
*8251
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82520
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82521
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82522
8251
82530
82531
82532
82533
82534
82535
82539

82532
82533
82534
82535
82539
8271
8280
8281
*82523
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82524
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82525
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82529
8251
82530
82531
82532
82533
82534
82535
82539

8271
8280
8281
*82530
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82531
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82532
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82533
8251
82530
82531
82532
82533
82534
82535
82539

82531
82532
82533
82534
82535
82539
8271
8280
8281
*82535
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*82539
8251
82530
82531
82532
82533
82534
82535
82539
8271
8280
8281
*8260
82530
82539
8271
8280
8281
*8261
82530
82539
8271
8280
8281
*8270
82120
82121
82122
82123
82129
82130
82131
82132

82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8271
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382

82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8280
80700
80701
80702
80703
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8220
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392

8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8281
80700
80701
80702
80703
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392

8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8290
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8291
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
8271
8280
8281
*8300
8301
*8301
8301
83979
8399
*83110
83110
83979
8399
*83111
83111
83979
8399
*83112
83112
83979
8399
*83113
83113
83979
8399
*83114
83114
83979
8399
*83119
83119
83979
8399
*83210
83210
83979
8399
*83211
83211
83979
8399
*83212
83212
83979
8399
*83213
83213
83979
8399
*83214
83214
83979
8399
*83219
83219
83979
8399
*83300
83310
83313
83314
83315
83319
*83301
83310
83313
83314
83315
83319
*83302
83310
83313
83314
83315
83319
*83303
83310
83313
83314
83315
83319
*83304
83310
83313
83314
83315
83319
*83305
83310
83313
83314
83315
83319
*83309
83310
83313
83314
83315
83319
*83310
83310
83313
83314
83315
83319
*83311
83310
83311
83313
83314
83315
83319
*83312
83310
83312
83313
83314
83315

83319
83979
8399
*83313
83310
83313
83314
83315
83319
83979
8399
*83314
83310
83313
83314
83315
83319
83979
8399
*83315
83310
83313
83314
83315
83319
83979
8399
*83319
83310
83313
83314
83315
83319
83979
8399
*83410
83979
8399
*83411
83979
8399
*83412
83979
8399
*83500
80841
8090
8091
83500
*83501
80841
8090
8091
83501
*83502
80841
8090
8091
83502
*83503
80841
8090
8091
83503
*83510
80841
8090
8091
83510
83979
8399
*83511
80841
8090
8091
83511
83979
8399
*83512
80841
8090
8091
83512
83979
8399
*83513
80841
8090
8091
83513
83979
8399
*8363
8364
*8364
8364
83979
8399
*83660
83660
83979
8399
*83661
83661
83979
8399
*83662
83662
83979
8399
*83663
83663
83979
8399
*83664
83664
83979
8399
*83669
83669
83979
8399
*8371
8371
83979
8399
*83810
83979
8399
*83811
83979
8399
*83812
83979
8399
*83813
83979
8399
*83814
83979
8399
*83815
83979
8399
*83816
83979
8399
*83819
83979
8399
*83910
83950
83959
83979
8399
*83911
83950
83959
83979
8399
*83912
83950
83959
83979
8399
*83913
83950
83959
83979
8399
*83914
83950
83959
83979
8399
*83915
83950
83959
83979
8399
*83916
83950
83959
83979
8399
*83917
83950
83959
83979
8399
*83918
83950
83959
83979
8399
*83921
83931
*83930
83930
83950
83959
83979
8399
*83931
83931
83950
83959
83979
8399
*83950
83950
83959
83979
8399
*83951
83950
83959
83979
8399
*83952
83950
83952
83959
83979
8399
*83959
83950
83959
83979
8399
*83961
83961
83971
*83969
8301
83110
83111
83112
83113
83114
83119
83500
83501
83502
83503
83510
83511
83512
83513
83660
83661
83662
83663
83664
83669
8371
*83971
83961
83971
83979
8399
*83979
8301
83110
83111
83112
83113
83114
83119
83500
83501
83502
83503
*8398
8301
83110
83111
83112
83113
83114
83119
83500
83501
83502
83503
*8399
8301
83110
83111
83112
83113
83114
83119
83500
83501
83502
83503

83510
83511
83512
83513
83660
83661
83662
83663
83664
83669
8371
83950
83959
83979
8399
*8430
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*8431
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*8438
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*8439
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*8460
80841
8090
8091
*8461
80841
8090
8091
*8462
80841
8090
8091
*8463
80841
8090
8091
*8468
80841
8090
8091
*8469
80841
8090
8091
*8470
8742
8744
*8485
80841
8090
8091
*8488
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*8500
4329
*85011
4329
*85012
4329
*8502
4329
*8503
4329
*8504
4329
*8505
4329
*8509
4329
*85100
4329
*85101
4329
*85102
4329
*85103
4329
*85104
4329
*85105
4329

*85106	*85141	*85174	*85209	*85243	*85316
4329	4329	4329	4329	4329	4329
*85109	*85142	*85175	*85210	*85244	*85319
4329	4329	4329	4329	4329	4329
*85110	*85143	*85176	*85211	*85245	*85400
4329	4329	4329	4329	4329	4329
*85111	*85144	*85179	*85212	*85246	*85401
4329	4329	4329	4329	4329	4329
*85112	*85145	*85180	*85213	*85249	*85402
4329	4329	4329	4329	4329	4329
*85113	*85146	*85181	*85214	*85250	*85403
4329	4329	4329	4329	4329	4329
*85114	*85149	*85182	*85215	*85251	*85404
4329	4329	4329	4329	4329	4329
*85115	*85150	*85183	*85216	*85252	*85405
4329	4329	4329	4329	4329	4329
*85116	*85151	*85184	*85219	*85253	*85406
4329	4329	4329	4329	4329	4329
*85119	*85152	*85185	*85221	*85254	*85409
4329	4329	4329	4329	4329	4329
*85120	*85153	*85186	*85222	*85255	*85410
4329	4329	4329	4329	4329	4329
*85121	*85154	*85189	*85223	*85256	*85411
4329	4329	4329	4329	4329	4329
*85122	*85155	*85190	*85224	*85259	*85412
4329	4329	4329	4329	4329	4329
*85123	*85156	*85191	*85225	*85300	*85413
4329	4329	4329	4329	4329	4329
*85124	*85159	*85192	*85226	*85301	*85414
4329	4329	4329	4329	4329	4329
*85125	*85160	*85193	*85229	*85302	*85415
4329	4329	4329	4329	4329	4329
*85126	*85161	*85194	*85230	*85303	*85416
4329	4329	4329	4329	4329	4329
*85129	*85162	*85195	*85231	*85304	*85419
4329	4329	4329	4329	4329	4329
*85130	*85163	*85196	*85232	*85305	*86100
4329	4329	4329	4329	4329	86100
*85131	*85164	*85199	*85233	*85306	*86101
4329	4329	4329	4329	4329	86100
*85132	*85165	*85200	*85234	*85309	*86102
4329	4329	4329	4329	4329	86100
*85133	*85166	*85201	*85235	*85310	*86103
4329	4329	4329	4329	4329	86100
*85134	*85169	*85202	*85236	*85311	*86110
4329	4329	4329	4329	4329	86100
*85135	*85170	*85203	*85239	*85312	*86111
4329	4329	4329	4329	4329	86100
*85136	*85171	*85204	*85240	*85313	*86112
4329	4329	4329	4329	4329	86100
*85139	*85172	*85205	*85241	*85314	*86113
4329	4329	4329	4329	4329	86100
*85140	*85173	*85206	*85242	*85315	*86120
4329	4329	4329	4329	4329	86120

86121
*86121
86120
86121
*86122
86120
86121
*86130
86120
86121
*86131
86120
86121
*86132
86120
86121
*8620
8620
*8621
8620
*86229
86100
86120
86121
8620
8628
*86239
86100
86120
86121
8620
8628
*8628
86100
86120
86121
8620
8628
*8629
86100
86120
86121
8620
8628
*8630
72973
8630
86380
86389
95893
*8631
72973
8630
86380

86389
95893
*86320
72973
86320
86321
86329
86380
86389
95893
*86321
72973
86320
86321
86329
86380
86389
95893
*86329
72973
86320
86321
86329
86380
86389
95893
*86330
72973
86320
86321
86329
86380
86389
95893
*86331
72973
86320
86321
86329
86380
86389
95893
*86339
72973
86320
86321
86329
86380
86389
95893
*86340
72973
86340
86341

86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86341
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86342
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86343
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86344
72973

86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86345
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86346
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86349
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893

*86350
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86351
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86352
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86353
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385

86389
95893
*86354
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86355
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86356
72973
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86359
72973
86340
86341
86342
86343
86344
86345
86346
86349

86380
86385
86389
95893
*86380
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86389
95893
*86381
72973
86381
86382
86383
86384
86389
95893
*86382
72973
86381
86382
86383
86384
86389
95893
*86383
72973
86381
86382
86383
86384
86389
95893
*86384
72973
86381

86382
86383
86384
86389
95893
*86385
72973
86385
95893
*86389
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86390
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86385
86389
95893
*86391
72973
86381
86382
86383
86384
86389
95893
*86392

72973
86381
86382
86383
86384
86389
95893
*86393
72973
86381
86382
86383
86384
86389
95893
*86394
72973
86381
86382
86383
86384
86389
95893
*86395
72973
95893
*86399
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385

86389
95893
*86400
72973
95893
*86401
72973

95893
*86402
72973
95893
*86403
72973
95893
*86404
72973
95893
*86405
72973
95893
*86409
72973
95893
*86410
72973
95893
*86411
72973
95893
*86412
72973
95893
*86413
72973
95893
*86414
72973
95893
*86415
72973
95893
*86419
72973
95893
*86500
72973
95893
*86501
72973
95893
*86502
72973
95893
*86503
72973
95893
*86504
72973
95893

*86509

72973
95893
*86510
72973
95893
*86511
72973
95893
*86512
72973
95893
*86513
72973
95893
*86514
72973
95893
*86519
72973
95893
*86600
72973
95893
*86601
72973
95893
*86602
72973
95893
*86603
72973
95893
*86610
72973
95893
*86611
72973
95893
*86612
72973
95893
*86613
72973
95893
*8670
72973
95893
*8671
72973
95893
*8672
72973
95893

*8673

72973
95893
*8675
72973
95893
*8676
72973
95893
*8677
72973
95893
*8678
72973
95893
*8679
72973
95893
*86800
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*86801
72973
95893
*86802
72973
95893
*86803
72973
72979
8630
86320
86321
86329
86340
86341

86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86804
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86809
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86810
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86811
72973
95893
*86812
72973
95893
*86813
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86814
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95890
95893
95899
*86819
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
*8690
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
*8691
72973
72979
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
*8700
8702
8715
8716
*8701
8702
8715
8716
*8702
8702
8715
8716
*8703
8702
8715
8716
*8704
8702
8715
8716
*8708
8702
8715
8716
*8709
8702
8715
8716
*8710
8702
8715
8716
*8711
8702
8715
8716
*8712
8702
8715
8716
*8713
8702
8715
8716
*8714
8702
8715
8716
*8715
8385
8389
95890
95893
95899
*8716
8702
8715
8716
*8717
8702
8715
8716
*8719
8702
8715
8716
*87200
87212
87261
87262
87263
87264
87269
87271
87279
*87201
87212
87261
87262
87263
87264
87269
87271
87279
*87202
87212
87261
87262
87263
87264
87269
87271
87279
*87210
87212
87261
87262
87263
87264
87269
87271
87279
*87211
87212

87261
87262
87263
87264
87269
87271
87279
*87212
87212
87261
87262
87263
87264
87269
87271
87279
*87261
87212
87261
87262
87263
87264
87269
87271
87279
*87262
87212
87261
87262
87263
87264
87269
87271
87279
*87263
87212
87261
87262
87263
87264
87269
87271
87279
*87264
87212
87261
87262
87263
87264
87269
87271
87279
*87269
87212
87261
87262
87263
87264
87269
87271
87279
*87271
87212
87261
87262
87263
87264
87269
87271
87279
*87272
87212
87261
87262
87263
87264
87269
87271
87279
*87273
87212
87261
87262
87263
87264
87269
87271
87279
*87274
87212
87261
87262
87263
87264
87269
87271
87279
*87279
87212
87261
87262
87263
87264
87269
87271
87279
*8728
87212
87261
87262
87263
87264
87269
87271
87279
*8729
87212
87261
87262
87263
87264
87269
87271
87279
*87320
87323
*87321
87323
*87322
87323
*87323
87323
*87329
87323
*87330
87323
*87331
87323
*87332
87323
*87333
87323
*87339
87323
*8742
8742
*8743
8742
*8744
8744
*8745
8744
*8748
8742
8744
*8749
8742
8744
*8750
86120
86121
8620
8628
*8751
86120
86121
8620
8628
*8792
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8793
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8794
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8795
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8796
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8797
72973
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
95893
*8798
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311

82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
95893
*8799
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
95893
*88000
88020
88021
88022
88023
88029
*88001
88020
88021
88022
88023
88029
*88002
88020
88021
88022
88023
88029
*88003
88020
88021
88022
88023
88029
*88009
88020
88021
88022
88023
88029
*88010
88020
88021
88022
88023
88029
*88011
88020
88021
88022
88023
88029
*88012
88020
88021
88022
88023
88029
*88013
88020
88021
88022
88023
88029
*88019
88020
88021
88022
88023
88029
*88020
88020
88021
88022
88023
88029
*88021
88020
88021
88022
88023
88029
*88022
88020
88021
88022
88023
88029
*88023
88020
88021
88022
88023
88029
*88029
88020
88021
88022
88023
88029
*88100
88120
88121
88122
*88101
88120
88121
88122
*88102
88120
88121
88122
*88110
88120
88121
88122
*88111
88120
88121
88122
*88112
88120
88121
88122
*88120
88120
88121
88122
*88121
88120
88121
88122
*88122
88120
88121
88122
*8820
8822
*8821
8822
*8822
8822
*8830
8832
*8831
8832
*8832
8832
*8840
8842
*8841
8842
*8842
8842
*8900
8902
*8901
8902
*8902
8902
*8910
8912
*8911
8912
*8912
8912
*8920
8922
*8921
8922
*8922
8922
*8930
8932
*8931
8932
*8932
8932
*8940
8942
*8941
8942
*8942
8942
*90000
9049
*90001
9049
*90002
9049

*90003
9049
*9001
9049
*90081
9049
*90082
9049
*90089
9049
*9009
9049
*9010
90189
9019
9049
*9011
90189
9019
9049
*9012
90189
9019
9049
*9013
90189
9019
9049
*90140
90140
90189
9019
9049
*90141
90140
90189
9019
9049
*90142
90189
9019
9049
*90181
90181
90189
9019
9049

*90182
90182
90189
9019
9049
*90183
90181
90182
90189
9019
9049
*90189
90181
90182
90189
9019
9049
*9019
90189
9019
9049
*9020
9029
9049
*90210
9029
9049
*90211
9029
9049
*90219
9029
9049
*90220
9029
9049
*90221
90221
9029
9049
*90222
9029
9049
*90223
9029
9049
*90224
9029
9049
*90225
9029
9049
*90226
9029
9049
*90227
9029
9049
*90229
9029
9049
*90231
9029

9049
*90232
9029
9049
*90233
9029
9049
*90234
9029
9049
*90239
9029
9049
*90240
9029
9049
*90241
9029
9049
*90242
9029
9049
*90249
9029
9049
*90250
9029
9049
*90251
9029
9049
*90252

9029
9049
*90253
9029
9049
*90254
9029
9049
*90255
90255
9029
9049
*90256
90256
9029
9049
*90259
9049
90255
90256
9029
9049
*90281
90281
9029
9049
*90282
90282
9029
9049
*90287
90221
90255
90256
90281
90282
90289
9029
9049
*90289
90221
90255
90256
90281
90282
90289
9029
9049
*9029
90221
90255
90256
90281
90282
90289
9029
9049
*90300
90300
90301
90302
9049
*90301
90300
90301
9049
*90302
90300
90302
9049
*9031
9031
9049
*9032
9032
9049
*9033
9033
9038
9039
9049
*9034
9034
9038
9039
9049
*9035
9035
9038
9039
9049
*9038
72971
90300
90301
90302
9031
9032
9033
9034
9035
9038
9039
9049
*9039
90300
90301
90302
9031
9032
9033
9034
9035
9038
9039
9049
*9040
9040
9047
9048
9049
*9041
9041
9047
9048
9049
*9042
9042
9047
9048
9049
*9043
9043
9047
9048
9049
*90440
90440
9047
9048
9049
*90441
90441
9047
9048
9049
*90442
90442
9047
9048
9049
*90450
90450
9047
9048
9049
*90451
90451
9047
9048
9049
*90452
90452
9047
9048
9049
*90453
90453
9047
9048
9049
*90454
90454
9047
9048
9049
*9046
9046
9047
9048
9049

9049
*9047
72972
9040
9041
9042
9043
90440
90441
90442
90450
90451
90452
90453
90454
9046
9047
9048
9049
*9048
9040
9041
9042
9043
90440
90441
90442
90450
90451
90452
90453
90454
9046
9047
9048
9049
*9049
72971
72972
90140
90221
90255
90256
90281
90282
90289
9029
90300
90301
90302
9031
9032
9033
9034
9035
9038
9039
9040
9041
9042
9043
90440
90441
90442
90450
90451
90452
90453
90454
9046
9047
9048
9049
*92800
92800
*92801
92801
*9288
92800
92801
*9289
92800
92801
*9290
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
90140
90221
90255
90256
90281
90282
90289
9029
92800
92801
95893
*9299
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
90140
90221
90255
90256
90281
90282
90289
9029
92800
92801
95893
*9340
9340
9341
9348
*9341
9341
9348
*9348
9341
9348
*9349
9341
9348
*94130
94130
94139
9493
*94131
94131
94139
9493
*94132
94132
94139
9493
*94133
94133
94139
9493
*94134
94134
94139
9493
*94135
94135
94139
9493
*94136
94136
94139
9493
*94137
94137
94139
9493
*94138
94138
94139
9493
*94139
94130
94131
94132
94133

94134
94135
94136
94137
94138
94139
9493
*94140
94140
94141
94142
94143
94144
94145
94146
94147
94148
94149
9494
*94141
94141
9494
*94142
94142
9494
*94143
94143
9494
*94144
94144
9494
*94145
94145
9494
*94146
94146
9494
*94147
94147
9494
*94148
94148
9494
*94149
94140
94141
94142
94143
94144
94145
94146
94147
94148
94149
9494
*94150
94150
94151
94152
94153
94154
94155
94156
94157
94158
94159
*94151
94151
*94152
94152
*94153
94153
*94154
94154
*94155
94155
*94156
94156
*94157
94157
*94158
94158
*94159
94150
94151
94152
94153
94154
94155
94156
94157
94158
94159
*94230
94230
94231
94232
94233
94234
94235
94239
9493
*94231
94231
9493
*94232
94232
9493
*94233
94233
9493
*94234
94234
9493
*94235
94235
9493
*94239
94230
94231
94232
94233
94234
94235
9493
*94240
94240
94241
94242
94243
94244
94245
94249
9494
*94241
94241
94249
9494
*94242
94242
94249
9494
*94243
94243
94249
9494
*94244
94244
94249
9494
*94245
94245
94249
9494
*94249
94240
94241
94242
94243
94244
94245
94249
9494
*94250
94250
94251
94252
94253
94254
94255
94259
*94251
94251
*94252
94252
*94253
94253
*94254
94254
*94255
94255
*94259
94250
94251
94252
94253
94254
94255
94259
*94330
94330
94331
94332
94333
94334
94335
94336
94339
*94331
94331
*94332
94332
*94333
94333
*94334
94334
*94335
94335
*94336
94336
*94339
94330
94331
94332
94333
94334
94335
94336
94339
9494
*94340
94340
94341
94342
94343
94344
94345
94346
94349
*94341
94341
*94342
94342
*94343
94343
*94344
94344
*94345
94345
*94346
94346
*94349
94340
94341
94342
94343
94344
94345
94346
94349
*94350
94350
94351
94352
94353
94354
94355
94356
94359
*94351
94351
*94352
94352
*94353
94353
*94354
94354
*94355
94355
*94356
94356
*94359
94350
94351
94352
94353
94354
94355
94356
94359
*94430
94430
94431
94432
94433
94434
94435
94436
94437
94438
9493
*94431
94431
9493
*94432
94432
9493
*94433
94433
9493
*94434
94434
9493
*94435
94435
9493
*94436
94436
9493
*94437
94437
9493
*94438
94430
94431
94432
94433
94434
94435
94436
94437
94438
9493
*94440

94440
94441
94442
94443
94444
94445
94446
94447
94448
9494
*94441
94441
9494
*94442
94442
9494
*94443
94443
9494
*94444
94444
9494
*94445
94445
9494
*94446
94446
9494
*94447
94447
9494
*94448
94440
94441
94442
94443
94444
94445
94446
94447
94448
9494
*94450
94450
94451
94452
94453
94454
94455
94456
94457
94458
*94451
94451
*94452
94452
*94453
94453
*94454
94454
*94455
94455
*94456
94456
*94457
94457
*94458
94450
94451
94452
94453
94454
94455
94456
94457
94458
*94530
94530
94531
94532
94533
94534
94535
94536
94539
9493
*94531
94531
9493
*94532
94532
9493
*94533
94533
9493
*94534
94534
9493
*94535
94535
9493
*94536
94536
9493
*94539
94530
94531
94532
94533
94534
94535
94536
94539
9493
*94540
94540
94541
94542
94543
94544
94545
94546
94549
9494
*94541
94541
9494
*94542
94542
9494
*94543
94543
9494
*94544
94544
9494
*94545
94545
9494
*94546
94546
9494
*94549
94540
94541
94542
94543
94544
94545
94546
94549
9494
*94550
94550
94551
94552
94553
94554
94555
94556
94559
*94551
94551
*94552
94552
*94553
94553
*94554
94554
*94555
94555
*94556
94556
*94559
94550
94551
94552
94553
94554
94555
94556
94559
*9463
9463
9493
*9464
9464
9494
*9465
9465
9495
*9471
9471
*9472
9472
*9473
9473
*9474
9474
*9478
9471
9472
9473
9474
*9479
9471
9472
9473
9474
*94800
94810
94811
94820
94821
94822
94830
94831
94832
94833
94840
94841
94842
94843
94844
94850
94851
94852
94853
94854
94855
94860
94861
94862
94863
94864
94865
94866
94870
94871
94872
94873
94874
94875
94876
94877
94880
94881
94882
94883
94884
94885
94886
94887
94888
94890
94891
94892
94893
94894
94895
94896
94897
94898
94899
*94810
94810
94811
94820
94821
94822
94830
94831
94832
94833
94840
94841
94842
94843
94844
94850
94851
94852
94853
94854
94855
94860
94861
94862
94863
94864
94865
94866
94870
94871
94872
94873
94874
94875
94876
94877
94880
94881
94882
94883
94884
94885
94886
94887
94888
94890
94891
94892
94893
94894
94895
94896
94897
94898
94899
*94811
94810

94811	94810	*94821	94899	94898	94897
94820	94811	94810	*94822	94899	94898
94821	94820	94811	94810	*94830	94899
94822	94821	94820	94811	94810	*94831
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94820	94899	94898	94897	94896	94895

94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94832	94899	94898	94897	94896	94895
94810	*94833	94899	94898	94897	94896
94811	94810	*94840	94899	94898	94897
94820	94811	94810	*94841	94899	94898
94821	94820	94811	94810	*94842	94899
94822	94821	94820	94811	94810	*94843
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888

94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94844	94899	94898	94897	94896	94895
94810	*94850	94899	94898	94897	94896
94811	94810	*94851	94899	94898	94897
94820	94811	94810	*94852	94899	94898
94821	94820	94811	94810	*94853	94899
94822	94821	94820	94811	94810	*94854
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882

94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94855	94899	94898	94897	94896	94895
94810	*94860	94899	94898	94897	94896
94811	94810	*94861	94899	94898	94897
94820	94811	94810	*94862	94899	94898
94821	94820	94811	94810	*94863	94899
94822	94821	94820	94811	94810	*94864
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874

94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94865	94899	94898	94897	94896	94895
94810	*94866	94899	94898	94897	94896
94811	94810	*94870	94899	94898	94897
94820	94811	94810	*94871	94899	94898
94821	94820	94811	94810	*94872	94899
94822	94821	94820	94811	94810	*94873
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865

94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94874	94899	94898	94897	94896	94895
94810	*94875	94899	94898	94897	94896
94811	94810	*94876	94899	94898	94897
94820	94811	94810	*94877	94899	94898
94821	94820	94811	94810	*94880	94899
94822	94821	94820	94811	94810	*94881
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855

94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94882	94899	94898	94897	94896	94895
94810	*94883	94899	94898	94897	94896
94811	94810	*94884	94899	94898	94897
94820	94811	94810	*94885	94899	94898
94821	94820	94811	94810	*94886	94899
94822	94821	94820	94811	94810	*94887
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832
94844	94843	94842	94841	94840	94833
94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844

94850	94844	94843	94842	94841	94840
94851	94850	94844	94843	94842	94841
94852	94851	94850	94844	94843	94842
94853	94852	94851	94850	94844	94843
94854	94853	94852	94851	94850	94844
94855	94854	94853	94852	94851	94850
94860	94855	94854	94853	94852	94851
94861	94860	94855	94854	94853	94852
94862	94861	94860	94855	94854	94853
94863	94862	94861	94860	94855	94854
94864	94863	94862	94861	94860	94855
94865	94864	94863	94862	94861	94860
94866	94865	94864	94863	94862	94861
94870	94866	94865	94864	94863	94862
94871	94870	94866	94865	94864	94863
94872	94871	94870	94866	94865	94864
94873	94872	94871	94870	94866	94865
94874	94873	94872	94871	94870	94866
94875	94874	94873	94872	94871	94870
94876	94875	94874	94873	94872	94871
94877	94876	94875	94874	94873	94872
94880	94877	94876	94875	94874	94873
94881	94880	94877	94876	94875	94874
94882	94881	94880	94877	94876	94875
94883	94882	94881	94880	94877	94876
94884	94883	94882	94881	94880	94877
94885	94884	94883	94882	94881	94880
94886	94885	94884	94883	94882	94881
94887	94886	94885	94884	94883	94882
94888	94887	94886	94885	94884	94883
94890	94888	94887	94886	94885	94884
94891	94890	94888	94887	94886	94885
94892	94891	94890	94888	94887	94886
94893	94892	94891	94890	94888	94887
94894	94893	94892	94891	94890	94888
94895	94894	94893	94892	94891	94890
94896	94895	94894	94893	94892	94891
94897	94896	94895	94894	94893	94892
94898	94897	94896	94895	94894	94893
94899	94898	94897	94896	94895	94894
*94888	94899	94898	94897	94896	94895
94810	*94890	94899	94898	94897	94896
94811	94810	*94891	94899	94898	94897
94820	94811	94810	*94892	94899	94898
94821	94820	94811	94810	*94893	94899
94822	94821	94820	94811	94810	*94894
94830	94822	94821	94820	94811	94810
94831	94830	94822	94821	94820	94811
94832	94831	94830	94822	94821	94820
94833	94832	94831	94830	94822	94821
94840	94833	94832	94831	94830	94822
94841	94840	94833	94832	94831	94830
94842	94841	94840	94833	94832	94831
94843	94842	94841	94840	94833	94832

94833	94832	94830	94821	94820	94810
94840	94833	94831	94822	94821	94811
94841	94840	94832	94830	94822	94820
94842	94841	94833	94831		94821
94843	94842	94840	94832	94830	94822
94844	94843	94841	94833	94831	94830
94850	94844	94842	94840	94832	94831
94851	94850	94843	94841	94833	
94852	94851	94844	94842	94840	94832
94853	94852	94850	94843	94841	94833
94854	94853	94851	94844	94842	94840
94855	94854	94852	94850	94843	94841
94860	94855	94853	94851	94844	94842
94861	94860	94854	94852	94850	94843
94862	94861	94855	94853	94851	94844
94863	94862	94860	94854	94852	94850
94864	94863	94861	94855	94853	94851
94865	94864	94862	94860	94854	94852
94866	94865	94863	94861	94855	94853
94870	94866	94864	94862	94860	94854
94871	94870	94865	94863	94861	94855
94872	94871	94866	94864	94862	94860
94873	94872	94870	94865	94863	94861
94874	94873	94871	94866	94864	94862
94875	94874	94872	94870	94865	94863
94876	94875	94873	94871	94866	94864
94877	94876	94874	94872	94870	94865
94880	94877	94875	94873	94871	94866
94881	94880	94876	94874	94872	94870
94882	94881	94877	94875	94873	94871
94883	94882	94880	94876	94874	94872
94884	94883	94881	94877	94875	94873
94885	94884	94882	94880	94876	94874
94886	94885	94883	94881	94877	94875
94887	94886	94884	94882	94880	94876
94888	94887	94885	94883	94881	94877
94890	94888	94886	94884	94882	94880
94891	94890	94887	94885	94883	94881
94892	94891	94888	94886	94884	94882
94893	94892	94890	94887	94885	94883
94894	94893	94891	94888	94886	94884
94895	94894	94892	94890	94887	94885
94896	94895	94893	94891	94888	94886
94897	94896	94894	94892	94890	94887
94898	94897	94895	94893	94891	94888
94899	94898	94896	94894	94892	94890
*94895	94899	94897	94895	94893	94891
94810	*94896	94898	94896	94894	94892
94811	94810	94899	94897	94895	94893
94820		*94897	94898	94896	94894
94821	94811	94810	94899	94897	94895
94822	94820	94811	*94898	94898	94896
94830	94821	94820	94810	94899	94897
94831	94822		94811	*94899	94898

94899
*9493
9493
*9494
9494
*9495
9495
*9500
9500
9501
9502
9503
9509
*9501
9500
9501
9502
9503
9509
*9502
9500
9501
9502
9503
9509
*9503
9500
9501
9502
9503
9509
*9509
9500
9501
9502
9503
9509
*9510
9510
*9511
9511
*9512
9512
*9513
9513
*9514
9514
*9515
9515
*9516
9516
*9517
9517
*9518
9500
9501
9502
9503
9509
*9519
9500
9501
9502
9503
9509
*9587
86120
86121
8620
8628
*9588
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
90140
90221
90255
90256
90281
90282
90289
9029
95893
*95890
80700
80701
80702
86389
90140
90221
90255
90256
90281
90282
90289
9029
*95891
71910
71911
71912
71913
71914
71915
71918
71919
80700
80701
80702
*95892
71910
71915
71916
71917
71918
71919
80700
80701
80702
*95893
80700
80701
80702
8628
8630
86320
86321
86322
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
90140
90221
90255
90256
90281
90282
90289
9029
*95899
80700
80701
80702
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
90140
90221
90255
90256
90281
90282
90289
9029
*9596
80841
8090

8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
*9598
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
90140
90221
90255
90256
90281
90282
90289
9029
95893
*9599
72973
80700
80701
80702
80703
80841
8090
8091
82120
82121
82122
82123
82129
82130
82131
82132
82133
82139
8221
82300
82302
82310
82311
82312
82320
82322
82330
82331
82332
82382
82390
82391
82392
8241
8243
8245
8247
8249
8251
82531
82532
82533
82534
82535
86120
86121
8620
8628
8630
86320
86321
86329
86340
86341
86342
86343
86344
86345
86346
86349
86380
86381
86382
86383
86384
86385
86389
8702
8715
8716
87212
87261
87262
87263
87264
87269
87271
87279
87323
8742
8744
90140
90221
90255
90256
90281
90282
90289
9029
95893
*9849
0461
0463
048
0498
0499
0620
0621
0622
0623
0624
0625
0628
0629
0630
0631
0632
0638
0639
064
0662
0663
0737
0819
0869
124
3231
3232
3239
7712
*9910
9910
9913
*9911
9911
9913
*9912
9912
9913
*9913
9910
9911
9912
9913
9914
*9914
9913
9914
*9920
9920
*9921
9920
*9922
9920
*9923
9920
*9924
9920
*9925
9920
*9926
9920
*9927
9920
*9928
9920
*9929
9920
*9933
9933
*9934
9933
*9938
9933
*9939
9933
*9941
9941
*9947
9947
*99550
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99551
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585

*99552
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99553
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99554
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99555
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99559
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99560
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99561
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99562
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99563
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99564
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99565
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99566
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99567
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99568
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99569
9950
99560
99561
99562
99563
99564
99565
99566
99567
99568
99569
*99580
99550
99551
99552
99553
99554
99555
99559
99580
99581
99583
99584
99585
*99581
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99582
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99583
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99584
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99585
99550
99551
99552
99553
99554
99555
99559
99580
*99585
99550
99551
99552
99553
99554
99555
99559
99581
99583
99584
99585
*99590
0031
0202
0223
*99591
0031
0202
0223
*99592
0031
0202
0223
*99593
0031
0202
0223
*99594
0031
0202
0223
*99661
07422
09884
09885
3911
*99662
99931
99939
*99664
77182
*9987
03283

0952
09886
09956
*9990
9990
*99931
99931
99939
*99939
99931
99939
*V090
0031
0223
6824
*V091
0031
0223
6824
*V092
0031
0223
6824
*V093
0031
0223
6824
*V094
0031
0223
6824
*V0950

0031
0223
6824
*V0951

0031
0223
6824
*V096
0031
0223
6824
*V0970
0031
0223
6824
*V0971
0031
0223
6824
*V0980
0031
0223
6824
*V0981
0031
0223
6824
*V0990
0031
0223
6824
*V0991
0031
0223
6824
*V4574
5934
*V551
V551
*V580
1580
1588
1589
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1712
1713
1714
1715
1716
1717
1718
1719
1760
1761
1762
1763
1768
1769
1943
1944
2385
2386
*V6284
29011
2903
2930
*V778
V850
*V850
V850
V854
*V851
V850
V854
*V8521
V850
V854
*V8522
V850
V854
*V8523
V850
V854
*V8524
V850
V854
*V8525
V850
V854
*V8530
V850
V854
*V8531
V850
V854
*V8532
V850
V854
*V8533
V850
V854
*V8534
V850
V854
*V8535
V850
V854
*V8536
V850
V854
*V8537
V850
V854
*V8538
V850
V854
*V8539
V850
V854
*V854
V850
*V8551
V850
V854
*V8552
V850
V854
*V8553
V850
V854
*V8554
V850
V854

TABLE 6H.--DELETIONS TO THE CC EXCLUSIONS LIST

CCs that are deleted from the list are in Table 6H-Deletions to the CC Exclusions List. Each of the principal diagnoses is shown with an asterisk, and the revisions to the CC Exclusions List are provided in an indented column immediately following the affected principal diagnosis.

*01100	4956	4952	*01120	4956	4953
4950	515	4953	4950	515	4954
4951	5178	4954	4951	5178	4955
4952	*01105	4955	4952	*01125	4956
4953	4950	4956	4953	4950	515
4954	4951	515	4954	4951	5178
4955	4952	5178	4955	4952	*01133
4956	4953	*01113	4956	4953	4950
515	4954	4950	515	4954	4951
5178	4955	4951	5178	4955	4952
*01101	4956	4952	*01121	4956	4953
4950	515	4953	4950	515	4954
4951	5178	4954	4951	5178	4955
4952	*01106	4955	4952	*01126	
4953	4950	4956	4953	4950	4956
4954	4951	515	4954	4951	515
4955	4952	5178	4955	4952	5178
4956	4953	*01114	4956	4953	*01134
515	4954	4950	515	4954	4950
5178	4955	4951	5178	4955	4951
*01102	4956	4952	*01122	4956	4952
4950	515	4953	4950	515	4953
4951	5178	4954	4951	5178	4954
4952	*01110	4955	4952	*01130	4955
4953	4950	4956	4953	4950	4956
4954	4951	515	4954	4951	515
4955	4952	5178	4955	4952	5178
4956	4953	*01115	4956	4953	*01135
515	4954	4950	515	4954	4950
5178	4955	4951	5178	4955	4951
*01103	4956	4952	*01123	4956	4952
4950	515	4953	4950	515	4953
4951	5178	4954	4951	5178	4954
4952	*01111	4955	4952	*01131	4955
4953	4950	4956	4953	4950	4956
4954	4951	515	4954	4951	515
4955	4952	5178	4955	4952	5178
4956	4953	*01116	4956	4953	*01136
515		4950	515	4954	4950
5178	4954	4951	5178	4955	4951
*01104	4955	4952	*01124	4956	4952
4950	4956	4953	4950	515	4953
4951	515	4954	4951	5178	4954
4952	5178	4955	4952	*01132	4955
4953	*01112	4956	4953	4950	4956
4954	4950	515	4954	4951	515
4955	4951	5178	4955	4952	5178

*01140
4950
4951
4952
4953
4954
4955
4956
515
5178
*01141
4950
4951
4952
4953
4954
4955
4956
515
5178
*01142
4950
4951
4952
4953
4954
4955
4956
515
5178
*01143
4950
4951
4952
4953
4954
4955
4956
515
5178
*01144
4950
4951
4952
4953
4954
4955
4956
515
5178
*01145
4950
4951
4952
4953
4954
4955
4956
515
5178
*01146
4950
4951
4952
4953
4954
4955
4956
515
5178
*01150
4950
4951
4952
4953
4954
4955
4956
515
5178
*01151
4950
4951
4952
4953
4954
4955
4956
515
5178
*01152
4950
4951
4952
4953
4954
4955
4956
515
5178
*01153
4950
4951
4952
4953
4954
4955
4956
515
5178
*01154
4950
4951
4952
4953
4954
4955
4956
515
5178
*01155
4950
4951
4952
4953
4954
4955
4956
515
5178
*01156
4950
4951
4952
4953
4954
4955
4956
515
5178
*01160
4950
4951
4952
4953
4954
4955
4956
515
5178
*01161
4950
4951
4952
4953
4954
4955
4956
515
5178
*01162
4950
4951
4952
4953
4954
4955
4956
515
5178
*01163
4950
4951
4952
4953
4954
4955
4956
515
5178
*01164
4950
4951
4952
4953
4954
4955
4956
515
5178
*01165
4950
4951
4952
4953
4954
4955
4956
515
5178
*01166
4950
4951
4952
4953
4954
4955
4956
515
5178
*01170
4950
4951
4952
4953
4954
4955
4956
515
5178
*01171
4950
4951
4952
4953
4954
4955
4956
515
5178
*01172
4950
4951
4952
4953
4954
4955
4956
515
5178
*01173
4950
4951
4952
4953
4954
4955
4956
515
5178
*01174
4950
4951
4952
4953
4954
4955
4956
515
5178
*01175
4950
4951
4952
4953
4954
4955
4956
515
5178
*01176
4950
4951
4952
4953
4954
4955
4956
515
5178
*01180
4950
4951
4952
4953
4954
4955
4956
515
5178
*01181
4950
4951
4952
4953
4954
4955
4956
515
5178
*01182
4950
4951
4952
4953
4954
4955
4956
515
5178
*01183
4950
4951
4952
4953
4954
4955
4956
515
5178
*01184
4950
4951
4952

4953
4954
4955
4956
515
5178
*01185
4950
4951
4952
4953
4954
4955
4956
515
5178
*01186
4950
4951
4952
4953
4954
4955
4956
515
5178
*01190
4950
4951
4952
4953
4954
4955
4956
515
5178
*01191
4950
4951
4952
4953
4954
4955
4956
515
5178
*01192
4950
4951
4952
4953
4954
4955
4956
515
5178
*01193
4950
4951
4952
4953
4954
4955
4956
515
5178
*01194
4950
4951
4952
4953
4954
4955
4956
515
5178
*01195
4950
4951
4952
4953
4954
4955
4956
515
5178
*01196
4950
4951
4952
4953
4954
4955
4956
515
5178
*01200
4950
4951
4952
4953
4954
4955
4956
515
5178
*01201
4950
4951
4952
4953
4954
4955
4956
515
5178
*01202
4950
4951
4952
4953
4954
4955
4956
515
5178
*01203
4950
4951
4952
4953
4954
4955
4956
515
5178
*01204
4950
4951
4952
4953
4954
4955
4956
515
5178
*01205
4950
4951
4952
4953
4954
4955
4956
515
5178
*01206
4950
4951
4952
4953
4954
4955
4956
515
5178
*01210
4950
4951
4952
4953
4954
4955
4956
515
5178
*01211
4950
4951
4952
4953
4954
4955
4956
515
5178
*01212
4950
4951
4952
4953
4954
4955
4956
515
5178
*01213
4950
4951
4952
4953
4954
4955
4956
515
5178
*01214
4950
4951
4952
4953
4954
4955
4956
515
5178
*01215
4950
4951
4952
4953
4954
4955
4956
515
5178
*01216
4950
4951
4952
4953
4954
4955
4956
515
5178
*01280
4950
4951
4952
4953
4954
4955
4956
515
5178
*01281
4950
4951
4952
4953
4954
4955
4956
515
5178
*01282
4950
4951
4952
4953
4954
4955
4956
515
5178
*01283
4950
4951
4952
4953
4954
4955
4956
515
5178
*01284
4950
4951
4952
4953
4954
4955
4956
515
5178
*01285
4950
4951
4952
4953
4954
4955
4956
515
5178
*01286
4950
4951
4952
4953
4954
4955
4956
515
5178
*01560
38330
38381
*01561
38330
38381
*01562
38330
38381
*01563
38330
38381
*01564
38330
38381
*01565
38330
38381

*01566
38330
38381
*01580
6960
*01581
6960
*01582
6960
*01583
6960
*01584
6960
*01585
6960
*01586
6960
*01590
6960
*01591
6960
*01592
6960
*01593
6960
*01594
6960
*01595
6960
*01596
6960
*01600
5909
*01601
5909
*01602
5909
*01603
5909
*01604
5909
*01605
5909
*01606
5909
*01610
5951
5952
5954
59581
59589
5959
*01611
5951
5952
5954
59581
59589
5959
*01612
5951
5952
5954
59581
59589
5959
*01613
5951
5952
5954
59581
59589
5959
*01614
5951
5952
5954
59581
59589
5959
*01615
5951
5952
5954
59581
59589
5959
*01616
5951
5952
5954
59581
59589
5959
*01630
5909
5951
5952
5954
59581
59589
5959
*01631
5909
5951
5952
5954
59581
59589
5959
*01632
5909
5951
5952
5954
59581
59589
5959
*01633
5909
5951
5952
5954
59581
59589
5959
*01634
5909
5951
5952
5954
59581
59589
5959
*01635
5909
5951
5952
5954
59581
59589
5959
*01636
5909
5951
5952
5954
59581
59589
5959
*01690
5909
5951
5952
5954
59581
59589
5959
*01691
5909
5951
5952
5954
59581
59589
5959
*01692
5909
5951
5952
5954
59581
59589
5959
*01693
5909
5951
5952
5954
59581
59589
5959
*01694
5909
5951
5952
5954
59581
59589
5959
*01695
5909
5951
5952
5954
59581
59589
5959
*01696
5909
5951
5952
5954
59581
59589
5959
*01700
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01701
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01702
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01703
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01704
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01705
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01706
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*01730
37702
*01731
37702
*01732
37702
*01733
37702
*01734
37702
*01735
37702
*01736
37702
*01740
38330
38381
*01741
38330
38381
*01742
38330
38381
*01743
38330
38381
*01744
38330
38381
*01745
38330
38381
*01746
38330
38381
*01750
24200
24210
24220
24230

24240
24280
24290
*01751
24200
24210
24220
24230
24240
24280
24290
*01752
24200
24210
24220
24230
24240
24280
24290
*01753
24200
24210
24220
24230
24240
24280
24290
*01754
24200
24210
24220
24230
24240
24280
24290
*01755
24200
24210
24220
24230
24240
24280
24290
*01756
24200
24210
24220
24230
24240
24280
24290
*01760
2554
*01761
2554
*01762
2554
*01763
2554
*01764
2554
*01765
2554
*01766
2554
*01790
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01791
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01792
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01793
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01794
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01795
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960
*01796
24200
24210
24220
24230
24240
24280
24290
2554
37702
38330
38381
4950
4951
4952
4953
4954
4955
4956
496
515
5178
5909
5951
5952
5954
59581
59589
5959
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
6960

4956	4956	6808	6807	6806	6805
496	*04082	6809	6808	6807	6806
515	6800	*04103	6809	6808	6807
5178	6801	6800	*04111	6809	6808
5909	6802	6801	6800	*0415	6809
5951	6803	6802	6801	6800	*04183
5952	6804	6803	6802	6801	6800
5954	6805	6804	6803	6802	6801
59581	6806	6805	6804	6803	6802
59589	6807	6806	6805	6804	6803
5959	6808	6807	6806	6805	6804
6800	6809	6808	6807	6806	6805
6801	*04089	6809	6808	6807	6806
6802	6800	*04104	6809	6808	6807
6803	6801	6800	*04119	6809	6808
6804	6802	6801	6800	*0416	6809
6805	6803	6802	6801	6800	*04184
6806	6804	6803	6802	6801	6800
6807	6805	6804	6803	6802	6801
6808	6806	6805	6804	6803	6802
6809	6807	6806	6805	6804	6803
6960	6808	6807	6806	6805	6804
*0212	6809	6808	6807	6806	6805
4950	*04100	6809	6808	6807	6806
4951	6800	*04105	6809	6808	6807
4952	6801	6800	*0412	6809	6808
4953	6802	6801	6800	*0417	6809
4954	6803	6802	6801	6800	*04185
4955	6804	6803	6802	6801	6800
4956	6805	6804	6803	6802	6801
*0310	6806	6805	6804	6803	6802
4950	6807	6806	6805	6804	6803
4951	6808	6807	6806	6805	6804
4952	6809	6808	6807	6806	6805
4953	*04101	6809	6808	6807	6806
4954	6800	*04109	6809	6808	6807
4955	6801	6800	*0413	6809	6808
4956	6802	6801	6800	*04181	6809
*03681	6803	6802	6801	6800	*04186
37702	6804	6803	6802	6801	6800
*03682	6805	6804	6803	6802	6801
6960	6806	6805	6804	6803	6802
7141	6807	6806	6805	6804	6803
7142	6808	6807	6806	6805	6804
71430	6809	6808	6807	6806	6805
71432	*04102	6809	6808	6807	6806
71433	6800	*04110	6809	6808	6807
*0391	6801	6800	*0414	6809	6808
4950	6802	6801	6800	*04182	6809
4951	6803	6802	6801	6800	*04189
4952	6804	6803	6802	6801	6800
4953	6805	6804	6803	6802	6801
4954	6806	6805	6804	6803	6802
4955	6807	6806	6805	6804	6803

6804
6805
6806
6807
6808
6809
*0419
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*05371
7235
*05474
0548
*05479
0548
*0548
0548
*0549
0548
*0552
0552
*05579
0552
0558
*0558
0552
0558
*0559
0552
0558
*05600
0568
*05601
0568
*05609
0558
*05671
6960
7141
7142
71430
71432
71433
*05679
0568
*0568
0568
*0569
0568
*0700
07054
07070
*0701
07054
07070
*07020
07054
07070
*07021
07054
07070
*07022
07054
07070
*07023
07054
07070
*07030
07054
07070
*07031
07054
07070
*07032
07054
07070
*07033
07054
07070
*07041
07054
07070
*07042
07054
07070
*07043
07054
07070
*07044
07054
07070
*07049
07054
07070
*07051
07054
07070
*07052
07054
07070
*07053
07054
07070
*07054
07054
07070
*07059
07054
07070
*0706
07054
07070
*07070
07054
07070
*07071
07054
07070
*0709
07054
07070
*07888
0548
0552
0558
0568
07054
07070
*07889
0548
0552
0558
0568
07054
07070
*07988
0548
0552
0558
0568
07054
07070
*07989
0548
0552
0558
0568
07054
07070
*07998
0548
0552
0558
0568
07054
07070
*07999
0548
0552
0558
0568
07054
07070
*0980
5951
5952
5954
59581
59589
5959
5981
5982
*09810
5909
*09811
5951
5952
5954
59581
59589
5959
5981
5982
*09812
6013
6021
*09819
5909
*0982
5951
5952
5954
59581
59589
5959
5981
5982
*09830
5909
*09831
5909
*09832
6013
6021
*09839
5951
5952
5954
59581
59589
5959
5981
5982
*09850
6960
*09851
6960
*09859
6960
*09889
5909
5951
5952
5954
59581
59589
5959
5981
5982
6013
6021
6960
*1122
5909
5951
5952
5954
59581
59589
5959
6013
6021
*11500
11500
*11505
4950
4951
4952
4953
4954
4955
4956
*11509
11500
*11510
11510
*11515
4950
4951
4952
4953
4954
4955
4956
*11519
11510
*11590
11500
11510
11590
*11595
4950
4951
4952
4953
4954
4955
4956
*11599
11500
11510
11590
11599
*1179
11500
11510
11590
11599
*1221
4950
4951
4952
4953
4954
4955
4956
*1304
4950
4951
4952
4953
4954
4955
4956
*13100
5909
5951
5952

5954
59581
59589
5959
6013
6021
*13102
5981
5982
*13103
6013
6021
*1318
5909
5951
5952
5954
59581
59589
5959
6013
6021
*1319
5909
5951
5952
5954
59581
59589
5959
6013
6021
*135
135
*1363
4950
4951
4952
4953
4954
4955
4956
*1370
1370
*1371
1371
*1372
1372
*138
138
*1398
0548
0552
0558
0568
07054
07070
11500
11510
11590
11599
135
1370
1371
1372
138
*185
5960
59960
59969
*1880
5960
59960
59969
*1881
5960
59960
59969
*1882
5960
59960
59969
*1883
5960
59960
59969
*1884
5960
59960
59969
*1885
5960
59960
59969
*1886
5960
59960
59969
*1887
5960
59960
59969
*1888
5960
59960
59969
*1889
5960
59960
59969
*1892
59960
59969
*1893
5960
59960
59969
*1894
5960
59960
59969
*1898
5960
59960
59969
*1899
5960
59960
59969
*2400
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2409
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2410
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2411
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2419
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24200
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24201
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24210
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24211
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24220
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24221
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24230
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24231
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24240
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24241
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24280
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24281
24200
24210

24220
24230
24240
24280
24290
2580
2581
2588
2589
*24290
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*24291
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*243
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2440
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2441
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2442
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2443
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2448
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2449
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2450
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2451
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2452
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2453
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2454
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2458
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2459
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2460
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2461
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2462
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2463
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2468
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*2469
24200
24210
24220
24230
24240
24280
24290
2580
2581
2588
2589
*25000
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25001
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588

2589
*25002
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25003
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25010

25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25011
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25012
25001
25002

25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25013
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25020
25001
25002
25003
25041

25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25021
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25022
25001
25002
25003
25041
25042
25043

25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25023
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25030
25001
25002
25003
25041
25042
25043
25051
25052

25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25031
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*25032
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061

25062	25071	25051	25001	25001	25001
25063	25072	25052	25002	25002	25002
25071	25073	25053	25003	25003	25003
25072	25081	25061	25041	25041	25041
25073	25082	25062	25042	25042	25042
25081	25083	25063	25043	25043	25043
25082	25091	25071	25051	25051	25051
25083	25092	25072	25052	25052	25052
25091	25093	25073	25053	25053	25053
25092	2580	25081	25061	25061	25061
25093	2581	25082	25062	25062	25062
2580	2588	25083	25063	25063	25063
2581	2589	25091	25071	25071	25071
2588	5851	25092	25072	25072	25072
2589	5852	25093	25073	25073	25073
*25033	5853	2580	25081	25081	25081
25001	5859	2581	25082	25082	25082
25002	*25041	2588	25083	25083	25083
25003	25001	2589	25091	25091	25091
25041	25002	5851	25092	25092	25092
25042	25003	5852	25093	25093	25093
25043	25041	5853	2580	2580	2580
25051	25042	5859	2581	2581	2581
25052	25043	*25043	2588	2588	2588
25053	25051	25001	2589	2589	2589
25061	25052	25002	37702	37702	340
25062	25053	25003	*25051	*25053	34510
25063	25061	25041	25001	25001	35800
25071	25062	25042	25002	25002	*25061
25072	25063	25043	25003	25003	25001
25073	25071	25051	25041	25041	25002
25081	25072	25052	25042	25042	25003
25082	25073	25053	25043	25043	25041
25083	25081	25061	25051	25051	25042
25091	25082	25062	25052	25052	25043
25092	25083	25063	25053	25053	25051
25093	25091	25071	25061	25061	25052
2580	25092	25072	25062	25062	25053
2581	25093	25073	25063	25063	25061
2588	2580	25081	25071	25071	25062
2589	2581	25082	25072	25072	25063
*25040	2588	25083	25073	25073	25071
25001	2589	25091	25081	25081	25072
25002	5851	25092	25082	25082	25073
25003	5852	25093	25083	25083	25081
25041	5853	2580	25091	25091	25082
25042	5859	2581	25092	25092	25083
25043	*25042	2588	25093	25093	25091
25051	25001	2589	2580	2580	25092
25052	25002	5851	2581	2581	25093
25053	25003	5852	2588	2588	2580
25061	25041	5853	2589	2589	2581
25062	25042	5859	37702	37702	
25063	25043	*25050	*25052	*25060	2588

2589
340
34510
35800
*25062
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
34510
35800
*25063
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092

25093
2580
2581
2588
2589
4465
4510
4512
*25070
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
4465
4510
4512
*25071
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081

25082
25083
25091
25092
25093
2580
2581
2588
2589
4465
4510
4512
*25072
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
4465
4510
4512
*25073
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063

25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25080
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25081
25001

25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25082
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091

25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25083
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
*25090
25001

25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25091
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091

25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*25092
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
*25093
25001

25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
340
35800
37702
4465
4510
4512
5851
5852
5853
5859
*2510
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091

25092
25093
2580
2581
2588
2589
*2511
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*2512
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093

2580
2581
2588
2589
*2513
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2580
2581
2588
2589
*2514
2580
2581
2588
2589
*2515
2580
2581
2588
2589
*2518
2580
2581
2588
2589
*2519
2580
2581
2588
2589
*25200
2521
2580
2581

2588
2589
*25201
2521
2580
2581
2588
2589
*25202
2521
2580
2581
2588
2589
*25208
2521
2580
2581
2588
2589
*2521
2521
2580
2581
2588
2589
*2528
2521
2580
2581
2588
2589
*2529
2521
2580
2581
2588
2589
*2530
2580
2581
2588
2589
*2531
2580
2581
2588
2589
*2532
2580
2581
2588
2589
*2533

2580
2581
2588
2589
*2534
2580
2581
2588
2589
*2535
2580
2581
2588
2589
*2536
2580
2581
2588
2589
*2537
2580
2581
2588
2589
*2538
2580
2581
2588
2589
*2539
2580
2581
2588
2589
*2540
2580
2581
2588
2589
*2541
2580
2581
2588
2589
*2548
2580
2581
2588
2589
*2549
2580
2581
2588
2589

*2550
2580
2581
2588
2589
*25510
2580
2581
2588
2589
*25511
2580
2581
2588
2589
*25512
2580
2581
2588
2589
*25513
2580
2581
2588
2589
*25514
2580
2581
2588
2589
*2552
2580
2581
2588
2589
*2553
2554
2580
2581
2588
2589
*2554
2553
2554
2555
2556
2580
2581
2588
2589
*2555
2554
2580
2581

2588
2589
*2556
2554
2580
2581
2588
2589
*2558
2554
2580
2581
2588
2589
*2559
2554
2580
2581
2588
2589
*2560
2580
2581
2588
2589
*2561
2580
2581
2588
2589
*2562
2580
2581
2588
2589
*25631
2580
2581
2588
2589
*25639
2580
2581
2588
2589
*2564
2580
2581
2588
2589
*2568
2580
2581
2588

2589
*2569
2580
2581
2588
2589
*2570
2580
2581
2588
2589
*2571
2580
2581
2588
2589
*2572
2580
2581
2588
2589
*2578
2580
2581
2588
2589
*2579
2580
2581
2588
2589
*2580
2580
2581
2588
2589
*2581
2580
2581
2588
2589
*2588
2580
2581
2588
2589
*2589
2580
2581
2588
2589
*2590
2580
2581

2588
2589
*2591
2580
2581
2588
2589
*2592
2580
2581
2588
2589
*2593
2580
2581
2588
2589
*2594
2580
2581
2588

2589
*2595
24200
24210
24220
24230
24240
24280
24290
25001
25002
25003
25041
25042
25043
25051
25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2521
2554
2580
2581
2588
2589
*2598
24200
24210
24220
24230
24240
24280
24290
25001
25002
25003
25041
25042
25043
25051

2580
2581
2588
2589
*2599
24200
24210
24220
24230
24240
24280
24290
25001
25002
25003
25041
25042
25043
25051

25052
25053
25061
25062
25063
25071
25072
25073
25081
25082
25083
25091
25092
25093
2521
2554
2580
2581
2588
2589
*260
2630
2631
*261
2630
2631
*262
2630
2631
*2630
2630
2631
*2631
2630
2631
*2632
2630
2631
*2638
2630
2631
*2639
2630
2631
*2690
2690
*2730
2733
*2731
2733
*2732
2733
*2733
2733
*2738
2733
*2739
2733
*27410
5851
5852
5853
5859
5909
*27411
59960
59969
78820
78829
*27419
5851
5852
5853
5859
5909
*2760
27650
27651
27652
2766
2767
2769
*2761
27650
27651
27652
2766
2767
2769
*2762
27650
27651
27652
2766
2767
2769
*2763
27650
27651
27652
2766
2767
2769
*2764
27650
27651
27652
*27650
27650
27651
27652
2766
2767
2769
*27651
27650
27651
27652
2766
2767
2769
*2766
27650
27651
27652
2766
2767
2769
*2767
27650
27651
27652
2766
2767
2769
*2768
27650
27651
27652
2766
2767
2769
*2769
27650
27651
27652
2766
2767
2769
*27902
2794
2798
2799
*27903
2794
2798
2799
*27904
2794
2798
2799
*27905
2794
2798
2799
*27906
2794
2798
2799
*27909
2794
2798
2799
*27910
2794
2798
2799
*27911
2794
2798
2799
*27912
2794
2798
2799
*27913
2794
2798
2799
*2792
2794
2798
2799
*2793
2794
2798
2799
*2794
2794
2798
2799
*2798
2794
2798
2799
*2799
2794
2798
2799
*2800
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2801
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2808
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2809
2800
2814
2818
28241
28249
28260
28261
*2810
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2811
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2812
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2813
2800
2814
2818
28241
28249
28260
28261

28263
28268
2832
2848
2850
*2814
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2818
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2819
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2820
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2821
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2822
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2823
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2825
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28241
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28242
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28249
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28260
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28261
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28262
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28263
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28264
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28268
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28269
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2827
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2828
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2829
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2830
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28310
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28311
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28319
2800
2814
2818
28241
28249
28260

28261
28263
28268
2832
2848
2850
*2832
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2839
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28401
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28409
2800
2814
2818
28241
28249
28260
28261
28263

28268
2832
2848
2850
*2841
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2842
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2848
2800
2814
2818
28241
28242
28249
28260
28261
28262
28263
28264
28268
28269
2830
28310
28311
28319
2832
2839
2848
2849
2850

2851
*2849
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2850
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2851
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28521
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28522

2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*28529
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2858
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2859
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*2860
2871

2872
28730
28739
2874
2875
2878
2879
*2861
2871
2872
28730
28739
2874
2875
2878
2879
*2862
2871
2872
28730
28739
2874
2875
2878
2879
*2863
2871
2872
28730
28739
2874
2875
2878
2879
*2864
2871
2872
28730
28739
2874
2875
2878
2879
*2865
2871
2872
28730
28739
2874
2875
2878
2879
*2866
2871

2872
28730
28739
2874
2875
2878
2879
*2867
2871
2872
28730
28739
2874
2875
2878
2879
*2869
2871
2872
28730
28739
2874
2875
2878
2879
*2870
2871
2872
28730
28739
2874
2875
2878
2879
*2871
2871
2872
28730
28739
2874
2875
2878
2879
*2872
2871
2872
28730
28739
2874
2875
2878
2879
*28730
2871

2872
28730
28739
2874
2875
2878
2879
*28731
2871
2872
28730
28739
2874
2875
2878
2879
*28732
2871
2872
28730
28739
2874
2875
2878
2879
*28733
2871
2872
28730
28739
2874
2875
2878
2879
*28739
2871
2872
28730
28739
2874
2875
2878
2879
*2874
2871
2872
28730
28739
2874
2875
2878
2879
*2875
2871

2872
28730
28739
2874
2875
2878
2879
*2878
2871
2872
28730
28739
2874
2875
2878
2879
*2879
2871
2872
28730
28739
2874
2875
2878
2879
*28800
2881
*28801
2881
*28802
2881
*28803
2881
*28804
2881
*28809
2881
*2881
2881
*2882
2881
*2883
2881
*2884
2881
*28850
2881
*28851
2881
*28859
2881
*28860
2881
*28861

2881
*28862
2881
*28863
2881
*28864
2881

*28865
2881
*28869
2881
*2888
2881
*2889
2881
*28953
2881
*28981
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
2871
2872
28730
28739
2874
2875
2878
2879
2881
*28862
2881
*28863
2881
*28864
2881

*28865
2881
*28869
2881
*2888
2881
*2889
2881
*28953
2881
*28982
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
2871
2872
28730
28739
2874
2875
2878
2879
2881
*28983
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
2871
2872
28730
28739
2874
2875
2878
2879
2881
*28989
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
2871
2872
28730
28739
2874
2875
2878
2879
2881
*2899
2800

2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
2871
2872
28730
28739
2874
2875
2878
2879
2881
*2910
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492

30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*2911
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492

30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*2912	30592	30591	30590	30572	30571
2911	*2913	30592	30591	30590	30572
2914	2911	*2914	30592	30591	30590
2922	2914	2911	*2915	30592	30591
29283	2922	2914	2911	*29181	30592
29284	29283	2922	2914	2911	*29182
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460

30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*29189	30592	30591	30590	30572	30571
2911	*2919	30592	30591	30590	30572
2914	2911	*2920	30592	30591	30590
2922	2914	2911	*29211	30592	30591
29283	2922	2914	2911	*29212	30592
29284	29283	2922	2914	2911	*2922
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420

30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*29281	30592	30591	30590	30572	30571
2911	*29282	30592	30591	30590	30572
2914	2911	*29283	30592	30591	30590
2922	2914	2911	*29284	30592	30591
29283	2922	2914	2911	*29285	30592
29284	29283	2922	2914	2911	*29289
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391

30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*2929
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*2930
2911
2914
2922
29283
29284
29289
2929
29383
29384
*2931
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29381
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29382
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29383
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29384
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29389
2911
2914
2922
29283
29284
29289
2929
29383
29384
*2939
2911
2914
2922
29283
29284
29289
2929
29383
29384
*2940
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29410
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29411
2911
2914
2922
29283
29284
29289
2929
29383
29384
*2948
2911
2914
2922
29283
29284
29289
2929
29383
29384
*2949
2911
2914
2922
29283
29284
29289
2929
29383
29384
*29500
29570
29590
*29501
29570
29590
*29502
29570
29590
*29503
29570
29590
*29504
29570
29590
*29505
29570
29590
*29510
29570
29590
*29511
29570
29590
*29512
29570
29590
*29513
29570
29590
*29514
29570
29590
*29520
29570
29590
*29521
29570
29590
*29522
29570
29590
*29523
29570
29590
*29524
29570
29590
*29525
29570
29590
*29530
29570
29590
*29531
29570
29590
*29532
29570
29590
*29533
29570
29590
*29534
29570
29590
*29535
29570
29590
*29540
29570
29590
*29541
29570
29590
*29542
29570
29590
*29543
29570
29590
*29544
29570
29590
*29545
29570
29590
*29550
29570
29590
*29551
29570
29590

*29552
29570
29590
*29553
29570
29590
*29554
29570
29590
*29555
29570
29590
*29560
29570
29590
*29561
29570
29590
*29562
29570
29590
*29563
29570
29590
*29564
29570
29590
*29565
29570
29590
*29570
29570
29590
*29571
29570
29590
*29572
29570
29590
*29573
29570
29590
*29574
29570
29590
*29575
29570
29590
*29580
29570
29590
*29581
29570
29590
*29582
29570
29590
*29583
29570
29590
*29584
29570
29590
*29585
29570
29590
*29590
29570
29590
*29591
29570
29590
*29592
29570
29590
*29593
29570
29590
*29594
29570
29590
*29595
29570
29590
*29600
29570
29590
*29601
29570
29590
*29602
29570
29590
*29603
29570
29590
*29604
29570
29590
*29605
29570
29590
*29606
29570
29590
*29610
29570
29590
*29611
29570
29590
*29612
29570
29590
*29613
29570
29590
*29614
29570
29590
*29615
29570
29590
*29616
29570
29590
*29620
29570
29590
*29621
29570
29590
*29622
29570
29590
*29623
29570
29590
*29624
29570
29590
*29625
29570
29590
*29626
29570
29590
*29630
29570
29590
*29631
29570
29590
*29632
29570
29590
*29633
29570
29590
*29634
29570
29590
*29635
29570
29590
*29636
29570
29590
*29640
29570
29590
*29641
29570
29590
*29642
29570
29590
*29643
29570
29590
*29644
29570
29590
*29645
29570
29590
*29646
29570
29590
*29650
29570
29590
*29651
29570
29590
*29652
29570
29590
*29653
29570
29590
*29654
29570
29590
*29655
29570
29590
*29656
29570
29590
*29660
29570
29590
*29661
29570
29590
*29662
29570
29590
*29663
29570
29590
*29664
29570
29590
*29665
29570
29590
*29666
29570
29590
*2967
29570
29590
*29680
29570
29590
*29681
29570
29590
*29682
29570
29590
*29689
29570
29590
*29690
29570
29590
*29699
29570
29590
*2970
29570
29590
*2971
29570
29590
*2972
29570
29590
*2973
29570
29590
*2978
29570
29590
*2979
29570
29590
*2980
29570
29590
*2981
29570
29590
*2982
29570
29590
*2983
29570
29590
*2984
29570
29590
*2988
29570
29590
*2989
29570
29590
*29900
29570
29590
*29901
29570
29590
*29910
29570
29590
*29911
29570
29590
*29980
29570
29590
*29981
29570
29590
*29990
29570
29590
*29991
29570
29590
*30000
29570
29590
*30001
29570
29590

*30002
29570
29590
*30009
29570
29590
*30010
29570
29590
*30011
29570
29590
*30012
29570
29590
*30013
29570
29590
*30014
29570
29590
*30015
29570
29590
*30016
29570
29590
*30019
29570
29590
*30020
29570
29590
*30021
29570
29590
*30022
29570
29590
*30023
29570
29590
*30029
29570
29590
*3003
29570
29590
*3004
29570
29590
*3005
29570
29590
*3006
29570
29590
*3007
29570
29590
*30081
29570
29590
*30082
29570
29590
*30089
29570
29590
*3009
29570
29590
*3010
29570
29590
*30110
29570
29590
*30111
29570
29590
*30112
29570
29590
*30113
29570
29590
*30120
29570
29590
*30121
29570
29590
*30122
29570
29590
*3013
29570
29590
*3014
29570
29590
*30150
29570
29590
*30151
29570
29590
*30159
29570
29590
*3016
29570
29590
*3017
29570
29590
*30181
29570
29590
*30182
29570
29590
*30183
29570
29590
*30184
29570
29590
*30189
29570
29590
*3019
29570
29590
*30300
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480

30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30301
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30302
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30303
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592

30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*30390	30592	30591	30590	30572	30571
2911	*30391	30592	30591	30590	30572
2914	2911	*30392	30592	30591	30590
2922	2914	2911	*30393	30592	30591
29283	2922	2914	2911	*30400	30592
29284	29283	2922	2914	2911	*30401
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400

30402	30392	30390	30302	30301	30300
30410	30400	30391	30390	30302	30301
30412	30402	30392	30391	30390	30302
30420	30410	30400	30392	30391	30390
30422	30412	30402	30400	30392	30391
30440	30420	30410	30402	30400	30392
30442	30422	30412	30410	30402	30400
30450	30440	30420	30412	30410	30402
30452	30442	30422	30420	30412	30410
30460	30450	30440	30422	30420	30412
30462	30452	30442	30440	30422	30420
30470	30460	30450	30442	30440	30422
30472		30452	30450	30442	30440
30480	30462	30460	30452	30450	30442
30482	30470	30462	30460	30452	30450
30490	30472	30470	30462	30460	30452
30492	30480	30472	30470	30462	30460
30500	30482	30480	30472	30470	30462
30501	30490	30482	30480	30472	30470
30502	30492	30490	30482	30480	30472
30530	30500	30492	30490	30482	30480
30531	30501	30500	30492	30490	30482
30532	30502	30501	30500	30492	30490
30540	30530	30502	30501	30500	30492
30541	30531	30530	30502	30501	30500
30542	30532	30531	30530	30502	30501
30550	30540	30532	30531	30530	30502
30551	30541	30540	30532	30531	30530
30552	30542	30541	30540	30532	30531
30560	30550	30542	30541	30540	30532
30561	30551	30550	30542	30541	30540
30562	30552	30551	30550	30542	30541
30570	30560	30552	30551	30550	30542
30571	30561	30560	30552	30551	30550
30572	30562	30561	30560	30552	30551
30590	30570	30562	30561	30560	30552
	30571	30570	30562	30561	30560
30591	30572	30571	30570	30562	30561
30592	30590	30572	30571	30570	30562
*30402	30591	30590	30572	30571	30570
2911	30592	30591	30590	30572	30571
2914	*30403	30592	30591	30590	30572
2922	2911	*30410	30592	30591	30590
29283	2914	2911	*30411	30592	30591
29284	2922	2914	2911	*30412	30592
29289	29283	2922	2914	2911	*30413
2929	29284	29283	2922	2914	2911
29383	29289	29284	29283	2922	2914
29384	2929	29289	29284	29283	2922
30300	29383	2929	29289	29284	29283
30301	29384	29383	2929	29289	29284
30302	30300	29384	29383	2929	29289
30390	30301	30300	29384	29383	2929
30391	30302	30301	30300	29384	29383

29384	29383	2929	29289	29284	2922
30300	29384	29383	2929	29289	29283
30301	30300	29384	29383	2929	29284
30302	30301	30300	29384	29383	29289
30390	30302	30301	30300	29384	2929
30391	30390	30302	30301	30300	29383
30392	30391	30390	30302	30301	29384
30400	30392	30391	30390	30302	30300
30402	30400	30392	30391	30390	30301
30410	30402	30400	30392	30391	30302
30412	30410	30402	30400	30392	30390
30420	30412	30410	30402	30400	30391
30422	30420	30412	30410	30402	30392
30440	30422	30420	30412	30410	30400
30442	30440	30422	30420	30412	30402
30450	30442	30440	30422	30420	30410
30452	30450	30442	30440	30422	30412
30460	30452	30450	30442	30440	30420
30462	30460	30452	30450	30442	30422
30470	30462	30460	30452	30450	30440
30472	30470	30462	30460	30452	
30480	30472	30470	30462	30460	30442
30482	30480	30472	30470	30462	30450
30490	30482	30480	30472	30470	30452
30492	30490	30482	30480	30472	30460
30500	30492	30490	30482	30480	30462
30501	30500	30492	30490	30482	30470
30502	30501	30500	30492	30490	30472
30530	30502	30501	30500	30492	30480
30531	30530	30502	30501	30500	30482
30532	30531	30530	30502	30501	30490
30540	30532	30531	30530	30502	30492
30541	30540	30532	30531	30530	30500
30542	30541	30540	30532	30531	30501
30550	30542	30541	30540	30532	30502
30551	30550	30542	30541	30540	30530
30552	30551	30550	30542	30541	30531
30560	30552	30551	30550	30542	30532
30561	30560	30552	30551	30550	30540
30562	30561	30560	30552	30551	30541
30570	30562	30561	30560	30552	30542
30571	30570	30562	30561	30560	30550
30572	30571	30570	30562	30561	30551
30590	30572	30571	30570	30562	30552
30591	30590	30572	30571		30560
30592	30591	30590	30572	30570	30561
*30420	30592	30591	30590	30571	30562
2911	*30421	30592	30591	30572	30570
2914	2911	*30422	30592	30590	30571
2922	2914	2911	*30423	30591	30572
29283	2922	2914	2911	30592	30590
29284	29283	2922	2914	*30430	30591
29289	29284	29283	2922	2911	30592
2929	29289	29284	29283	2914	*30431

2911	*30432	30592	30591	30590	30572
2914	2911	*30433	30592	30591	30590
2922	2914	2911	*30440	30592	30591
29283	2922	2914	2911	*30441	30592
29284	29283	2922	2914	2911	*30442
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570

30571	30570	30562	30560	30551	30550
30572	30571	30570	30561	30552	30551
30590	30572	30571	30562	30560	30552
30591	30590	30572	30570	30561	30560
30592	30591	30590	30571	30562	30561
*30443	30592	30591	30572	30570	30562
2911	*30450	30592	30590	30571	30570
2914	2911	*30451	30591	30572	30571
2922	2914	2911	30592	30590	30572
29283	2922	2914	*30452	30591	30590
29284	29283	2922	2911	30592	30591
29289	29284	29283	2914	*30453	30592
2929	29289	29284	2922	2911	*30460
29383	2929	29289	29283	2914	2911
29384	29383	2929	29284	2922	2914
30300	29384	29383	29289	29283	2922
30301	30300	29384	2929	29284	29283
30302	30301	30300	29383	29289	29284
30390	30302	30301	29384	2929	29289
30391	30390	30302	30300	29383	2929
30392	30391	30390	30301	29384	29383
30400	30392	30391	30302	30300	29384
30402	30400	30392	30390	30301	30300
30410	30402	30400	30391	30302	30301
30412	30410	30402	30392	30390	30302
30420	30412	30410	30400	30391	30390
30422	30420	30412	30402	30392	30391
30440	30422	30420	30410	30400	30392
30442	30440	30422		30402	30400
30450	30442	30440	30412	30410	30402
30452	30450	30442	30420	30412	30410
30460	30452	30450	30422	30420	30412
30462	30460	30452	30440	30422	30420
30470	30462	30460	30442	30440	30422
30472	30470	30462	30450	30442	30440
30480	30472	30470	30452	30450	30442
30482	30480	30472	30460	30452	30450
30490	30482	30480	30462	30460	30452
30492	30490	30482	30470	30462	30460
30500	30492	30490	30472	30470	30462
30501	30500	30492	30480	30472	30470
30502	30501	30500	30482	30480	30472
30530	30502	30501	30490	30482	30480
30531	30530	30502	30492	30490	30482
30532	30531	30530	30500	30492	30490
30540	30532	30531	30501	30500	30492
30541	30540	30532	30502	30501	30500
30542	30541	30540	30530	30502	30501
30550	30542	30541	30531	30530	30502
30551	30550	30542	30532	30531	30530
30552	30551	30550	30540	30532	30531
30560	30552	30551	30541	30540	30532
30561	30560		30542	30541	30540
30562	30561	30552	30550	30542	30541

30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*30461	30592	30591	30590	30572	30571
2911	*30462	30592	30591	30590	30572
2914	2911	*30463	30592	30591	30590
2922	2914	2911	*30470	30592	30591
29283	2922	2914	2911	*30471	30592
29284	29283	2922	2914	2911	*30472
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501

30502	30501	30490	30482	30480	30472
30530	30502	30492	30490	30482	30480
30531	30530	30500	30492	30490	30482
30532	30531	30501	30500	30492	30490
30540	30532	30502	30501	30500	30492
30541	30540	30530	30502	30501	30500
30542		30531	30530	30502	30501
30550	30541	30532	30531	30530	30502
30551	30542	30540	30532	30531	30530
30552	30550	30541	30540	30532	30531
30560	30551	30542	30541	30540	30532
30561	30552	30550	30542	30541	30540
30562	30560	30551	30550	30542	30541
30570	30561	30552	30551	30550	30542
30571	30562	30560	30552	30551	30550
30572	30570	30561	30560	30552	30551
30590	30571	30562	30561	30560	30552
30591	30572	30570	30562	30561	30560
30592	30590	30571	30570	30562	30561
*30473	30591	30572	30571	30570	30562
2911	30592	30590	30572	30571	30570
2914	*30480	30591	30590	30572	30571
2922	2911	30592	30591	30590	30572
29283	2914	*30481	30592	30591	30590
29284	2922	2911	*30482	30592	30591
29289	29283	2914	2911	*30483	30592
2929	29284	2922	2914	2911	*30490
29383	29289	29283	2922	2914	2911
29384	2929	29284	29283	2922	2914
30300	29383	29289	29284	29283	2922
30301	29384	2929	29289	29284	29283
30302	30300	29383	2929	29289	29284
30390	30301	29384	29383	2929	29289
30391	30302	30300	29384	29383	2929
30392	30390	30301	30300	29384	29383
30400	30391	30302	30301	30300	29384
30402		30390	30302	30301	30300
30410	30392	30391	30390	30302	30301
30412	30400	30392	30391	30390	30302
30420	30402	30400	30392	30391	30390
30422	30410	30402	30400	30392	30391
30440	30412	30410	30402	30400	30392
30442	30420	30412	30410	30402	30400
30450	30422	30420	30412	30410	30402
30452	30440	30422	30420	30412	30410
30460	30442	30440	30422	30420	30412
30462	30450	30442	30440	30422	30420
30470	30452	30450	30442	30440	30422
30472	30460	30452	30450	30442	30440
30480	30462	30460	30452	30450	30442
30482	30470	30462	30460	30452	30450
30490	30472	30470	30462	30460	30452
30492	30480	30472	30470	30462	30460
30500	30482	30480	30472	30470	30462

30470	30462	30460	30452	30442	30440
30472	30470	30462	30460	30450	30442
30480	30472	30470	30462	30452	30450
30482	30480	30472	30470	30460	30452
30490	30482	30480	30472	30462	30460
30492	30490	30482	30480	30470	30462
30500	30492	30490	30482	30472	30470
30501	30500	30492	30490	30480	30472
30502	30501	30500	30492	30482	30480
30530	30502	30501	30500	30490	30482
30531	30530	30502	30501	30492	30490
30532	30531	30530	30502	30500	30492
30540	30532	30531	30530	30501	30500
30541	30540	30532	30531	30502	30501
30542	30541	30540	30532	30530	30502
30550	30542	30541	30540	30531	
30551	30550	30542	30541	30532	30530
30552	30551	30550	30542	30540	30531
30560	30552	30551	30550	30541	30532
30561	30560	30552	30551	30542	30540
30562	30561	30560	30552	30550	30541
30570	30562	30561	30560	30551	30542
30571	30570	30562	30561	30552	30550
30572	30571	30570	30562	30560	30551
30590	30572	30571	30570	30561	30552
30591	30590	30572	30571	30562	30560
30592	30591	30590	30572	30570	30561
*30491	30592	30591	30590	30571	30562
2911	*30492	30592	30591	30572	30570
2914	2911	*30493	30592	30590	30571
2922	2914	2911	*30500	30591	30572
29283	2922	2914	2911	30592	30590
29284	29283	2922	2914	*30501	30591
29289	29284	29283	2922	2911	30592
2929	29289	29284	29283	2914	*30502
29383	2929	29289	29284	2922	2911
29384	29383	2929		29283	2914
30300	29384	29383	29289	29284	2922
30301	30300	29384	2929	29289	29283
30302	30301	30300	29383	2929	29284
30390	30302	30301	29384	29383	29289
30391	30390	30302	30300	29384	2929
30392	30391	30390	30301	30300	29383
30400	30392	30391	30302	30301	29384
30402	30400	30392	30390	30302	30300
30410	30402	30400	30391	30390	
30412	30410	30402	30392	30391	30301
30420	30412	30410	30400	30392	30302
30422	30420	30412	30402	30400	30390
30440	30422	30420	30410	30402	30391
30442	30440	30422	30412	30410	30392
30450	30442	30440	30420	30412	30400
30452	30450	30442	30422	30420	30402
30460	30452	30450	30440	30422	30410

30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*30503	30592	30591	30590	30572	30571
2911	*30520	30592	30591	30590	30572
2914	2911	*30521	30592	30591	30590
2922	2914	2911	*30522	30592	30591
29283	2922	2914	2911	*30523	30592
29284	29283	2922	2914	2911	*30530
29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302

30390	30302	30301	30300	29383	2929
30391	30390	30302	30301	29384	29383
30392	30391	30390	30302	30300	29384
30400	30392	30391	30390	30301	30300
30402	30400	30392	30391	30302	30301
30410	30402	30400	30392	30390	30302
30412	30410	30402	30400	30391	30390
30420	30412	30410	30402	30392	30391
30422	30420	30412	30410	30400	30392
30440	30422	30420	30412	30402	30400
30442	30440	30422	30420	30410	30402
30450	30442	30440	30422	30412	30410
30452	30450	30442	30440	30420	30412
30460	30452	30450	30442	30422	30420
30462	30460	30452	30450	30440	30422
30470	30462	30460	30452	30442	30440
30472	30470	30462	30460	30450	30442
30480	30472	30470	30462	30452	30450
30482	30480	30472	30470	30460	30452
30490	30482	30480	30472	30462	30460
30492	30490	30482	30480	30470	30462
30500	30492	30490	30482	30472	30470
30501	30500	30492	30490	30480	30472
30502	30501	30500		30482	30480
30530	30502	30501	30492	30490	30482
30531	30530	30502	30500	30492	30490
30532	30531	30530	30501	30500	30492
30540	30532	30531	30502	30501	30500
30541	30540	30532	30530	30502	30501
30542	30541	30540	30531	30530	30502
30550	30542	30541	30532	30531	30530
30551	30550	30542	30540	30532	30531
30552	30551	30550	30541	30540	30532
30560	30552	30551	30542	30541	30540
30561	30560	30552	30550	30542	30541
30562	30561	30560	30551	30550	30542
30570	30562	30561	30552	30551	30550
30571	30570	30562	30560	30552	30551
30572	30571	30570	30561	30560	30552
30590	30572	30571	30562	30561	30560
30591	30590	30572	30570	30562	30561
30592	30591	30590	30571	30570	30562
30531	30592	30591	30572	30571	30570
2911	*30532	30592	30590	30572	30571
2914	2911	*30533	30591	30590	30572
2922	2914	2911	30592	30591	30590
29283	2922	2914	*30540	30592	30591
29284	29283	2922	2911	*30541	30592
29289	29284	29283	2914	2911	*30542
2929	29289	29284	2922	2914	2911
29383	2929	29289	29283	2922	2914
29384	29383	2929	29284	29283	2922
30300	29384	29383	29289	29284	29283
30301	30300	29384	2929	29289	29284

29289	29284	29283	2922	2914	2911
2929	29289	29284	29283	2922	2914
29383	2929	29289	29284	29283	2922
29384	29383	2929	29289	29284	29283
30300	29384	29383	2929	29289	29284
30301	30300	29384	29383	2929	29289
30302	30301	30300	29384	29383	2929
30390	30302	30301	30300	29384	29383
30391	30390	30302	30301	30300	29384
30392	30391	30390	30302	30301	30300
30400	30392	30391	30390	30302	30301
30402	30400	30392	30391	30390	30302
30410	30402	30400	30392	30391	30390
30412	30410	30402	30400	30392	30391
30420	30412	30410	30402	30400	30392
30422	30420	30412	30410	30402	30400
30440	30422	30420	30412	30410	30402
30442	30440	30422	30420	30412	30410
30450	30442	30440	30422	30420	30412
30452	30450	30442	30440	30422	30420
30460	30452	30450	30442	30440	30422
30462	30460	30452	30450	30442	30440
30470	30462	30460	30452	30450	30442
30472	30470	30462	30460	30452	30450
30480	30472	30470	30462	30460	30452
30482	30480	30472	30470	30462	30460
30490	30482	30480	30472	30470	30462
30492	30490	30482	30480	30472	30470
30500	30492	30490	30482	30480	30472
30501	30500	30492	30490	30482	30480
30502	30501	30500	30492	30490	30482
30530	30502	30501	30500	30492	30490
30531	30530	30502	30501	30500	30492
30532	30531	30530	30502	30501	30500
30540	30532	30531	30530	30502	30501
30541	30540	30532	30531	30530	30502
30542	30541	30540	30532	30531	30530
30550	30542	30541	30540	30532	30531
30551	30550	30542	30541	30540	30532
30552	30551	30550	30542	30541	30540
30560	30552	30551	30550	30542	30541
30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*30543	30592	30591	30590	30572	30571
2911	*30550	30592	30591	30590	30572
2914	2911	*30551	30592	30591	30590
2922	2914	2911	*30552	30592	30591
29283	2922	2914	2911	*30553	30592

30560	30592	30572	30571	30570	30562
2911		30590	30572	30571	30570
2914	*30561	30591	30590	30572	30571
2922	2911	30592	30591	30590	30572
29283	2914	*30562	30592	30591	30590
29284	2922	2911	*30563	30592	30591
29289	29283	2914	2911	*30570	30592
2929	29284	2922	2914	2911	*30571
29383	29289	29283	2922	2914	2911
29384	2929	29284	29283	2922	2914
30300	29383	29289	29284	29283	2922
30301	29384	2929	29289	29284	29283
30302	30300	29383	2929	29289	29284
30390	30301	29384	29383	2929	29289
30391	30302	30300	29384	29383	2929
30392	30390	30301	30300	29384	29383
30400	30391	30302	30301	30300	29384
30402	30392	30390	30302	30301	30300
30410	30400	30391	30390	30302	30301
30412	30402	30392	30391	30390	30302
30420	30410	30400	30392	30391	30390
30422	30412	30402	30400	30392	30391
30440	30420	30410	30402	30400	30392
30442	30422	30412	30410	30402	30400
30450	30440	30420	30412	30410	30402
30452	30442	30422	30420	30412	30410
30460	30450	30440	30422	30420	30412
30462	30452	30442	30440	30422	30420
30470	30460	30450	30442	30440	30422
30472	30462	30452	30450	30442	30440
30480	30470	30460	30452	30450	30442
30482		30462	30460	30452	30450
30490	30472	30470	30462	30460	30452
30492	30480	30472	30470	30462	30460
30500	30482	30480	30472	30470	30462
30501	30490	30482	30480	30472	30470
30502	30492	30490	30482	30480	30472
30530	30500	30492	30490	30482	30480
30531	30501	30500	30492	30490	30482
30532	30502	30501	30500	30492	30490
30540	30530	30502	30501	30500	30492
30541	30531	30530	30502	30501	30500
30542	30532	30531	30530	30502	30501
30550	30540	30532	30531	30530	30502
30551	30541	30540	30532	30531	30530
30552	30542	30541	30540	30532	30531
30560	30550	30542	30541	30540	30532
30561	30551	30550	30542	30541	30540
30562	30552	30551	30550	30542	30541
30570	30560	30552	30551	30550	30542
30571	30561	30560	30552	30551	30550
30572	30562	30561	30560	30552	30551
30590	30570	30562	30561	30560	30552
30591	30571	30570	30562	30561	30560

30561	30560	30552	30551	30550	30542
30562	30561	30560	30552	30551	30550
30570	30562	30561	30560	30552	30551
30571	30570	30562	30561	30560	30552
30572	30571	30570	30562	30561	30560
30590	30572	30571	30570	30562	30561
30591	30590	30572	30571	30570	30562
30592	30591	30590	30572	30571	30570
*30572	30592	30591	30590	30572	30571
2911	*30573	30592	30591	30590	
2914	2911	*30580	30592	30591	30572
2922	2914	2911	*30581	30592	30590
29283	2922	2914	2911	*30582	30591
29284	29283	2922	2914	2911	30592
29289	29284	29283	2922	2914	*30583
2929	29289	29284	29283	2922	2911
29383	2929	29289	29284	29283	2914
29384	29383	2929	29289	29284	2922
30300	29384	29383	2929	29289	29283
30301	30300	29384	29383	2929	29284
30302	30301	30300	29384	29383	29289
30390	30302	30301	30300	29384	2929
30391	30390	30302	30301	30300	29383
30392	30391	30390	30302	30301	29384
30400	30392	30391	30390	30302	30300
30402	30400	30392	30391	30390	30301
30410	30402	30400	30392	30391	30302
30412	30410	30402	30400	30392	30390
30420	30412	30410	30402	30400	30391
30422	30420	30412	30410	30402	30392
30440	30422	30420	30412	30410	30400
30442	30440	30422	30420	30412	30402
30450	30442	30440	30422	30420	30410
30452	30450	30442	30440	30422	30412
30460	30452	30450	30442	30440	30420
30462	30460	30452	30450	30442	30422
30470	30462	30460	30452	30450	30440
30472	30470	30462	30460	30452	30442
30480	30472	30470	30462	30460	30450
30482	30480	30472	30470	30462	
30490	30482	30480	30472	30470	30452
30492	30490	30482	30480	30472	30460
30500	30492	30490	30482	30480	30462
30501	30500	30492	30490	30482	30470
30502	30501	30500	30492	30490	30472
30530	30502	30501	30500	30492	30480
30531	30530	30502	30501	30500	30482
30532	30531	30530	30502	30501	30490
30540	30532	30531	30530	30502	30492
30541	30540	30532	30531	30530	30500
30542	30541	30540	30532	30531	30501
30550	30542	30541	30540	30532	30502
30551	30550	30542	30541	30540	30530
30552	30551	30550	30542	30541	30531

30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30590
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530

30531
30532
30540
30541
30542
30550
30560
30561
30562
30570
30571
30572
30590
30592
*30591

2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501

30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30592
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500

30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*30593
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492

30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*3060
29570
29590
*3061
29570
29590
*3062
29570
29590
*3063
29570
29590
*3064
29570
29590
*30650
29570
29590
*30651
29570
29590
*30652
29570
29590
*30653
29570
29590
*30659
29570
29590
*3066
29570
29590

*3067
29570
29590
*3068
29570
29590

*3069
29570
29590
*3070
29570
29590
*3071
29570
29590
*30720
29570
29590
*30721
29570
29590
*30722
29570
29590
*30723
29570
29590
*3073
29570
29590
*30740
29570
29590
*30741
29570
29590

*30742
29570
29590
*30743
29570
29590
*30744
29570
29590
*30745
29570
29590
*30746
29570
29590
*30747

29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30748	*3084	*3101	*31231	*31382	*31539
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30749	*3089	*3102	*31232	*31383	*3154
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30750	*3090	*3108	*31233	*31389	*3155
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30751	*3091	*3109	*31234	*3139	*3158
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30752	*30921	*311	*31235	*31400	*3159
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30753	*30922	*31200	*31239	*31401	*316
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30754	*30923	*31201	*3124	*3141	*317
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30759	*30924	*31202	*31281	*3142	*3180
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*3076	*30928	*31203	*31282	*3148	*3181
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*3077	*30929	*31210	*31289	*3149	*3182
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30780	*3093	*31211	*3129	*31500	*319
29570	29570	29570	29570	29570	29570
29590	29590	29590	29590	29590	29590
*30781	*3094	*31212	*3130	*31501	*3380
29570	29570	29570	29570	29570	78039
29590	29590	29590	29590	29590	78820
*30789	*30981	*31213	*3131	*31502	78829
29570	29570	29570	29570	29570	7895
29590	29590	29590	29590	29590	79902
*3079	*30982	*31220	*31321	*31509	*33811
29570	29570	29570	29570	29570	78039
29590	29590	29590	29590	29590	78820
*3080	*30983	*31221	*31322	*3151	78829
29570	29570	29570	29570	29570	7895
29590	29590	29590	29590	29590	79902
*3081	*30989	*31222	*31323	*3152	*33812
29570	29570	29570	29570	29570	78039
29590	29590	29590	29590	29590	78820
*3082	*3099	*31223	*3133	*31531	78829
29570	29570	29570	29570	29570	7895
29590	29590	29590	29590	29590	79902
*3083	*3100	*31230	*31381	*31532	*33818

78039
78820
78829
7895
79902
*33819
78039
78820
78829
7895
79902
*33821
78039
78820
78829
7895
79902
*33822
78039
78820
78829
7895
79902
*33828
78039
78820
78829
7895
79902
*33829
78039
78820
78829
7895
79902
*3383
78039
78820
78829
7895
79902
*3384
78039
78820
78829
7895
79902
*340
340
*3418
340
*3419
340
*34461
59960
59969
78820
78829
*34500
34510
78039
*34501
34510
78039
*34510
34510
78039
*34511
34510
78039
*3452
34510
78039
*3453
34510
78039
*34540
34510
78039
*34541
34510
78039
*34550
34510
78039
*34551
34510
78039
*34560
34510
78039
*34561
34510
78039
*34570
34510
78039
*34571
34510
78039
*34580
34510
78039
*34581
34510
78039
*34590
34510
78039
*34591
34510
78039
*3488
34510
78039
*3489
34510
78039
*34989
34510
35800
78039
*3499
34510
35800
*35801
35800
*3581
35800
*37700
37702
*37701
37702
*37702
37702
*37703
37702
*37714
37702
*37724
37702
*37960
37702
*37961
37702
*37962
37702
*37963
37702
*3798
37702
*37990
37702
*37999
37702
*38300
38330
38381
*38301
38330
38381
*38302
38330
38381
*3831
38330
38381
*38320
38330
38381
*38321
38330
38381
*38322
38330
38381
*38330
38330
38381
*38331
38330
38381
*38332
38330
38381
*38333
38330
38381
*38381
38330
*38389
38330
38381
*3839
38330
38381
*38871
38330
38381
*38872
38330
38381
*3888
38330
38381
*3889
38330
38381
*390
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
*3911
3979
*3918
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
*3919
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
*3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
4240
*3941
3940
3941
3942
3949
3960
3961
3962
3963
3968
3969
3979
4240
*3942
3940
3941
3942
3949
3960
3961
3962
3963
3968
3969
3979
4240
*3949
3940
3941
3942
3949
3960
3961
3962
3963
3968
3969
3979
4240
*3950
3950
3951
3952
3959
3960
3961
3962
3963
3968

3969
3979
4241
*3951
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
4241
*3952
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
4241
*3959
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
4241
*3960
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3962
3963
3968
3969
4240
4241
*3961
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
4240
4241
*3962
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
4240
4241
*3963
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
4240
4241
*3968
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
4240
4241
*3969
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
4240
4241
*3970
3970
4242
*3971
3971
3979
4243
*3979
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3961
3962
3963
3968
3969
3970
3971
3979
*4010
40211
40291
*4011
40211
40291
*4019
40211
40291
*40200
40211
40291
*40201
40211
40291
*39890
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3970
3971
3979
*39891
40211
40291
4280
4289
*39899
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3970
3971
3979
*4010
40211
40291
*4011
40211
40291
*4019
40211
40291
*40210
40211
40291
*40211
40211
40291
4280
4289
*40290
40211
40291
*40291
40211
40291
4280
4289
*40300
40211
40291
*40301
40211
40291
*40310
40211
40291
*40311
40211
40291
*40390
40211
40291
*40391
40211
40291
*40400
40211
40291
*40401
40211
40291
*40402
40211
40291
*40403
40211
40291
*40410
40211
40291
*40411
40211
40291
*40412
40211
40291
*40413
40211
40291
*40490
40211
40291
*40491
40211
40291
*40492
40211
40291
*40493
40211
40291
*40501
40211
40291
*40509
40211
40291
*40511
40211
40291
*40519
40211
40291
*40591
40211
40291
*40599
40211
40291
*41000
4139
*41001
4139
*41002
4139
*41010
4139
*41011

4139
*41012
4139
*41020
4139
*41021
4139
*41022
4139
*41030
4139
*41031
4139
*41032
4139
*41040
4139
*41041
4139
*41042
4139
*41050
4139
*41051
4139
*41052
4139
*41060
4139
*41061
4139
*41062
4139
*41070
4139
*41071
4139
*41072
4139
*41080
4139
*41081
4139
*41082
4139
*41090
4139
*41091
4139
*41092
4139
*4111
4139
*41181
4139
*41189
4139
*4130
4139
*4131
4139
*4139
4139
*4148
4139
*4149
4139
*4210
3979
*4211
3979
*4219
3979
*4240
3940
3941
3942
3949
3960
3961
3962
3963
3968
3969
3979
4240
*4241
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3979
4241
*4242
3970
3979
4242
*4243
3971
3979
4243
*42490
3979
*42491
3979
*42499
3979
*4260
42613
4266
4267
42681
4269
4272
42731
*42610
42613
4266
4267
42681
4269
4272
42731
*42611
42613
4266
4267
42681
4269
4272
42731
*42612
42613
4266
4267
42681
4269
4272
42731
*42613
42613
4266
4267
42681
4269
4272
42731
*4262
42613
4266
4267
42681
4269
4272
42731
*4263
42613
4266
4267
42681
4269
4272
42731
*4264
42613
4266
4267
42681
4269
4272
42731
*42650
42613
4266
4267
42681
4269
4272
42731
*42651
42613
4266
4267
42681
4269
4272
42731
*42652
42613
4266
4267
42681
4269
4272
42731
*42653
42613
4266
4267
42681
4269
4272
42731
*4266
42613
4266
4267
42681
4269
4272
42731
*4267
42613
4266
4267
42681
4269
4272
42731
*42681
42613
4266
4267
42681
4269
4272
42731
*42682
42613
4266
4267
42681
4269
4272
42731
*42689
42613
4266
4267
42681
4269
4272
42731
*4269
42613
4266
4267
42681
4269
4272
42731
*4270
42613
4266
4267
42681
4269
4272
42731
*4271
42613
4266
4267
42681
4269
4272
42731
*4272
42613
4266
4267
42681
4269
4272
42731
*42731
42613
4266
4267
42681
4269
4272
42731
*42732
42613
4266
4267
42681
4269
4272
42731
*42741
42613
4266
4267
42681
4269
4272
42731
*42742
42613
4266
4267
42681
4269
4272
42731
*4275

42613
4266
4267
42681
4269
4272
42731
*42789
42613
4266
4267
42681
4269
4272
42731
*4280
40211
40291
4280
4289
*4281
40211
40291
4280
4289
*42820
40211
40291
4280
4289
*42821
40211
40291
4280
4289
*42822
40211
40291
4280
4289
*42823
40211
40291
4280
4289
*42830
40211
40291
4280
4289
*42831
40211
40291
4280
4289
*42832
40211
40291
4280
4289
*42833
40211
40291
4280
4289
*42840
40211
40291
4280
4289
*42841
40211
40291
4280
4289
*42842
40211
40291
4280
4289
*42843
40211
40291
4280
4289
*4289
40211
40291
4280
4289
*42971
4294
*42979
4294
*44023
70715
*4460
4465
*4461
4465
*44620
4465
*44621
4465
*44629
4465
*4463
4465
*4464
4465
*4465
4465
*4466
4465
*4467
4465
*4510
4510
4512
*45111
4510
4512
*45119
4510
4512
*4512
4510
4512
*45181
4510
4512
*45182
4510
4512
*45183
4510
4512
*45184
4510
4512
*45189
4510
4512
*4519
4510
4512
*4590
4590
*45989
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3970
3971
3979
40211
40291
4139
4240
4241
4242
4243
42613
4266
4267
42681
4269
4272
42731
4280
4289
4294
4465
4510
4512
4590
*4599
3940
3941
3942
3949
3950
3951
3952
3959
3960
3961
3962
3963
3968
3969
3970
3971
3979
40211
40291
4139
4240
4241
4242
4243
42613
4266
4267
42681
4269
4272
42731
4280
4289
4294
4465
4510
4512
4590
*47830
47830
47831
47832
47833
*47831
47830
47831
47832
47833
*47832
47830
47831
47832
47833
*47833
47830
47831
47832
47833
*47834
47830
47831
47832
47833
*47870
47830
47831
47832
47833
*4800
4950
4951
4952
4953
4954
4955
4956
*4801
4950
4951
4952
4953
4954
4955
4956
*4802
4950
4951
4952
4953
4954
4955
4956
*4808
4950
4951
4952
4953
4954
4955
4956
*4809
4950
4951
4952
4953
4954
4955
4956
*481
4950
4951
4952
4953
4954
4955
4956
*4820
4950
4951
4952
4953
4954
4955
4956
*4821
4950
4951
4952

4953
4954
4955
4956
*4822
4950
4951
4952
4953
4954
4955
4956
*48230
4950
4951
4952
4953
4954
4955
4956
*48231
4950
4951
4952
4953
4954
4955
4956
*48232
4950
4951
4952
4953
4954
4955
4956
*48239
4950
4951
4952
4953
4954
4955
4956
*48240
4950
4951
4952
4953
4954
4955
4956
*48241
4950
4951
4952
4953
4954
4955
4956
*48249
4950
4951
4952
4953
4954
4955
4956
*48281
4950
4951
4952
4953
4954
4955
4956
*48282
4950
4951
4952
4953
4954
4955
4956
*48283
4950
4951
4952
4953
4954
4955
4956
*48284
4950
4951
4952
4953
4954
4955
4956
*48289
4950
4951
4952
4953
4954
4955
4956
*4829
4950
4951
4952
4953
4954
4955
4956
*4830
4950
4951
4952
4953
4954
4955
4956
*4831
4950
4951
4952
4953
4954
4955
4956
*4838
4950
4951
4952
4953
4954
4955
4956
*4841
4950
4951
4952
4953
4954
4955
4956
*4843
4950
4951
4952
4953
4954
4955
4956
*4845
4950
4951
4952
4953
4954
4955
4956
*4846
4950
4951
4952
4953
4954
4955
4956
*4847
4950
4951
4952
4953
4954
4955
4956
*4848
4950
4951
4952
4953
4954
4955
4956
*485
4950
4951
4952
4953
4954
4955
4956
*486
4950
4951
4952
4953
4954
4955
4956
*4870
4950
4951
4952
4953
4954
4955
4956
*4871
4950
4951
4952
4953
4954
4955
4956
496
*4911
4911
49120
4918
4919
49320
*49120
4911
49120
4918
4919
49320
*49121
4911
49120
4918
4919
49320
*49122
4911
49120
4918
4919
49320
*4918
4911
49120
4918
4919
49320
*4919
4911
49120
4918
4919
49320
*4920
4928
49320
*4928
4928
49320
*49300
49320
*49301
49320
*49302
49320
*49310
49320
*49311
49320
*49312
49320
*49320
4911
49120
4918
4919
4928
49320
*49321
4911
49120
4918
4919
49320
*49322
49320
*49381
49320
*49382
49320
*49390
49320
*49391
49320
*49392
49320
*4940
4950
4951
4952
4953
4954
4955
4956
496
515
5178
*4941
4950
4951
4952
4953
4954
4955
4956
496
515

5178
*4950
4950
4951
4952
4953
4954
4955
4956
515
5178
*4951
4950
4951
4952
4953
4954
4955
4956
515
5178
*4952
4950
4951
4952
4953
4954
4955
4956
515
5178
*4953
4950
4951
4952
4953
4954
4955
4956
515
5178
*4954
4950
4951
4952
4953
4954
4955
4956
515
5178
*4955
4950
4951
4952
4953
4954
4955
4956
515
5178
*4956
4950
4951
4952
4953
4954
4955
4956
515
5178
*4957
4950
4951
4952
4953
4954
4955
4956
515
5178
*4958
4950
4951
4952
4953
4954
4955
4956
515
5178
*4959
4950
4951
4952
4953
4954
4955
4956
515
5178
*496
4950
4951
4952
4953
4954
4955
4956
515
5178
*500
4950
4951
4952
4953
4954
4955
4956
515
5178
*501
4950
4951
4952
4953
4954
4955
4956
515
5178
*502
4950
4951
4952
4953
4954
4955
4956
515
5178
*503
4950
4951
4952
4953
4954
4955
4956
515
5178
*504
4950
4951
4952
4953
4954
4955
4956
515
5178
*505
4950
4951
4952
4953
4954
4955
4956
515
5178
*5060
4950
4951
4952
4953
4954
4955
4956
515
5178
*5061
4950
4951
4952
4953
4954
4955
4956
515
5178
*5062
4950
4951
4952
4953
4954
4955
4956
515
5178
*5063
4950
4951
4952
4953
4954
4955
4956
515
5178
*5064
4950
4951
4952
4953
4954
4955
4956
515
5178
*5069
4950
4951
4952
4953
4954
4955
4956
496
515
5178
*5070
4950
4951
4952
4953
4954
4955
4956
515
5178
*5071
4950
4951
4952
4953
4954
4955
4956
515
5178
*5078
4950
4951
4952
4953
4954
4955
4956
515
5178
*5080
4950
4951
4952
4953
4954
4955
4956
515
5178
*5081
4950
4951
4952
4953
4954
4955
4956
515
5178
*5088
4950
4951
4952
4953
4954
4955
4956
515
5178
*5089
4950
4951
4952
4953
4954
4955
4956
515
5178
*515
515
5178
*5160
515
5178
*5161
515
5178
*5162
515
5178
*5163
515
5178
*5168

515
5178
*5169
515
5178
*5171
4950
4951
4952
4953
4954
4955
4956
*5172
515
5178
*5173
2800
2814
2818
28241
28249
28260
28261
28263
28268
2832
2848
2850
*5178
49320
4950
4951
4952
4953
4954
4955
4956
515
5178
*5181
5181
*5184
4280
*51881
78603
79902
*51882
78603
79902
*51883
78603
79902
*51884
78603
79902
*51889
49320
4950
4951
4952
4953
4954
4955
4956
515
5178
*5198
47830
47831
47832
47833
49320
4950
4951
4952
4953
4954
4955
4956
515
5178
5181
78603
*5199
47830
47831
47832
47833
49320
4950
4951
4952
4953
4954
4955
4956
515
5178
*53086
53640
53649
*53087
53640
53649
*53640
53640
53649
*53641
53640
53649
*53642
53640
53649
*53649
53640
53649
*56960
56960
*56961
56960
*56962
56960
*56969
56960
*5712
5712
*57149
57149
5715
5716
*5715
57149
5715
5716
*5716
57149
5715
5716
*5718
57149
5715
5716
*5719
57149
5715
5716
*5731
5733
*5732
5733
*5733
5733
*5738
5712
57149
5715
5716
5733
*5739
5712
57149
5715
5716
5733
*57430
57450
57490
*57431
57450
57490
*57440
57450
57490
*57441
57450
57490
*57450
57450
57490
*57451
57450
57490
*57460
57450
57490
*57461
57450
57490
*57470
57450
57490
*57471
57450
57490
*57480
57450
57490
*57481
57450
57490
*57490
57450
57490
*57491
57450
57490
*5750
57450
57490
*57510
57450
57490
*57511
57450
57490
*57512
57450
57490
*5768
57450
57490
*5769
57450
57490
*5800
5851
5852
5853
5859
5909
*5804
5851
5852
5853
5859
5909
*58081
5851
5852
5853
5859
5909
*58089
5851
5852
5853
5859
5909
*5809
5851
5852
5853
5859
5909
*5810
5851
5852
5853
5859
5909
*5811
5851
5852
5853
5859
5909
*5812
5851
5852
5853
5859
5909
*5813
5851
5852
5853
5859
5909
*58181
5851
5852
5853
5859
5909
*58189
5851
5852
5853
5859
5909
*5819
5851
5852
5853
5859
5909
*5820
5851
5852
5853
5859
5909
*5821
5851
5852
5853
5859
5909
*5822
5851
5852
5853
5859
5909
*5824
5851
5852
5853
5859
5909

*58281
5851
5852
5853
5859
5909
*58289
5851
5852
5853
5859
5909
*5829
5851
5852
5853
5859
5909
*5830
5851
5852
5853
5859
5909
*5831
5851
5852
5853
5859
5909
*5832
5851
5852
5853
5859
5909
*5834
5851
5852
5853
5859
5909
*5836
5851
5852
5853
5859
5909
*5837
5851
5852
5853
5859
5909

*58381
5851
5852
5853
5859
5909
*58389
5851
5852
5853
5859
5909
*5839
5851
5852
5853
5859
5909
*5845
5851
5852
5853
5859
5909
*5846
5851
5852
5853
5859
5909
*5847
5851
5852
5853
5859
5909
*5848
5851
5852
5853
5859
5909
*5849
5851
5852
5853
5859
5909
*5851
5851
5852
5853
5859
5909

*5852
5851
5852
5853
5859
5909
*5853
5851
5852
5853
5859
5909
*5854
5851
5852
5853
5859
5909
*5855
5851
5852
5853
5859
5909
*5856
5851
5852
5853
5859
5909
*586
5851
5852
5853
5859
5909
*587
5851
5852
5853
5859
5909
*5880
5851
5852
5853
5859
5909

*5881
5851
5852
5853
5859
5909
*58881
5851
5852
5853
5859
5909
*58889
5851
5852
5853
5859
5909
*5889
5851
5852
5853
5859
5909
*5890
5851
5852
5853
5859
5909
*5891
5851
5852
5853
5859
5909
*5899
5851
5852
5853
5859
5909
*59000
5851
5852
5853
5859
5909
*59001
5851
5852
5853
5859
5909

*59010
5851
5852
5853
5859
5909
*59011
5851
5852
5853
5859
5909
*5902
5851
5852
5853
5859
5909
*5903
5851
5852
5853
5859
5909
*59080
5851
5852
5853
5859
5909
*59081
5851
5852
5853
5859
5909
*591
5851
5852
5853
5859
5909
*5920
5997
*5921
59960
59969
5997

*5929
59960
59969
5997
*5930
5851
5852
5853
5859
5909
*5931
5851
5852
5853
5859
5909
*5932
5851
5852
5853
5859
5909
*5933
5951
5952
5954
59581
59589
5959
59960
59969
78820
78829
*5934
5951
5952
5954
59581
59589
5959
59960
59969
78820
78829
*5935
5951
5952
5954
59581
59589
5959
59960
59969
78820

78829
*59389
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
59960
59969
5997
*5939
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
59960
59969
5997
*5940
59960
59969
5997
*5941
59960
59969
5997
*5942
59960
59969
5997
*5948
59960
59969
5997
*5949
59960
59969
5997
*5950
5951
5952
5954
5954
59581
59581
59589
59589
5959
5959
59960
59960
59969
59969
*5951
5951
5952
5954
59581
59589
5959
59960
59969
*5952
5951
5952
5954
59581
59589
5959
59960
59969
*5953
5951
5952
5954
59581
59589
5959
59960
59969
*5954
5951
5952
5954
59581
59589
5959
59960
59969
*59581
5951
5952
5954
59581
59589
5959
59960
59969
*59582
5951
5952
5954
5954
59581
59581
59589
59589
5959
5959
59960
59960
59969
59969
*5959
5951
5952
5954
59581
59589
5959
59960
59969
*5960
5960
59960
59969
78820
78829
*59651
5960
5964
59960
59969
78820
78829
*59652
5960
5964
59960
59969
78820
78829
*59653
5960
5964
59960
59969
78820
78829
*59654
5960
5964
59960
59969
78820
78829
*59655
5960
5964
59960
59969
78820
78829
*59659
5960
5964
59960
59969
78820
78829
*5966
5997
*5967
5997
*5968
5951
5952
5954
59581
59589
5959
5960
5964
59960
59969
78820
78829
*5969
5951
5952
5954
59581
59589
5959
5960
5964
59960
59969
78820
78829
*5970
5994
59960
59969
*59780
5994
59960
59969
*59781
5994
59960
59969
*59789
5994
59960
59969
*59800
5994
59960
59969
*59801
5994
59960
59969
*5981
5981
5982
5994
59960
59969
*5982
5981
5982
5994
59960
59969
*5988
5981
5982
5994
59960
59969
*5989
5981
5982
5994
59960
59969
*5990
5909
5951
5952
5954
59581
59589
5959
5960
5964
59960
59969
78820
78829
*59960
5951
5952
5954
59581
59589
5959
5981
5982
5994
59960
59969
78820
78829
*59969
5951
5952
5954
59581
59589
5959
5981
5982
5994
59960
59969
78820
78829
*5997
5851

5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*59981
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*59982
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*59983
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*59984
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*59989
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
5997
*5999
5851
5852
5853
5859
5909
5951
5952
5954
59581
59589
5959
5964
5981
5982
5994
59960
59969
6013
6021
78820
78829
*60000
5960
59960
59969
5997
*60001
5960
59960
59969
6013
6021
78820
78829
*60010
5960
59960
59969
6013
6021
78820
78829
*60011
5960
59960
59969
6013
6021
78820
78829
*60020
5960
59960
59969
6013
6021
78820
78829
*60021
5960
59960
59969
6013
6021
78820
78829
*6003
5960
59960
59969
6013
6021
78820
78829
*6010
5960
59960
59969
6013
6021
78820
78829
*6011
5960
59960
59969
6013
6021
78820
78829
*6012
5960
59960
59969
6013
6021
78820
78829
*6013
5960
59960
59969
6013
6021
78820
78829
*6014
5960
59960
59969
6013
6021
78820
78829
*6018
5960
59960
59969
6013
6021
78820
78829
*6019
5960
59960
59969
6013
6021
78820
78829
*6020
5960
59960
59969
6013
6021
78820
78829
*6021
5960
59960
59969
6013
6021
78820
78829
*6022
5960
59960
59969
6013
6021
78820
78829
*6023
5960
59960
59969
6013
6021
78820
78829
*6028
5960
59960
59969
6013
6021
78820
78829
*6029
5960
59960
59969
6013
6021
78820
78829
*6071
5994
*6072
5994
*6073
5994
*60781
5994
*60782
5994
*60783
5994
*60785
5994
*60789
5994

*6079
5994
*6084
5994
*60881
5994
*60885
5994
*60887
5994
*60889
5994
*6100
61172
*6101
61172
*6102
61172
*6103
61172
*6104
61172
*6108
61172
*6109
61172
*6110
61172
*6111
61172
*6112
61172
*6113
61172
*6114
61172
*6115
61172
*6116
61172
*61171
61172
*61172
61172
*61179
61172
*6118
61172
*6119
61172
*6206
6207
*6207
6207
*6208
6207
*6209
6207
*6258
6207
*6259
6207
*62920
6207
*62921
6207
*62922
6207
*62923
6207
*62929
6207
*62981
6207
*62989
6207
*6299
6207
*63400
63410
63411
63412
63490
63491
63492
*63401
63410
63411
63412
63490
63491
63492
*63402
63410
63411
63412
63490
63491
63492
*63410
63410
63411
63412
63490
63491
63492
*63411
63410
63411
63412
63490
63491
63492
*63412
63410
63411
63412
63490
63491
63492
*63420
63410
63411
63412
63490
63491
63492
*63421
63410
63411
63412
63490
63491
63492
*63422
63410
63411
63412
63490
63491
63492
*63430
63410
63411
63412
63490
63491
63492
*63431
63410
63411
63412
63490
63491
63492
*63432
63410
63411
63412
63490
63491
63492
*63440
63410
63411
63412
63490
63491
63492
*63441
63410
63411
63412
63490
63491
63492
*63442
63410
63411
63412
63490
63491
63492
*63450
63410
63411
63412
63490
63491
63492
*63451
63410
63411
63412
63490
63491
63492
*63452
63410
63411
63412
63490
63491
63492
*63460
63410
63411
63412
63490
63491
63492
*63461
63410
63411
63412
63490
63491
63492
*63462
63410
63411
63412
63490
63491
63492
*63470
63410
63411
63412
63490
63491
63492
*63471
63410
63411
63412
63490
63491
63492
*63472
63410
63411
63412
63490
63491
63492
*63480
63410
63411
63412
63490
63491
63492
*63481
63410
63411
63412
63490
63491
63492
*63482
63410
63411
63412
63490
63491
63492
*63490
63410
63411
63412
63490
63491
63492
*63491
63410
63411
63412
63490
63491
63492
*63492
63410
63411
63412
63490
63491
63492
*63500
63410
63411
63412
63490
63491
63492
*63501
63410
63411
63412
63490
63491
63492
*63502
63410
63411
63412
63490
63491
63492
*63510
63410
63411
63412
63490
63491
63492
*63511
63410
63411
63412
63490
63491
63492

63492
*63512
63410
63411
63412
63490
63491
63492
*63520
63410
63411
63412
63490
63491
63492
*63521
63410
63411
63412
63490
63491
63492
*63522
63410
63411
63412
63490
63491
63492
*63530
63410
63411
63412
63490
63491
63492
*63531
63410
63411
63412
63490
63491
63492
*63532
63410
63411
63412
63490
63491
63492
*63540
63410
63411
63412
63490
63491
63492
*63541
63410
63411
63412
63490
63491
63492
*63542
63410
63411
63412
63490
63491
63492
*63550
63410
63411
63412
63490
63491
63492
*63551
63410
63411
63412
63490
63491
63492
*63552
63410
63411
63412
63490
63491
63492
*63560
63410
63411
63412
63490
63491
63492
*63561
63410
63411
63412
63490
63491
63492
*63562
63410
63411
63412
63490
63491
63492
*63570
63410
63411
63412
63490
63491
63492
*63571
63410
63411
63412
63490
63491
63492
*63572
63410
63411
63412
63490
63491
63492
*63580
63410
63411
63412
63490
63491
63492
*63581
63410
63411
63412
63490
63491
63492
*63582
63410
63411
63412
63490
63491
63492
*63590
63410
63411
63412
63490
63491
63492
*63591
63410
63411
63412
63490
63491
63492
*63592
63410
63411
63412
63490
63491
63492
*63600
63410
63411
63412
63490
63491
63492
*63601
63410
63411
63412
63490
63491
63492
*63602
63410
63411
63412
63490
63491
63492
*63610
63410
63411
63412
63490
63491
63492
*63611
63410
63411
63412
63490
63491
63492
*63612
63410
63411
63412
63490
63491
63492
*63620
63410
63411
63412
63490
63491
63492
*63621
63410
63411
63412
63490
63491
63492
*63622
63410
63411
63412
63490
63491
63492
*63630
63410
63411
63412
63490
63491
63492
*63631
63410
63411
63412
63490
63491
63492
*63632
63410
63411
63412
63490
63491
63492
*63640
63410
63411
63412
63490
63491
63492
*63641
63410
63411
63412
63490
63491
63492
*63642
63410
63411
63412
63490
63491
63492
*63650
63410
63411
63412
63490
63491
63492
*63651
63410
63411
63412
63490
63491
63492
*63652
63410
63411
63412
63490
63491
63492
*63660
63410
63411
63412
63490
63491
63492
*63661
63410
63411
63412
63490
63491
63492
*63662
63410
63411
63412
63490
63491
63492

*63670
63410
63411
63412
63490
63491
63492
*63671
63410
63411
63412
63490
63491
63492
*63672
63410
63411
63412
63490
63491
63492
*63680
63410
63411
63412
63490
63491
63492
*63681
63410
63411
63412
63490
63491
63492
*63682
63410
63411
63412
63490
63491
63492
*63690
63410
63411
63412
63490
63491
63492
*63691
63410
63411
63412
63490
63491
63492
*63692
63410
63411
63412
63490
63491
63492
*63700
63410
63411
63412
63490
63491
63492
*63701
63410
63411
63412
63490
63491
63492
*63702
63410
63411
63412
63490
63491
63492
*63710
63410
63411
63412
63490
63491
63492
*63711
63410
63411
63412
63490
63491
63492
*63712
63410
63411
63412
63490
63491
63492
*63720
63410
63411
63412
63490
63491
63492
*63721
63410
63411
63412
63490
63491
63492
*63722
63410
63411
63412
63490
63491
63492
*63730
63410
63411
63412
63490
63491
63492
*63731
63410
63411
63412
63490
63491
63492
*63732
63410
63411
63412
63490
63491
63492
*63740
63410
63411
63412
63490
63491
63492
*63741
63410
63411
63412
63490
63491
63492
*63742
63410
63411
63412
63490
63491
63492
*63750
63410
63411
63412
63490
63491
63492
*63751
63410
63411
63412
63490
63491
63492
*63752
63410
63411
63412
63490
63491
63492
*63760
63410
63411
63412
63490
63491
63492
*63761
63410
63411
63412
63490
63491
63492
*63762
63410
63411
63412
63490
63491
63492
*63770
63410
63411
63412
63490
63491
63492
*63771
63410
63411
63412
63490
63491
63492
*63772
63410
63411
63412
63490
63491
63492
*63780
63410
63411
63412
63490
63491
63492
*63781
63410
63411
63412
63490
63491
63492
*63782
63410
63411
63412
63490
63491
63492
*63790
63410
63411
63412
63490
63491
63492
*63791
63410
63411
63412
63490
63491
63492
*6380
63410
63411
63412
63490
63491
63492
*6381
63410
63411
63412
63490
63491
63492
*6382
63410
63411
63412
63490
63491
63492
*6383
63410
63411
63412
63490
63491
63492
*6384
63410
63411
63412
63490
63491
63492
*6385
63410
63411
63412
63490
63491
63492
*6386
63410
63411
63412
63490
63491
63492
*6387

63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64080
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64081
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64083
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64090
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64091
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64093
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64100
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64101
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64103
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64110
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64111
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64113
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64120
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64121
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64123
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
*64130
64130
64180
64181
64183
64190
64191
64193
*64131
64130
64180
64181
64183
64190
64191
64193
*64133
64130
64180
64181
64183
64190
64191
64193
*64180
64130
64180
64181
64183
64190
64191
64193
*64181
64130
64180
64181
64183
64190
64191
64193
*64183
64130
64180
64181
64183
64190
64191
64193
*64190
64130
64180
64181
64183
64190

64191
64193
*64191
64130
64180
64181
64183
64190
64191
64193
*64193
64130
64180
64181
64183
64190
64191
64193
*64200
64240
64250
64260
64270
*64201
64240
64250
64260
64270
*64202
64240
64250
64260
64270
*64203
64240
64250
64260
64270
*64204
64240
64250
64260
64270
*64210
64240
64250
64260
64270
*64211
64240
64250
64260
64270
*64212
64240
64250
64260
64270
*64213
64240
64250
64260
64270
*64214
64240
64250
64260
64270
*64220
64240
64250
64260
64270
*64221
64240
64250
64260
64270
*64222
64240
64250
64260
64270
*64223
64240
64250
64260
64270
*64224
64240
64250
64260
64270
*64230
64240
64250
64260
64270
*64231
64240
64250
64260
64270
*64232
64240
64250
64260
64270
*64233
64240
64250
64260
64270
*64234
64240
64250
64260
64270
*64240
64240
64250
64260
64270
*64241
64240
64250
64260
64270
*64242
64240
64250
64260
64270
*64243
64240
64250
64260
64270
*64244
64240
64250
64260
64270
*64250
64240
64250
64260
64270
*64251
64240
64250
64260
64270
*64252
64240
64250
64260
64270
*64253
64240
64250
64260
64270
*64254
64240
64250
64260
64270
*64260
64240
64250
64260
64270
*64261
64240
64250
64260
64270
*64262
64240
64250
64260
64270
*64263
64240
64250
64260
64270
*64264
64240
64250
64260
64270
*64270
64240
64250
64260
64270
*64271
64240
64250
64260
64270
*64272
64240
64250
64260
64270
*64273
64240
64250
64260
64270
*64274
64240
64250
64260
64270
*64290
64240
64250
64260
64270
*64291
64240
64250
64260
64270
*64292
64240
64250
64260
64270
*64293
64240
64250
64260
64270
*64294
64240
64250
64260
64270
*64400
64400
64410
*64403
64400
64410
*64410
64400
64410
*64413
64400
64410
*64420
64400
64410
*64421

64400
64410
*64610
64240
64250
64260
64270
*64611
64240
*64612
64240
64250
64260
64270
*64613
64240
64250
64260
64270
*64614
64240
64250
64260
64270
*64660
64660
*64661
64660
*64662
64660
*64663
64660
*64664
64660
*64670
64670
*64671
64670
*64673
64670
*64680
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190

64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310

67320
67380
67400
67410
67412
67420
67422
67424
67510
*64681
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800

66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64682
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130

64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910

66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64683
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930

66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64684
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090

64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64690
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64691
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64693
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64730
64730
*64731

64730
*64732
64730
*64733
64730
*64734
64730
*64740
64740
*64741
64740
*64742
64740
*64743
64740
*64744
64740
*64820
64820
64821
64822
64823
64824
*64821
64820
64821
64822
64823
64824
*64822
64820
64821
64822
64823
64824
*64823
64820
64821
64822
64823
64824
*64824
64820
64821
64822
64823
64824
*64830
64830
*64831
64830
*64832
64830
*64833

64830
*64834
64830
*64850
64850
64860
*64851
64850
64860
*64852
64850
64860
*64853
64850
64860
*64854
64850
64860
*64860
64850
64860
*64861
64850
64860
*64862
64850
64860
*64863
64850
64860
*64864
64850
64860
*64890
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191

64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320

67380
67400
67410
67412
67420
67422
67424
67510
*64891
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801

66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64892
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180

64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910

66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64893
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860

65930

66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64894
63410
63411
63412
63490
63491
63492
64000
64080
64081

64083
64090
64091
64100
64110

64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883

66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64900
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821

64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64901
63410
63411
63412
63490

63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824

66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64902
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64903
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64904
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
67422
67424
67510
*64910
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811

66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64911
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193

64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380

67400
67410
67412
67420
67422
67424
67510
*64912
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802

66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64913
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180

64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910

66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64914
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860

65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64920
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083

64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66890

66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64921
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823

64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64922
63410
63411
63412
63490
63491
63492

64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881

66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64923
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740

64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64924
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64930
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64931
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64932
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250

64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64933
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
*64934
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
*64940
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
*64941
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091

64100	66893	64850	64081	66884	64822
64110	66894	64860	64083	66890	64823
64130	66910	65930	64090	66891	64824
64180	66930	66500	64091	66892	64830
64181	67000	66510	64100	66893	64850
64183	67300	66634	64110	66894	64860
64190	67310	66800	64130	66910	65930
64191	67320	66801	64180	66930	66500
64193	67380	66802	64181	67000	66510
64240	67400	66803	64183	67300	66634
64250	67410	66804	64190	67310	66800
64260	67412	66810	64191	67320	66801
64270	67420	66811	64193	67380	66802
64400	67422	66812	64240	67400	66803
64410	67424	66813	64250	67410	66804
64660	67510	66814	64260	67412	66810
64670	*64942	66820	64270	67420	66811
64730	63410	66821	64400	67422	66812
64740	63411	66822	64410	67424	66813
64820	63412	66823	64660	67510	66814
64821	63490	66824	64670	*64944	66820
64822	63491	66880	64730	63410	66821
64823	63492	66881	64740	63411	66822
64824	64000	66882	64820	63412	66823
64830	64080	66883	64821	63490	66824
64850	64081	66884	64822	63491	66880
64860	64083	66890	64823	63492	66881
65930	64090	66891	64824	64000	66882
66500	64091	66892	64830	64080	66883
66510	64100	66893	64850	64081	66884
66634	64110	66894	64860	64083	66890
66800	64130	66910	65930	64090	66891
66801	64180	66930	66500	64091	66892
66802	64181	67000	66510	64100	66893
66803	64183	67300	66634	64110	66894
66804	64190	67310	66800	64130	66910
66810	64191	67320	66801	64180	66930
66811	64193	67380	66802	64181	67000
66812	64240	67400	66803	64183	67300
66813	64250	67410	66804	64190	67310
66814	64260	67412	66810	64191	67320
66820	64270	67420	66811	64193	67380
66821	64400	67422	66812	64240	67400
66822	64410	67424	66813	64250	67410
66823	64660	67510	66814	64260	67412
66824	64670	*64943	66820	64270	67420
66880	64730	63410	66821	64400	67422
66881	64740	63411	66822	64410	67424
66882	64820	63412	66823	64660	67510
66883	64821	63490	66824	64670	*64950
66884	64822	63491	66880	64730	63410
66890	64823	63492	66881	64740	63411
66891	64824	64000	66882	64820	63412
66892	64830	64080	66883	64821	63490

63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824

66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64951
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670

64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422

67424
67510

*64953
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814

66820

66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64960
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250

64260
64270
64400
64410
64660

64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400

67410
67412
67420
67422
67424
67510
*64961
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64962
63410
63411
63412
63490
63491
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64963
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*64964
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893

66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
·650
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*65570
66500
66510
*65571
66500
66510
*65573
66500
66510
*65930
65930
*65931
65930
*65933
65930
*66500
66500
66510
*66501
66500
66510
*66503
66500
66510
*66510
66500
66510
*66511
66500
66510
*66550
66500
66510
*66551
66500
66510
*66554
66500
66510
*66580
66500
66510
*66581
66500
66510
*66582
66500
66510
*66583
66500
66510
*66584
66500
66510
*66590
66500
66510
*66591
66500
66510
*66592
66500
66510
*66593
66500
66510
*66594
66500
66510
*66600
66634
*66602
66634
*66604
66634
*66610
66634
*66612
66634
*66614
66634
*66620
66634
*66622
66634
*66624
66634
*66630
66634
*66632
66634
*66634
66634
*66800
66800
66801
66802
66803
66804
*66801
66800
66801
66802
66803
66804
*66802
66800
66801
66802
66803
66804
*66803
66800
66801
66802
66803
66804
*66804
66800
66801
66802
66803
66804
*66810
66810
66811
66812
66813
66814
*66811
66810
66811
66812
66813
66814
*66812
66810
66811
66812
66813
66814
*66813
66810
66811
66812
66813
66814
*66814
66810
66811
66812
66813
66814
*66820
66820
66821
66822
66823
66824
*66821
66820
66821
66822
66823
66824
*66822
66820
66821
66822
66823
66824
*66823
66820
66821
66822
66823
66824
*66824
66820
66821
66822
66823
66824
*66880
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66881
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66882
66880
66881
66882
66883
66884
66890
66891
66892
*66883
66880
66881
66882
66883
66884
66890
66891
66892

66893
66894
*66884
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66890
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66891
66880
66881
66882
66883
66884
66890
66892
66893
66894
*66892
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66893
66880
66881
66882
66883
66884
66890

66891
66892
66893
66894
*66894
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
*66910
66910
*66911
66910
*66912
66910
*66913
66910
*66914
66910
*66930
66930
*66932
66930
*66934
66930
*66940
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240

64250
64260
64270
64400

64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380

67400
67410
67412
67420
67422
67424
67510
*66941

63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801

66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66942
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180

64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930

67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66943
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500

66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66944
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091

64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892

66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66980
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830

64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66981
63410
63411
63412
63490
63491
63492
64000
64080

64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883

66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66982
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821

64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66983
63410
63411
63412
63490

63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824

66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320

67380
67400
67410
67412
67420
67422
67424
67510
*66984
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660

64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804

66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424

67510
*66990
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812

66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66991
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66992
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66993
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634
66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*66994
63410
63411
63412
63490
63491
63492
64000
64080
64081
64083
64090
64091
64100
64110
64130
64180
64181
64183
64190
64191
64193
64240
64250
64260
64270
64400
64410
64660
64670
64730
64740
64820
64821
64822
64823
64824
64830
64850
64860
65930
66500
66510
66634

66800
66801
66802
66803
66804
66810
66811
66812
66813
66814
66820
66821
66822
66823
66824
66880
66881
66882
66883
66884
66890
66891
66892
66893
66894
66910
66930
67000
67300
67310
67320
67380
67400
67410
67412
67420
67422
67424
67510
*67000
67000
*67002
67000
*67004
67000
*67300
67300
67310
67320
67380
*67301
67300
67310
67320
67380
*67302
67300
67310
67320
67380
*67303
67300
67310
67320
67380
*67304
67300
67310
67320
67380
*67310
67300
67310
67320
67380
*67311
67300
67310
67320
67380
*67312
67300
67310
67320
67380
*67313
67300
67310
67320
67380
*67314
67300
67310
67320
67380
*67320
67300
67310
67320
67380
*67321
67300
67310
67320
67380
*67322
67300
67310
67320
67380
*67323
67300
67310
67320
67380
*67324
67300
67310
67320
67380
*67330
67300
67310
67320
67380
*67331
67300
67310
67320
67380
*67332
67300
67310
67320
67380
*67333
67300
67310
67320
67380
*67334
67300
67310
67320
67380
*67380
67300
67310
67320
67380
*67381
67300
67310
67320
67380
*67382
67300
67310
67320
67380
*67383
67300
67310
67320
67380
*67384
67300
67310
67320
67380
*67400
67400
*67401
67400
*67402
67400
*67403
67400
*67404
67400
*67410
67410
67412
67420
67422
67424
*67412
67410
67412
67420
67422
67424
*67414
67410
67412
67420
67422
67424
*67420
67410
67412
67420
67422
67424
*67422
67410
67412
67420
67422
67424
*67424
67410
67412
67420
67422
67424
*67430
67410
67412
67420
67422
67424
*67432
67410
67412
67420
67422
67424
*67434
67410
67412
67420
67422
67424
*67450
67400
*67451
67400
*67452
67400
*67453
67400
*67454
67400
*67500
67510
*67501
67510
*67502
67510
*67503
67510
*67504
67510
*67510
67510
*67511
67510
*67512
67510
*67513
67510
*67514
67510
*67520
67510
*67521
67510
*67522
67510
*67523
67510
*67524
67510
*67580
67510
*67581
67510
*67582
67510
*67583
67510
*67584
67510
*67590
67510
*67591
67510
*67592
67510
*67593
67510
*67594
67510
*6800
6800
*6801
6801
*6802
6802
*6803
6803
*6804
6804
*6805
6805
*6806
6806
*6807
6807
*6808
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*6809
6800
6801

6802
6803
6804
6805
6806
6807
6808
6809
*684
684
*68600
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*68601
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*68609
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*6861
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*6868
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*6869
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*6960
6960
*70583
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*70710
70715
*70711
70715
*70712
70715
*70713
70715
*70714
70715
*70715
70715
*70719
70715
*7078
70715
*7079
70715
*7098
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
684
*7100
7100
*7101
7101
*71100
6960
7141
7142
71430
71432
71433
*71101
6960
7141
7142
71430
71432
71433
*71102
6960
7141
7142
71430
71432
71433
*71103
6960
7141
7142
71430
71432
71433
*71104
6960
7141
7142
71430
71432
71433
*71105
6960
7141
7142
71430
71432
71433
*71106
6960
7141
7142
71430
71432
71433
*71107
6960
7141
7142
71430
71432
71433
*71108
6960
7141
7142
71430
71432
71433
*71109
6960
7141
7142
71430
71432
71433
*71110
6960
7141
7142
71430
71432
71433
*71111
6960
7141
7142
71430
71432
71433
*71112
6960
7141
7142
71430
71432
71433
*71113
6960
7141
7142
71430
71432
71433
*71114
6960
7141
7142
71430
71432
71433
*71115
6960
7141
7142
71430
71432
71433
*71116
6960
7141
7142
71430
71432
71433
*71117
6960
7141
7142
71430
71432
71433
*71118
6960
7141
7142
71430
71432
71433
*71119
6960
7141
7142
71430
71432
71433
*71120
6960
7141
7142
71430
71432
71433
*71121
6960
7141
7142
71430
71432
71433
*71122
6960
7141
7142
71430
71432
71433
*71123
6960
7141
7142
71430
71432
71433
*71124
6960
7141
7142
71430
71432
71433
*71125
6960
7141
7142
71430
71432
71433
*71126
6960
7141
7142
71430
71432
71433
*71127
6960
7141
7142

71430
71432
71433
*71128
6960
7141
7142
71430
71432
71433
*71129
6960
7141
7142
71430
71432
71433
*71130
6960
7141
7142
71430
71432
71433
*71131
6960
7141
7142
71430
71432
71433
*71132
6960
7141
7142
71430
71432
71433
*71133
6960
7141
7142
71430
71432
71433
*71134
6960
7141
7142
71430
71432
71433
*71135
6960
7141
7142
71430
71432
71433
*71136
6960
7141
7142
71430
71432
71433
*71137
6960
7141
7142
71430
71432
71433
*71138
6960
7141
7142
71430
71432
71433
*71139
6960
7141
7142
71430
71432
71433
*71140
6960
7141
7142
71430
71432
71433
*71141
6960
7141
7142
71430
71432
71433
*71142
6960
7141
7142
71430
71432
71433
*71143
6960
7141
7142
71430
71432
71433
*71144
6960
7141
7142
71430
71432
71433
*71145
6960
7141
7142
71430
71432
71433
*71146
6960
7141
7142
71430
71432
71433
*71147
6960
7141
7142
71430
71432
71433
*71148
6960
7141
7142
71430
71432
71433
*71149
6960
7141
7142
71430
71432
71433
*71150
6960
7141
7142
71430
71432
71433
*71151
6960
7141
7142
71430
71432
71433
*71152
6960
7141
7142
71430
71432
71433
*71153
6960
7141
7142
71430
71432
71433
*71154
6960
7141
7142
71430
71432
71433
*71155
6960
7141
7142
71430
71432
71433
*71156
6960
7141
7142
71430
71432
71433
*71157
6960
7141
7142
71430
71432
71433
*71158
6960
7141
7142
71430
71432
71433
*71159
6960
7141
7142
71430
71432
71433
*71160
6960
7141
7142
71430
71432
71433
*71161
6960
7141
7142
71430
71432
71433
*71162
6960
7141
7142
71430
71432
71433
*71163
6960
7141
7142
71430
71432
71433
*71164
6960
7141
7142
71430
71432
71433
*71165
6960
7141
7142
71430
71432
71433
*71166
6960
7141
7142
71430
71432
71433
*71167
6960
7141
7142
71430
71432
71433
*71168
6960
7141
7142
71430
71432
71433
*71169
6960
7141
7142
71430
71432
71433
*71170
6960
7141
7142
71430
71432
71433
*71171
6960
7141
7142
71430
71432
71433
*71172
6960
7141
7142
71430
71432
71433
*71173
6960
7141
7142
71430

71432
71433
*71174
6960
7141
7142
71430
71432
71433
*71175
6960
7141
7142
71430
71432
71433
*71176
6960
7141
7142
71430
71432
71433
*71177
6960
7141
7142
71430
71432
71433
*71178
6960
7141
7142
71430
71432
71433
*71179
6960
7141
7142
71430
71432
71433
*71180
6960
7141
7142
71430
71432
71433
*71181
6960
7141
7142
71430
71432
71433
*71182
6960
7141
7142
71430
71432
71433
*71183
6960
7141
7142
71430
71432
71433
*71184
6960
7141
7142
71430
71432
71433
*71185
6960
7141
7142
71430
71432
71433
*71186
6960
7141
7142
71430
71432
71433
*71187
6960
7141
7142
71430
71432
71433
*71188
6960
7141
7142
71430
71432
71433
*71189
6960
7141
7142
71430
71432
71433
*71190
6960
7141
7142
71430
71432
71433
*71191
6960
7141
7142
71430
71432
71433
*71192
6960
7141
7142
71430
71432
71433
*71193
6960
7141
7142
71430
71432
71433
*71194
6960
7141
7142
71430
71432
71433
*71195
6960
7141
7142
71430
71432
71433
*71196
6960
7141
7142
71430
71432
71433
*71197
6960
7141
7142
71430
71432
71433
*71198
6960
7141
7142
71430
71432
71433
*71199
6960
7141
7142
71430
71432
71433
*71210
6960
7141
7142
71430
71432
71433
*71211
6960
7141
7142
71430
71432
71433
*71212
6960
7141
7142
71430
71432
71433
*71213
6960
7141
7142
71430
71432
71433
*71214
6960
7141
7142
71430
71432
71433
*71215
6960
7141
7142
71430
71432
71433
*71216
6960
7141
7142
71430
71432
71433
*71217
6960
7141
7142
71430
71432
71433
*71218
6960
7141
7142
71430
71432
71433
*71219
6960
7141
7142
71430
71432
71433
*71220
6960
7141
7142
71430
71432
71433
*71221
6960
7141
7142
71430
71432
71433
*71222
6960
7141
7142
71430
71432
71433
*71223
6960
7141
7142
71430
71432
71433
*71224
6960
7141
7142
71430
71432
71433
*71225
6960
7141
7142
71430
71432
71433
*71226
6960
7141
7142
71430
71432
71433
*71227
6960
7141
7142
71430
71432
71433
*71228
6960
7141
7142
71430
71432
71433
*71229
6960
7141
7142
71430
71432

71433
*71230
6960
7141
7142
71430
71432
71433
*71231
6960
7141
7142
71430
71432
71433
*71232
6960
7141
7142
71430
71432
71433
*71233
6960
7141
7142
71430
71432
71433
*71234
6960
7141
7142
71430
71432
71433
*71235
6960
7141
7142
71430
71432
71433
*71236
6960
7141
7142
71430
71432
71433
*71237
6960
7141
7142
71430
71432
71433
*71238
6960
7141
7142
71430
71432
71433
*71239
6960
7141
7142
71430
71432
71433
*71280
6960
7141
7142
71430
71432
71433
*71281
6960
7141
7142
71430
71432
71433
*71282
6960
7141
7142
71430
71432
71433
*71283
6960
7141
7142
71430
71432
71433
*71284
6960
7141
7142
71430
71432
71433
*71285
6960
7141
7142
71430
71432
71433
*71286
6960
7141
7142
71430
71432
71433
*71287
6960
7141
7142
71430
71432
71433
*71288
6960
7141
7142
71430
71432
71433
*71289
6960
7141
7142
71430
71432
71433
*71290
6960
7141
7142
71430
71432
71433
*71291
6960
7141
7142
71430
71432
71433
*71292
6960
7141
7142
71430
71432
71433
*71293
6960
7141
7142
71430
71432
71433
*71294
6960
7141
7142
71430
71432
71433
*71295
6960
7141
7142
71430
71432
71433
*71296
6960
7141
7142
71430
71432
71433
*71297
6960
7141
7142
71430
71432
71433
*71298
6960
7141
7142
71430
71432
71433
*71299
6960
7141
7142
71430
71432
71433
*7130
6960
7141
7142
71430
71432
71433
*7131
6960
7141
7142
71430
71432
71433
*7132
6960
7141
7142
71430
71432
71433
*7133
6960
7141
7142
71430
71432
71433
*7134
6960
7141
7142
71430
71432
71433
*7135
6960
7141
7142
71430
71432
71433
*7136
6960
7141
7142
71430
71432
71433
*7137
6960
7141
7142
71430
71432
71433
*7138
6960
7141
7142
71430
71432
71433
*7140
6960
7141
7142
71430
71432
71433
*7141
7141
7142
71430
71432
71433
*7142
7141
7142
71430
71432
71433
*71430
7141
7142
71430
71432
71433
*71431
7141
7142
71430
71432
71433
*71432
7141
7142
71430
71432
71433
*71433
7141
7142
71430
71432
71433
*7144
7141
7142
71430
71432

71433
*71500
6960
7141
7142
71430
71432
71433
*71509
6960
7141
7142
71430
71432
71433
*71510
6960
7141
7142
71430
71432
71433
*71518
6960
7141
7142
71430
71432
71433
*71520
6960
7141
7142
71430
71432
71433
*71521
6960
7141
7142
71430
71432
71433
*71522
6960
7141
7142
71430
71432
71433
*71523
6960
7141
7142
71430
71432
71433
*71524
6960
7141
7142
71430
71432
71433
*71525
6960
7141
7142
71430
71432
71433
*71526
6960
7141
7142
71430
71432
71433
*71527
6960
7141
7142
71430
71432
71433
*71528
6960
7141
7142
71430
71432
71433
*71530
6960
7141
7142
71430
71432
71433
*71531
6960
7141
7142
71430
71432
71433
*71532
6960
7141
7142
71430
71432
71433
*71533
6960
7141
7142
71430
71432
71433
*71534
6960
7141
7142
71430
71432
71433
*71535
6960
7141
7142
71430
71432
71433
*71536
6960
7141
7142
71430
71432
71433
*71537
6960
7141
7142
71430
71432
71433
*71538
6960
7141
7142
71430
71432
71433
*71580
6960
7141
7142
71430
71432
71433
*71589
6960
7141
7142
71430
71432
71433
*71590
6960
7141
7142
71430
71432
71433
*71591
6960
7141
7142
71430
71432
71433
*71592
6960
7141
7142
71430
71432
71433
*71593
6960
7141
7142
71430
71432
71433
*71594
6960
7141
7142
71430
71432
71433
*71595
6960
7141
7142
71430
71432
71433
*71596
6960
7141
7142
71430
71432
71433
*71597
6960
7141
7142
71430
71432
71433
*71598
6960
7141
7142
71430
71432
71433
*71600
6960
7141
7142
71430
71432
71433
*71601
6960
7141
7142
71430
71432
71433
*71602
6960
7141
7142
71430
71432
71433
*71603
6960
7141
7142
71430
71432
71433
*71604
6960
7141
7142
71430
71432
71433
*71605
6960
7141
7142
71430
71432
71433
*71606
6960
7141
7142
71430
71432
71433
*71607
6960
7141
7142
71430
71432
71433
*71608
6960
7141
7142
71430
71432
71433
*71609
6960
7141
7142
71430
71432
71433
*71610
6960
7141
7142
71430
71432
71433
*71611
6960
7141
7142
71430
71432
71433
*71612
6960
7141
7142
71430
71432
71433

*71613
6960
7141
7142
71430
71432
71433
*71614
6960
7141
7142
71430
71432
71433
*71615
6960
7141
7142
71430
71432
71433
*71616
6960
7141
7142
71430
71432
71433
*71617
6960
7141
7142
71430
71432
71433
*71618
6960
7141
7142
71430
71432
71433
*71619
6960
7141
7142
71430
71432
71433
*71620
6960
7141
7142
71430
71432
71433
*71621
6960
7141
7142
71430
71432
71433
*71622
6960
7141
7142
71430
71432
71433
*71623
6960
7141
7142
71430
71432
71433
*71624
6960
7141
7142
71430
71432
71433
*71625
6960
7141
7142
71430
71432
71433
*71626
6960
7141
7142
71430
71432
71433
*71627
6960
7141
7142
71430
71432
71433
*71628
6960
7141
7142
71430
71432
71433
*71629
6960
7141
7142
71430
71432
71433
*71630
6960
7141
7142
71430
71432
71433
*71631
6960
7141
7142
71430
71432
71433
*71632
6960
7141
7142
71430
71432
71433
*71633
6960
7141
7142
71430
71432
71433
*71634
6960
7141
7142
71430
71432
71433
*71635
6960
7141
7142
71430
71432
71433
*71636
6960
7141
7142
71430
71432
71433
*71637
6960
7141
7142
71430
71432
71433
*71638
6960
7141
7142
71430
71432
71433
*71639
6960
7141
7142
71430
71432
71433
*71640
6960
7141
7142
71430
71432
71433
*71641
6960
7141
7142
71430
71432
71433
*71642
6960
7141
7142
71430
71432
71433
*71643
6960
7141
7142
71430
71432
71433
*71644
6960
7141
7142
71430
71432
71433
*71645
6960
7141
7142
71430
71432
71433
*71646
6960
7141
7142
71430
71432
71433
*71647
6960
7141
7142
71430
71432
71433
*71648
6960
7141
7142
71430
71432
71433
*71649
6960
7141
7142
71430
71432
71433
*71650
6960
7141
7142
71430
71432
71433
*71651
6960
7141
7142
71430
71432
71433
*71652
6960
7141
7142
71430
71432
71433
*71653
6960
7141
7142
71430
71432
71433
*71654
6960
7141
7142
71430
71432
71433
*71655
6960
7141
7142
71430
71432
71433
*71656
6960
7141
7142
71430
71432
71433
*71657
6960
7141
7142
71430
71432
71433
*71658
6960
7141
7142
71430
71432
71433

*71659
6960
7141
7142
71430
71432
71433
*71660
6960
7141
7142
71430
71432
71433
*71661
6960
7141
7142
71430
71432
71433
*71662
6960
7141
7142
71430
71432
71433
*71663
6960
7141
7142
71430
71432
71433
*71664
6960
7141
7142
71430
71432
71433
*71665
6960
7141
7142
71430
71432
71433
*71666
6960
7141
7142
71430
71432
71433
*71667
6960
7141
7142
71430
71432
71433
*71668
6960
7141
7142
71430
71432
71433
*71680
6960
7141
7142
71430
71432
71433
*71681
6960
7141
7142
71430
71432
71433
*71682
6960
7141
7142
71430
71432
71433
*71683
6960
7141
7142
71430
71432
71433
*71684
6960
7141
7142
71430
71432
71433
*71685
6960
7141
7142
71430
71432
71433
*71686
6960
7141
7142
71430
71432
71433
*71687
6960
7141
7142
71430
71432
71433
*71688
6960
7141
7142
71430
71432
71433
*71689
6960
7141
7142
71430
71432
71433
*71690
6960
7141
7142
71430
71432
71433
*71691
6960
7141
7142
71430
71432
71433
*71692
6960
7141
7142
71430
71432
71433
*71693
6960
7141
7142
71430
71432
71433
*71694
6960
7141
7142
71430
71432
71433
*71695
6960
7141
7142
71430
71432
71433
*71696
6960
7141
7142
71430
71432
71433
*71697
6960
7141
7142
71430
71432
71433
*71698
6960
7141
7142
71430
71432
71433
*71699
6960
7141
7142
71430
71432
71433
*71800
6960
7141
7142
71430
71432
71433
*71801
6960
7141
7142
71430
71432
71433
*71802
6960
7141
7142
71430
71432
71433
*71803
6960
7141
7142
71430
71432
71433
*71804
6960
7141
7142
71430
71432
71433
*71805
6960
7141
7142
71430
71432
71433
*71807
6960
7141
7142
71430
71432
71433
*71808
6960
7141
7142
71430
71432
71433
*71900
6960
7141
7142
71430
71432
71433
*71901
6960
7141
7142
71430
71432
71433
*71902
6960
7141
7142
71430
71432
71433
*71903
6960
7141
7142
71430
71432
71433
*71904
6960
7141
7142
71430
71432
71433
*71905
6960
7141
7142
71430
71432
71433
*71906
6960
7141
7142
71430
71432
71433
*71907
6960
7141
7142
71430
71432
71433
*71908

6960
7141
7142
71430
71432
71433
*71909
6960
7141
7142
71430
71432
71433
*71910
6960
7141
7142
71430
71432
71433
*71918
6960
7141
7142
71430
71432
71433
*71919
6960
7141
7142
71430
71432
71433
*71920
6960
7141
7142
71430
71432
71433
*71921
6960
7141
7142
71430
71432
71433
*71922
6960
7141
7142
71430
71432
71433
*71923
6960
7141
7142
71430
71432
71433
*71924
6960
7141
7142
71430
71432
71433
*71925
6960
7141
7142
71430
71432
71433
*71926
6960
7141
7142
71430
71432
71433
*71927
6960
7141
7142
71430
71432
71433
*71928
6960
7141
7142
71430
71432
71433
*71929
6960
7141
7142
71430
71432
71433
*71930
6960
7141
7142
71430
71432
71433
*71931
6960
7141
7142
71430
71432
71433
*71932
6960
7141
7142
71430
71432
71433
*71933
6960
7141
7142
71430
71432
71433
*71934
6960
7141
7142
71430
71432
71433
*71935
6960
7141
7142
71430
71432
71433
*71936
6960
7141
7142
71430
71432
71433
*71937
6960
7141
7142
71430
71432
71433
*71938
6960
7141
7142
71430
71432
71433
*71939
6960
7141
7142
71430
71432
71433
*71940
6960
7141
7142
71430
71432
71433
*71941
6960
7141
7142
71430
71432
71433
*71942
6960
7141
7142
71430
71432
71433
*71943
6960
7141
7142
71430
71432
71433
*71944
6960
7141
7142
71430
71432
71433
*71945
6960
7141
7142
71430
71432
71433
*71946
6960
7141
7142
71430
71432
71433
*71947
6960
7141
7142
71430
71432
71433
*71948
6960
7141
7142
71430
71432
71433
*71949
6960
7141
7142
71430
71432
71433
*71950
6960
7141
7142
71430
71432
71433
*71951
6960
7141
7142
71430
71432
71433
*71952
6960
7141
7142
71430
71432
71433
*71953
6960
7141
7142
71430
71432
71433
*71954
6960
7141
7142
71430
71432
71433
*71955
6960
7141
7142
71430
71432
71433
*71956
6960
7141
7142
71430
71432
71433
*71957
6960
7141
7142
71430
71432
71433
*71958
6960
7141
7142
71430
71432
71433
*71959
6960
7141
7142
71430
71432
71433
*71960
6960
7141
7142
71430
71432
71433
*71961
6960

7141
7142
71430
71432
71433
*71962
6960
7141
7142
71430
71432
71433
*71963
6960
7141
7142
71430
71432
71433
*71964
6960
7141
7142
71430
71432
71433
*71965
6960
7141
7142
71430
71432
71433
*71966
6960
7141
7142
71430
71432
71433
*71967
6960
7141
7142
71430
71432
71433
*71968
6960
7141
7142
71430
71432
71433
*71969
6960
7141
7142
71430
71432
71433
*7197
6960
7141
7142
71430
71432
71433
*71980
6960
7141
7142
71430
71432
71433
*71981
6960
7141
7142
71430
71432
71433
*71982
6960
7141
7142
71430
71432
71433
*71983
6960
7141
7142
71430
71432
71433
*71984
6960
7141
7142
71430
71432
71433
*71985
6960
7141
7142
71430
71432
71433
*71986
6960
7141
7142
71430
71432
71433
*71987
6960
7141
7142
71430
71432
71433
*71988
6960
7141
7142
71430
71432
71433
*71989
6960
7141
7142
71430
71432
71433
*71990
6960
7141
7142
71430
71432
71433
*71991
6960
7141
7142
71430
71432
71433
*71992
6960
7141
7142
71430
71432
71433
*71993
6960
7141
7142
71430
71432
71433
*71994
6960
7141
7142
71430
71432
71433
*71995
6960
7141
7142
71430
71432
71433
*71996
6960
7141
7142
71430
71432
71433
*71997
6960
7141
7142
71430
71432
71433
*71998
6960
7141
7142
71430
71432
71433
*71999
6960
7141
7142
71430
71432
71433
*72251
72280
72281
72282
72283
*72252
72280
72281
72282
72283
*7226
72280
72281
72282
72283
7234
7235
*72270
72280
72281
72282
72283
7234
7235
*72271
72280
72281
72282
72283
7234
7235
*72272
72280
72281
72282
72283
7234
7235
*72273
72280
72281
72282
72283
7234
7235
*72280
72280
72281
72282
72283
7234
7235
*72281
72280
72281
72282
72283
7234
7235
*72282
72280
72281
72282
72283
7234
7235
*72283
72280
72281
72282
72283
7234
7235
*72290
72280
72281
72282
72283
7234
7235
*72291
72280
72281
72282
72283
7234
7235
*72292
72280
72281
72282
72283
7234
7235
*72293
72280
72281
72282
72283
7234
7235
*7230
7234
7235
*7231
7234
7235
*7232
7234
7235
*7233
7234
7235
*7234
7234
7235
*7235
7234
7235
*7236
7234
7235
*7237
7234
7235
*7238
7234
7235

*7239
7234
7235
*73310
73393
73394
73395
*73311
73393
73394
73395
*73312
73393
73394
73395
*73313
73393
73394
73395
*73314
73393
73394
73395
*73315
73393
73394
73395
*73316
73393
73394
73395
*73319
73393
73394
73395
*73393
73393
73394
73395
*73394
73393
73394
73395
*73395
73393
73394
73395
*74100
74190
74191
74192
74193
*74101
74190
74191
74192
74193
*74102
74190
74191
74192
74193
*74103
74190
74191
74192
74193
*74190
74190
74191
74192
74193
*74191
74190
74191
74192
74193
*74192
74190
74191
74192
74193
*74193
74190
74191
74192
74193
*7428
74190
74191
74192
74193
*7429
74190
74191
74192
74193
*7438
37702
*7439
37702
*74400
38330
38381
*74402
38330
38381
*74409
38330
38381
*74429
38330
38381
*7443
38330
38381
*74861
4950
4951
4952
4953
4954
4955
4956
496
515
5178
*75261
5981
5982
5994
*75262
5981
5982
5994
*75263
5981
5982
5994
*75264
5981
5982
5994
*75265
5981
5982
5994
*75269
5981
5982
5994
*75281
5994
6207
*75289
5994
6207
*7529
5994
6207
*7530
5851
5852
5853
5859
59960
59969
78820
78829
*75310
5851
5852
5853
5859
59960
59969
78820
78829
*75311
5851
5852
5853
5859
59960
59969
78820
78829
*75312
5851
5852
5853
5859
59960
59969
78820
78829
*75313
5851
5852
5853
5859
59960
59969
78820
78829
*75314
5851
5852
5853
5859
59960
59969
78820
78829
59969
78820
78829
*75315
5851
5852
5853
5859
59960
59969
78820
78829
*75316
5851
5852
5853
5859
59960
59969
78820
78829
*75317
5851
5852
5853
5859
59960
59969
78820
78829
*75319
5851
5852
5853
5859
59960
59969
78820
78829
*75320
5851
5852
5853
5859
59960
59969
78820
78829
*75321
5851
5852
5853
5859
59960
59969
*75322
5851
5852
5853
5859
59960
59969
78820
78829
*75323
5851
5852
5853
5859
59960
59969
78820
78829
*75329
5851
5852
5853
5859
59960
59969
78820
78829
*7533
5851
5852
5853
5859
59960
59969
78820
78829
*7534
59960
59969
78820
78829
*7535
59960
59969
78820
78829
*7536
5981
5982
59960
59969

78820
78829
*7537
5981
5982
59960
59969
78820
78829
*7538
5981
5982
59960
59969
78820
78829
*7539
5851
5852
5853
5859
5981
5982
5994
59960
59969
78820
78829
*7597
74190
74191
74192
74193
*75981
74190
74191
74192
74193
*75982
74190
74191
74192
74193
*75983
74190
74191
74192
74193
*75989
74190
74191
74192
74193
*76400
76501
76502
76503
76504
76505
76506
76507
76508
*76401
76501
76502
76503
76504
76505
76506
76507
76508
*76402
76501
76502
76503
76504
76505
76506
76507
76508
*76403
76501
76502
76503
76504
76505
76506
76507
76508
*76404
76501
76502
76503
76504
76505
76506
76507
76508
*76405
76501
76502
76503
76504
76505
76506
76507
76508
*76406
76501
76502
76503
76504
76505
76506
76507
76508
*76407
76501
76502
76503
76504
76505
76506
76507
76508
*76408
76501
76502
76503
76504
76505
76506
76507
76508
*76409
76501
76502
76503
76504
76505
76506
76507
76508
*76410
76501
76502
76503
76504
76505
76506
76507
76508
*76411
76501
76502
76503
76504
76505
76506
76507
76508
*76412
76501
76502
76503
76504
76505
76506
76507
76508
*76413
76501
76502
76503
76504
76505
76506
76507
76508
*76414
76501
76502
76503
76504
76505
76506
76507
76508
*76415
76501
76502
76503
76504
76505
76506
76507
76508
*76416
76501
76502
76503
76504
76505
76506
76507
76508
*76417
76501
76502
76503
76504
76505
76506
76507
76508
*76418
76501
76502
76503
76504
76505
76506
76507
76508
*76419
76501
76502
76503
76504
76505
76506
76507
76508
*76420
76501
76502
76503
76504
76505
76506
76507
76508
*76421
76501
76502
76503
76504
76505
76506
76507
76508
*76422
76501
76502
76503
76504
76505
76506
76507
76508
*76423
76501
76502
76503
76504
76505
76506
76507
76508
*76424
76501
76502
76503
76504
76505
76506
76507
76508
*76425
76501
76502
76503
76504
76505
76506
76507
76508
*76426
76501
76502
76503
76504
76505
76506
76507
76508
*76427
76501
76502
76503
76504
76505
76506
76507
76508
*76428
76501
76502
76503
76504
76505
76506
76507
76508
*76429
76501
76502
76503
76504
76505
76506
76507
76508

*76490
76501
76502
76503
76504
76505
76506
76507
76508
*76491
76501
76502
76503
76504
76505
76506
76507
76508
*76492
76501
76502
76503
76504
76505
76506
76507
76508
*76493
76501
76502
76503
76504
76505
76506
76507
76508
*76494
76501
76502
76503
76504
76505
76506
76507
76508
*76495
76501
76502
76503
76504
76505
76506
76507
76508
*76496
76501
76502
76503
76504
76505
76506
76507
76508
*76497
76501
76502
76503
76504
76505
76506
76507
76508
*76498
76501
76502
76503
76504
76505
76506
76507
76508
*76499
76501
76502
76503
76504
76505
76506
76507
76508
*76500
76501
76502
76503
76504
76505
76506
76507
76508
*76501
76501
76502
76503
76504
76505
76506
76507
76508
*76502
76501
76502
76503
76504
76505
76506
76507
76508
*76503
76501
76502
76503
76504
76505
76506
76507
76508
*76504
76501
76502
76503
76504
76505
76506
76507
76508
*76505
76501
76502
76503
76504
76505
76506
76507
76508
*76506
76501
76502
76503
76504
76505
76506
76507
76508
*76507
76501
76502
76503
76504
76505
76506
76507
76508
*76508
76501
76502
76503
76504
76505
76506
76507
76508
*76509
76501
76502
76503
76504
76505
76506
76507
76508
*76510
76501
76502
76503
76504
76505
76506
76507
76508
*76511
76501
76502
76503
76504
76505
76506
76507
76508
*76512
76501
76502
76503
76504
76505
76506
76507
76508
*76513
76501
76502
76503
76504
76505
76506
76507
76508
*76514
76501
76502
76503
76504
76505
76506
76507
76508
*76515
76501
76502
76503
76504
76505
76506
76507
76508
*76516
76501
76502
76503
76504
76505
76506
76507
76508
*76517
76501
76502
76503
76504
76505
76506
76507
76508
*76518
76501
76502
76503
76504
76505
76506
76507
76508
*76519
76501
76502
76503
76504
76505
76506
76507
76508
*76520
76501
76502
76503
76504
76505
76506
76507
76508
*76521
76501
76502
76503
76504
76505
76506
76507
76508
*76522
76501
76502
76503
76504
76505
76506
76507
76508
*76523
76501
76502
76503
76504
76505
76506
76507
76508
*76524
76501
76502
76503
76504
76505
76506
76507
76508
*76525
76501
76502
76503
76504
76505
76506

76506
76507
76508
*76526
76501
76502
76503
76504
76505
76506
76507
76508
*76527
76501
76502
76503
76504
76505
76506
76507
76508
*76528
76501
76502
76503
76504
76505
76506
76507
76508
*76529
76501
76502
76503
76504
76505
76506
76507
76508
*7678
76501
76502
76503
76504
76505
76506
76507
76508
*7679
76501
76502
76503
76504
76505
76506
76507
76508
*7730
7730
7731
7732
*7731
7730
7731
7732
*7732
7730
7731
7732
*7733
7730
7731
7732
*7734
7730
7731
7732
*7735
7730
7731
7732
*7740
7740
7741
7742
77430
77431
77439
7745
*7741
7740
7741
7742
77430
77431
77439
7745
*7742
7740
7741
7742
77430
77431
77439
7745
*77430
7740
7741
7742
77430
77431
77439
7745
*7744
7740
7741
7742
77430
77431
77439
7745
*7745
7740
7741
7742
77430
77431
77439
7745
*7746
7740
7741
7742
77430
77431
77439
7745
*7747
7740
7741
7742
77430
77431
77439
7745
*7750
7751
7755
7756
*7751
7755
7756
*7752
7755
7756
*7753
7755
7756
*7754
7755
7756
*7755
7755
7756
*7756
7755
7756
*7757
7755
7756
*7759
7755
7756
*7771
7771
7772
*7772
7771
7772
*7773
7771
7772
*7774
7771
7772
*7775
7771
7772
*7776
7771
7772
*7778
7771
7772
*7779
7771
7772
*7790
7791
78039
*7791
7791
78039
*7793
7793
*77981
76501
76502
76503
76504
76505
76506
76507
76508
7730
7731
7732
7740
7741
7742
77430
77431
77439
7745
7755
7756
7771
7772
7791
*77982
76501
76502
76503
76504
76505
76506
76507
76508
7730
7731
7732
7740
7741
7742
77430
77431
77439
7745
7755
7756
7771
7772
7791
*77983
76501
76502
76503
76504
76505
76506
76507
76508
7730
7731
7732
7740
7741
7742
77430
77431
77439
7745
7755
7756
7771
7772
7791
*77984
76501
76502
76503
76504
76505
76506
76507
76508
7730
7731
7732
7740
7741
7742
77430
77431
77439
7745
7755
7756
7771
7772
7791
*77989
76501
76502
76503
76504
76505
76506

76507
76508
7730
7731
7732
7740
7741
7742
77430
77431
77439
7745
7755
7756
7771
7772
7791
*78031
78039
*78032
78039
*78039
78039
*78091
78039
78820
78829
7895
79902
*78092
78039
78820
78829
7895
79902
*78093
78039
78820
78829
7895
79902
*78094
78039
78820
78829
7895
79902
*78095
78039
78820
78829
7895
79902
*78096
78039
78820
78829
7895
79902
*78097
78039
78820
78829
7895
79902
*78099
78039
78820
78829
7895
79902
*78603
78603
*78604
78603
*7881
5964
5981
5982
5994
59960
59969
*78820
78820
78829
*78821
78820
78829
*78829
78820
78829
*78861
78820
78829
*78862
78820
78829
*78863
78820
78829
*78864
78820
78829
*78865
78820
78829
*78869
78820
78829
*7889
78820
78829
*78930
7895
*78931
7895
*78932
7895
*78933
7895
*78934
7895
*78935
7895
*78936
7895
*78937
7895
*78939
7895
*78940
7895
*78941
7895
*78942
7895
*78943
7895
*78944
7895
*78945
7895
*78946
7895
*78947
7895
*78949
7895
*7895
7895
*7899
7895
*7903
2911
2914
2922
29283
29284
29289
2929
29383
29384
30300
30301
30302
30390
30391
30392
30400
30402
30410
30412
30420
30422
30440
30442
30450
30452
30460
30462
30470
30472
30480
30482
30490
30492
30500
30501
30502
30530
30531
30532
30540
30541
30542
30550
30551
30552
30560
30561
30562
30570
30571
30572
30590
30591
30592
*7980
79902
*79901
79902
*79902
79902
*7991
78603
79902
*79981
78039
78820
78829
7895
79902
*79989
78039
78820
78829
7895
79902
*80000
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80001
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80002
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80003
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80004
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80005
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80006
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80009
8500
8509
85100
85101

85409
*80010
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80011
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80012
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80013
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80014
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*80015
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80016
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80019
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80020
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*80021
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80022
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80023
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80024
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80025
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*80026
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80029
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80030
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80031
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*80032
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80033
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80034
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80035
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80036
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80039
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80040
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80041
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80042
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80043
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80044
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80045
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80046
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80049
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80050
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80051
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80052
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80053
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80054
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80055
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80056
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80059
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80060
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80061
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80062
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80063
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80064
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80065
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80066
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80069
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80070
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80071
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80072
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80073
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80074
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80075
8500
8509
85100
85101
85109
85140
85141
85149

85400
85401
85409
*80076
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80079
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80080
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80081
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80082
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80083
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80084
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80085
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80086
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80089
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80090
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80091
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80092
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80093
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80094
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80095
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80096
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80099
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80100
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80101
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80102
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80103
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80104
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80105
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80106
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80109
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80110
8500
8509
85100
85101
85109
85140
85141

85149
85400
85401
85409
*80111
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80112
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80113
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80114
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80115
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80116
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80119
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80120
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80121
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80122
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80123
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80124
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80125
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80126
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80129
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80130
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80131
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80132
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80133
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80134
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80135
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80136
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80139
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80140
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80141
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80142
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80143
8500
8509
85100
85101
85109

85140
85141
85149
85400
85401
85409
*80144
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80145
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80146
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80149
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80150
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80151
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80152
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80153
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80154
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
85140
85141
85149
85400

85401
85409
*80155
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80156
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80159
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80160
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
85409
*80161
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80162
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80163
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80164
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80165
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80166
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80169
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80170
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80171
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80172
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80173
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80174
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80175
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80176
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*80179
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80180
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80181
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80182
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*80183
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80184
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80185
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80186
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80189
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*80190
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80191
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80192
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80193
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*80194
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80195
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80196
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80199
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80300
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
*80301
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
*80302
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
*80303
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
*80304
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80305
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80306
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80309
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80310
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80311
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80312
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80313
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80314
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80315
8500
8509
85100
85101
85109
85140
85141
85149

85400
85401
85409
*80316
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80319
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80320
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80321
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80322
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*80323
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80324
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80325
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80326
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80322
8500
8509

85400
85401
85409
*80329
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80330
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80331
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80332
8500
8509
85100
85101
85109
85140
85141

85149
85400
85401
85409
*80333
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*80334
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80335
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80336
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80339
8500
8509
85100
85101
85109
85140
85141

85149
85400
85401
85409
*80340
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80341
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80342
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80343
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80344
8500

8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80345
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80346
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80349
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80350
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80351
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80352
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80353
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80354
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80355
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80356
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80359
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80360
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80361
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80362
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80363
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80364
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80365
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80366
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80369
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80370
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80371
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80372
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80373
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80374
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80375
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80376
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80379

8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80380
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80381
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80382
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80383
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80384
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80385
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80386
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80389
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80390
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80391
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80392
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80393
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80394
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80395
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80396
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80399
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80400
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80401
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80402
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80403
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80404
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80405
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80406
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80409
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80410
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80411
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409

*80412
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80413
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80414
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80415
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80416
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80419
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80420
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80421
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80422
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80423
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80424
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80425
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80426
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80429
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80430
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80431
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80432
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80433
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80434
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80435
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80436
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80439
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80440
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80441
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80442
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80443
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80444
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*80445
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80446
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80449
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80450
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80451
8500
8509
85100
85101

85109
*80452
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80453
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80454
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80455
8500
8509
85100
85101
85109
85140
85141
85149

85400

85401
85409
*80456
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80459
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80460
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80461
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80462
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80463
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80464
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80465
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80466
8500
8509
85100
85101
85109
85140
85141
85149
85400

85101
85109
85140
85141
85149
85400
85401
85409
*80469
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80470
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80471
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80472
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80473
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80474
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80475
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80476
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80479
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80480
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80481
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80482
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80483
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80484
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*80485
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80486
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80489
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80490
8500
8509
85100
85101
85109
85140
85141
85149
85400

85401
85409
*80491
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80492
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409

*80493
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80494
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80495
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*80496
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*80499
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*8058
9529
*8059
9529
*83940
9529
*83949
9529
*83950
9529
*83959
9529
*83969
9529
*83979
9529
*8398
9529
*8399
9529
*8470

8739
*8479
9529
*8500
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85011
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85012
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*8502
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*85100
8500
8509
85100
85101
85109
85140
85141

85100
85101
85109
85140
85141
85149
85400
85401
85409
*8504
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*8505
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*8509
8500
8509
85100
85101
85109
85140
85141

85149
85400
85401
85409
*85101
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85102
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85103
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85104
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85105
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85106
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85109
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85110
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85111
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85112
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85113
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85114
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85115
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85116
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85119
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85120
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85121
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85122
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85123
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85124
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85125
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85126
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85129
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85130
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85131
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85132
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85133
8500
8509
85100
85101
85109
85140

85141
85149
85400
85401
85409
*85134
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85135
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85136
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85139
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85140
8500
8509
85100
85101
85109
*85141
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85142
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85143
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85144
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85145
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85146
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85149
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85150
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85151
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85152
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85153
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85154
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85155
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85156
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85159
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85160
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85161
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85162
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85163
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85164
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85165
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85166
8500
8509
85100
85101
85109

85140
85141
85149
85400
85401
85409
*85169
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85170
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85171
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85172
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85173
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85174
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85175
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85176
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85179
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
85140
85141
85149
85400
85401
85409
*85180
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85181
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85182
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85183
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
85409
*85184
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85185
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85186
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85189
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85190
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85191
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85192
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85193
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85194
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85195
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85196
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85199
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85200
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85201
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*85202
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85203
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85204
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85205
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409
*85206
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85209
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85210
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85211
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85212
8500
8509
85100
85101

85109
85140
85141
85149
85400
85401
85409
*85213
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85214
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85215
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85216
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401

85409

*85219
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85221
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85222
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85223
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85224
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*85225
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85226
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85229
8500
8509
85100

85101
85109
85140
85141
85149
85400
85401
85409
*85230
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85231
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85232
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85233
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85234
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85235
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*85236
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85239
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85240
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85241
8500
8509
85100
85101
85109
85140
85141
85149

85400
85401
85409
*85242
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85243
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85244
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85245
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85246
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*85249
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85250
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85251
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85252
8500
8509
85100
85101
85109
85140
85141
85149

85400
85401
85409
*85253
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85254
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85255
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85256
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85259
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*85300
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85301
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85302
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85303
8500
8509
85100
85101
85109
85140
85141
85149

85400
85401
85409
*85304
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85305
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85306
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85309
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85310
8500

8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85311
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85312
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85313
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85314
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85315
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85316
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85319
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85400
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85401
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85402
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85403
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85404
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85405
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85406
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85409
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85410
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85411
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85412
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85413
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85414
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85415
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*85416
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*8700
8714
*8701
8714
*8702
8714
*8703
8714
*8704
8714
*8708
8714
*8709
8714
*8710
8714
*8711
8714
*8712
8714
*8713
8714
*8714
8714
*8715
8714
*8716
8714
*8717
8714
*8719
8714
*87340
8739
*87341
8739
*87342

8739
*87343
8739
*87344
8739
*87349
8739
*87350
8739
*87351
8739
*87352
8739
*87353
8739
*87354
8739
*87359
8739
*87360
8739

*87361
8739
*87362
8739
*87363
8739
*87364
8739
*87365
8739
*87369
8739
*87370
8739
*87371
8739
*87372
8739
*87373
8739
*87374
8739
*87375
8739
*87379
8739
*8738
8500
8509
85100
85101
85109

85140
85141
85149
85400
85401
85409
*8739
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8739
*8748
8739
*8749
8739
*8798
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
*8799
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
*9050
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
*9051
9529
*9251
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*9252
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*92611
9529
*9290
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
*9299
8500

8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
*9528
9529
*9529
9529
*9538
9530
9531
9532
9533
9534
9535
9538
9539
*9539
9530
9531
9532
9533
9534
9535
9538
9539
*9588
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532

9533
9534
9535
9538
9539
*95890
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532
9533
9534
9535
9538
9539
*95891
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532
9533
9534
9535
9538
9539
*95892

8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532
*95893
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532
*95899
8500
8509
85100
85101
85109
85140

85141
85149
85400
85401
85409
8714
8739
9290
9529
9530
9531
9532
9533
9534
9535
9538
9539
*95901
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*95909
8500
8509
85100
85101
85109
85140
85141
85149
85400
85401
85409
*95911
9529
*95912
9529
*95913
9529
*95914
9529
*95919
9529
*9598
8500
8509

85100
85101
85109
85140
85141
85149
85400
85401
85409
8714

8739
9290
9529
9530
9531
9532
9533

9534
9535
9538
9539
*99600
99670
*99601
99670
*99602
99670
*99603

99670
*99604
99670
*99609
99670
*9961
99670
*9962
99670
*99630
99670
*99639
99670
*99640
99670
*99641
99670
*99642
99670
*99643
99670
*99644
99670
*99645
99670
*99646
99670
*99647
99670
*99649
99670
*99651
99670
*99652
99670
*99653
99670
*99654
99670
*99655
99670
*99656
99670
*99657
99670
*99659
99670
*99660
99670
*99661
99670
*99662
99670
*99663

99670
*99664
99670
*99665
99670
*99666
99670
*99667
99670
*99668
99670
*99669
99670
*99670
99670
*99671
99670
V422
*99672
99670
*99673
99670
V451
*99674
99670
*99675

99670
*99676
99670
*99677
99670
*99678
99670
*99679
99670
*99680
V4289
*99687
V4289
*99689
V4289
*99700
99700
*99701
99700
*99702
99700
*99709
99700
*9974
53640
53649
*9975

9975
*99771
53640
53649
*99772
9975
*99791
53640
53649
99670
99700
9975
99889
9989
*99799
53640
53649
99670
99700
9975
99889
9989
*99881
53640
53649
99670
99700
9975
99889
9989
*99883
53640
53649
99670
99700
9975
99889
9989
*9989
53640
53649
99670
99700
9975
99889
9989

*9993
9993
*V090
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V091
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V092
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V093
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V094
6800
6801
6802
6803
6804
6805
6806

6807
6808
6809
*V0950
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0951
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V096
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0970
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0971
6800
6801
6802
6803
6804
6805

6806
6807
6808
6809
*V0980
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0981
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0990
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V0991
6800
6801
6802
6803
6804
6805
6806
6807
6808
6809
*V220
V237
V2381
V2382
V2383
V2384

V2389
V239
*V221
V237
V2381
V2382
V2383
V2384
V2389
V239
*V222
V237
V2381
V2382
V2383
V2384
V2389
V239
*V230
V237
V2381
V2382
V2383
V2384
V2389
V239
*V231
V237
V2381
V2382
V2383
V2384
V2389
V239
*V232
V237
V2381
V2382
V2383
V2384
V2389
V239
*V233
V237
V2381
V2382
V2383
V2384
V2389
V239
*V2341
V237
V2381
V2382

V2383
V2384
V2389
V239
*V2349
V237
V2381
V2382
V2383
V2384
V2389
V239
*V235
V237
V2381
V2382
V2383
V2384
V2389
V239
*V237
V237
V2381
V2382
V2383
V2384
V2389
V239
*V2381
V237
V2381
V2382
V2383
V2384
V2389
V239
*V2382
V237
V2381
V2382
V2383
V2384
V2389
V239
*V2383
V237
V2381
V2382
V2383
V2384
V2389
V239
*V2384
V237

V2381
V2382
V2383
V2384
V2389
V239
*V2389
V237
V2381
V2382
V2383
V2384
V2389
V239
*V239
V237
V2381
V2382
V2383
V2384
V2389
V239
*V422
V422
*V4289
V422
V4289
*V429
V422
V4289
*V451
V451
*V4983
V4983

BILLING CODE 4120–01–C

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1	25,131	9.4313	2	4	7	12	19
2	9,628	4.2481	1	2	3	6	8
3	3	31.6667	2	2	42	51	51
6	256	2.9608	1	1	2	4	6
7	14,480	9.0468	2	4	7	11	18
8	3,103	2.7051	1	1	2	3	6
9	1,792	6.0107	1	2	4	7	11
10	18,959	5.7670	2	3	4	7	11
11	2,790	3.6250	1	1	3	5	7
12	59,298	5.3199	2	3	4	6	9
13	7,739	4.8765	2	3	4	6	8
14	264,219	5.2662	2	3	4	6	10
15	13,996	3.8492	1	2	3	5	7
16	20,216	6.2530	2	3	5	8	12
17	3,152	3.2056	1	1	2	4	6
18	34,068	5.1279	2	3	4	6	10
19	7,541	3.3149	1	2	3	4	6
21	2,094	6.1833	2	3	5	8	12
22	3,399	5.1278	2	2	4	6	10
23	10,464	3.7091	1	2	3	5	7
26	33	2.8750	1	1	2	3	5
27	6,296	4.6766	1	1	3	6	10
28	21,433	5.4849	1	2	4	7	11
29	6,780	3.0806	1	1	2	4	6
31	5,116	3.7875	1	2	3	5	7
32	1,745	2.2458	1	1	2	3	4
34	29,554	4.6998	1	2	4	6	9
35	7,840	2.9365	1	1	2	4	5
36	302	1.9455	1	1	1	1	2
37	1,199	4.0918	1	1	3	5	9
38	56	2.3846	1	1	2	3	4
39	306	2.2586	1	1	1	2	4
40	1,124	4.4811	1	2	4	5	8
42	1,642	2.5714	1	1	1	2	4
43	130	3.0156	1	1	2	4	5
44	1,283	4.8950	2	3	4	6	9
45	2,879	2.9292	1	2	2	4	5
46	4,048	3.9677	1	2	3	5	8
47	1,288	2.9741	1	1	2	4	6
49	2,479	4.2539	1	2	3	5	8
50	2,000	1.7953	1	1	1	2	3
51	178	2.7910	1	1	1	3	6
52	185	1.5301	1	1	1	2	2
53	1,919	3.8786	1	1	2	5	9
55	1,254	2.7630	1	1	1	3	6
56	375	2.5627	1	1	2	3	5
57	740	3.4384	1	1	2	4	7
58	1	1.0000	1	1	1	1	1
59	113	2.5221	1	1	1	3	5
60	5	3.4000	1	1	1	6	8
61	213	5.8774	1	1	4	7	13
62	1	4.0000	4	4	4	4	4
63	2,607	4.5492	1	2	3	6	9
64	3,108	6.1176	1	2	4	7	12
65	39,649	2.7318	1	1	2	3	5
66	7,805	3.2004	1	1	2	4	6
67	349	3.5948	1	2	3	4	7
68	14,613	3.7088	1	2	3	5	7
69	3,579	2.7922	1	2	2	3	5
70	22	2.4545	1	1	2	3	4
71	65	3.8125	1	2	3	5	7
72	1,398	3.3912	1	2	3	4	6
73	9,912	4.3625	1	2	3	6	8
75	46,315	9.3605	3	4	7	12	19
76	45,317	10.1339	3	5	8	13	19
77	1,784	4.4012	1	2	4	6	9
78	52,438	5.9444	2	4	5	7	10
79	151,130	7.8794	3	4	6	10	14
80	5,970	5.2160	2	3	4	6	9
81	8	3.1250	1	2	3	3	4

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
82	61,331	6.5291	2	3	5	8	13
83	7,240	5.0375	2	3	4	6	9
84	1,346	3.0015	1	2	3	4	5
85	22,437	6.0961	2	3	5	8	12
86	1,440	3.3698	1	2	3	4	6
87	105,232	6.2370	2	3	5	8	11
88	378,958	4.7587	2	3	4	6	9
89	472,756	5.3886	2	3	4	7	10
90	34,464	3.5882	1	2	3	4	6
91	43	5.0930	1	2	3	6	8
92	16,046	5.8190	2	3	5	7	11
93	1,120	3.5820	1	2	3	5	6
94	13,688	5.8577	2	3	5	7	11
95	1,410	3.4328	1	2	3	4	7
96	52,901	4.1779	1	2	3	5	7
97	21,402	3.2642	1	2	3	4	6
98	11	4.6364	1	2	4	6	7
99	20,929	3.0894	1	1	2	4	6
100	5,463	2.0814	1	1	2	3	4
101	24,319	4.1850	1	2	3	5	8
102	4,235	2.4307	1	1	2	3	5
103	988	37.8279	9	13	25	47	83
104	19,397	14.5499	6	8	12	18	25
105	32,104	9.9315	4	6	8	11	18
106	3,285	10.8958	5	7	9	13	19
108	9,268	10.4271	4	6	8	13	19
110	56,637	7.8089	1	3	6	10	16
111	10,448	2.7745	1	1	2	4	6
113	30,753	12.4596	4	6	10	15	24
114	7,290	8.1490	2	4	7	10	15
117	7,097	4.0233	1	1	2	5	9
118	7,994	3.0067	1	1	2	4	7
119	793	5.4823	1	1	4	8	12
120	30,375	9.0225	1	3	6	12	19
121	132,870	5.9605	2	3	5	8	11
122	47,937	3.2303	1	1	3	4	6
123	24,196	4.6425	1	1	3	6	11
124	111,282	4.4078	1	2	3	6	9
125	85,682	2.6793	1	1	2	3	5
126	5,197	10.7631	3	6	8	13	20
127	632,794	5.0454	2	3	4	6	9
128	3,390	4.9852	2	3	4	6	8
129	3,268	2.6096	1	1	1	3	6
130	84,710	5.2355	1	3	4	7	10
131	20,557	3.6402	1	2	3	5	6
132	85,172	2.7460	1	1	2	3	5
133	5,023	2.0883	1	1	2	3	4
134	38,372	3.0023	1	1	2	4	6
135	7,010	4.2221	1	2	3	5	8
136	900	2.4872	1	1	2	3	5
138	207,864	3.8413	1	2	3	5	7
139	68,246	2.3922	1	1	2	3	4
140	25,370	2.3401	1	1	2	3	4
141	126,247	3.3956	1	2	3	4	6
142	44,621	2.4528	1	1	2	3	4
143	223,237	2.1145	1	1	2	3	4
144	107,318	5.8453	1	2	4	7	12
145	5,085	2.5058	1	1	2	3	5
146	9,743	9.6593	4	6	8	11	17
147	2,423	5.3166	2	4	5	7	8
149	18,595	5.4424	3	4	5	7	8
150	23,520	10.4472	3	6	9	13	19
151	5,168	4.9323	1	2	4	7	9
152	4,910	7.7955	3	4	6	9	13
153	1,853	4.7348	2	3	4	6	7
155	5,811	3.7807	1	2	3	5	8
156	3	19.0000	2	2	16	39	39
157	8,167	5.5270	1	2	4	7	11
158	3,274	2.6225	1	1	2	3	5
159	19,093	5.0841	1	2	4	6	10

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
160	10,896	2.5844	1	1	2	3	5
161	9,755	4.5095	1	2	3	6	9
162	4,431	2.0711	1	1	1	3	4
163	7	4.7143	2	3	4	5	7
164	6,034	7.6391	3	4	6	9	14
165	2,336	3.8898	1	2	4	5	7
166	5,502	4.2153	1	2	3	5	8
167	4,870	2.0816	1	1	2	3	4
168	1,653	4.5972	1	2	3	6	9
169	862	2.1583	1	1	2	3	4
170	17,875	10.3572	2	4	8	13	21
171	1,388	3.8916	1	2	3	5	8
172	32,418	6.7337	2	3	5	8	13
173	1,955	3.4441	1	1	3	4	6
174	240,894	4.6420	2	2	4	6	8
175	25,028	2.8115	1	2	2	3	5
176	13,344	5.0520	2	3	4	6	9
177	7,771	4.4075	2	2	4	5	8
178	2,294	3.1007	1	2	3	4	5
179	14,696	5.7497	2	3	4	7	11
180	90,205	5.2286	2	3	4	6	10
181	23,385	3.2729	1	2	3	4	6
182	284,288	4.0583	1	2	3	5	8
183	73,204	2.8163	1	1	2	4	5
184	81	3.5556	1	2	2	4	7
185	6,071	4.4178	1	2	3	5	9
186	4	4.7500	3	3	3	6	7
187	655	3.9908	1	2	3	5	8
188	85,371	5.3017	1	2	4	6	10
189	11,855	2.9775	1	1	2	4	6
190	9	5.1111	1	2	4	5	9
191	10,286	12.1607	3	6	9	15	25
192	1,303	5.2928	1	3	5	7	9
193	3,726	12.0478	4	6	10	15	22
194	431	6.6136	3	4	6	8	11
195	2,436	10.2609	4	6	9	13	18
196	505	5.5549	2	3	5	7	9
197	15,282	8.9193	3	5	7	11	16
198	3,595	4.2656	2	3	4	5	7
199	1,330	8.7641	2	3	6	11	19
200	891	10.4065	2	4	7	13	21
201	2,625	13.0693	3	6	10	16	26
202	26,642	6.0702	2	3	5	7	12
203	30,604	6.3715	2	3	5	8	12
204	67,196	5.3052	2	3	4	6	10
205	32,076	5.7548	2	3	4	7	11
206	1,771	3.8392	1	2	3	5	7
207	37,953	5.1883	1	2	4	6	10
208	8,748	2.8981	1	1	2	4	5
210	127,328	6.5376	3	4	5	7	11
211	23,386	4.5191	3	3	4	5	7
212	6	4.6667	1	1	2	8	8
213	8,148	9.2665	2	4	7	12	18
216	19,791	5.4380	1	1	3	8	12
217	14,674	11.9337	3	5	8	15	24
218	31,163	5.4241	2	3	4	7	10
219	20,018	3.1029	1	2	3	4	5
220	5	6.5000	1	1	2	4	4
223	11,983	3.3894	1	1	2	4	7
224	8,755	1.9509	1	1	1	2	3
225	6,196	5.1605	1	2	4	7	10
226	7,243	6.3625	1	3	4	8	13
227	4,761	2.5699	1	1	2	3	5
228	2,624	4.2102	1	1	3	5	9
229	979	2.3154	1	1	2	3	4
230	2,438	5.7623	1	2	4	7	12
232	480	2.9430	1	1	1	3	7
233	22,424	5.9435	1	2	5	8	12
234	10,689	2.4816	1	1	1	3	6
235	4,507	4.5416	1	2	4	6	8

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
236	41,531	4.3734	2	3	4	5	7
237	1,836	3.7021	1	2	3	5	7
238	9,574	8.0098	2	4	6	9	15
239	37,495	5.9298	2	3	5	7	11
240	12,594	6.4175	2	3	5	8	12
241	2,415	3.5871	1	2	3	4	6
242	2,616	6.3669	2	3	5	8	12
243	98,427	4.4708	1	2	4	6	8
244	16,911	4.3383	1	2	3	5	8
245	5,216	3.0312	1	1	3	4	5
246	1,297	3.5771	1	2	3	4	6
247	21,405	3.3455	1	2	3	4	6
248	17,580	4.7555	2	3	4	6	8
249	13,366	3.9374	1	1	3	5	8
250	4,475	3.8692	1	2	3	5	7
251	1,923	2.7432	1	1	3	3	5
253	25,870	4.5355	2	3	4	5	8
254	9,313	3.0799	1	2	3	4	5
255	1	3.0000	3	3	3	3	3
256	7,739	5.0466	1	2	4	6	9
257	12,277	2.5477	1	1	2	3	5
258	10,259	1.6863	1	1	1	2	3
259	2,463	2.9923	1	1	1	3	7
260	2,003	1.3551	1	1	1	1	2
261	1,523	2.1103	1	1	1	2	4
262	569	4.8768	1	2	4	6	10
263	20,967	10.2150	3	5	7	12	20
264	3,496	5.9813	2	3	5	7	11
265	3,986	6.3149	1	2	4	8	14
266	2,126	3.0918	1	1	2	4	6
267	215	4.9346	1	2	3	5	9
268	1,018	3.3734	1	1	2	4	7
269	11,532	8.0441	2	4	6	10	16
270	2,567	3.7101	1	1	3	5	7
271	20,085	6.7420	2	3	5	8	12
272	5,806	5.6625	2	3	4	7	10
273	1,106	3.7945	1	2	3	5	7
274	2,256	6.1463	2	3	5	8	11
275	191	2.9050	1	1	2	3	5
276	1,455	4.4663	1	2	4	6	8
277	122,645	5.3563	2	3	4	7	9
278	31,770	3.8934	2	2	3	5	7
279	9	2.5556	1	1	3	4	4
280	19,679	3.9461	1	2	3	5	7
281	6,054	2.8113	1	1	2	3	5
283	6,894	4.3785	1	2	3	5	8
284	1,776	2.9858	1	1	2	4	5
285	8,387	9.8055	3	5	8	13	18
286	3,030	5.2288	1	2	4	6	10
287	5,038	9.5913	3	5	7	11	18
288	9,255	3.3157	1	2	2	4	6
289	5,844	2.5231	1	1	1	2	5
290	12,189	2.0053	1	1	1	2	3
291	51	1.5200	1	1	1	2	2
292	7,680	10.0354	2	4	8	12	19
293	325	4.6852	1	2	3	6	9
294	95,358	4.1796	1	2	3	5	8
295	4,608	3.6299	1	2	3	4	7
296	209,892	4.4834	1	2	3	5	8
297	36,469	2.9933	1	2	3	4	5
298	82	3.3537	1	2	2	4	7
299	1,589	5.2780	1	2	4	6	10
300	21,925	5.7484	2	3	5	7	11
301	3,625	3.3959	1	2	3	4	6
302	10,721	7.8878	4	5	6	9	13
303	19,684	6.0530	2	3	5	7	11
304	13,865	7.8471	2	3	6	10	16
305	2,903	2.9119	1	2	2	4	5
306	5,219	5.8804	1	2	3	8	14
307	1,657	1.9212	1	1	2	2	3

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
308	5,083	5.4260	1	2	3	7	12
309	2,789	1.6113	1	1	1	2	3
310	24,767	4.5591	1	2	3	6	10
311	5,064	1.8171	1	1	1	2	3
312	1,378	4.8198	1	1	3	6	10
313	483	2.1206	1	1	2	3	4
315	35,069	6.7590	1	1	4	9	16
316	233,845	5.9901	2	3	5	7	11
317	2,526	3.4968	1	1	2	4	7
318	5,851	5.7865	1	3	4	7	11
319	337	2.8234	1	1	2	4	5
320	228,348	4.9126	2	3	4	6	9
321	29,956	3.4930	1	2	3	4	6
322	80	3.2875	1	2	3	4	6
323	19,348	3.0716	1	1	2	4	6
324	3,880	1.9113	1	1	1	2	3
325	9,350	3.6738	1	2	3	5	7
326	2,325	2.4998	1	1	2	3	4
327	5	2.6000	1	1	2	2	6
328	531	3.4356	1	1	2	4	6
329	49	1.6531	1	1	1	2	2
330	1	1.0000	1	1	1	1	1
331	56,142	5.4154	1	2	4	7	10
332	3,224	3.0420	1	1	2	4	6
333	306	5.5065	1	2	3	7	13
334	9,289	3.9511	1	2	3	5	7
335	12,822	2.2583	1	1	2	3	4
336	25,296	3.1764	1	1	2	3	6
337	19,205	1.7798	1	1	2	2	3
338	615	5.5668	1	2	4	8	12
339	1,138	5.6484	1	1	3	7	12
340	1	1.0000	1	1	1	1	1
341	2,815	3.1900	1	1	1	3	7
342	455	3.3890	1	1	2	4	7
344	2,043	2.9843	1	1	1	3	7
345	1,260	5.1809	1	2	3	6	11
346	3,420	5.6788	2	3	4	7	11
347	217	2.9299	1	1	1	4	6
348	4,289	4.0382	1	2	3	5	7
349	504	2.5668	1	1	2	3	5
350	7,262	4.4271	2	2	4	5	8
352	1,138	4.2251	1	2	3	5	9
353	2,814	5.7246	2	3	4	6	11
354	7,329	5.4921	2	3	4	6	10
355	4,668	2.9265	2	2	3	3	4
356	21,423	1.8025	1	1	1	2	3
357	5,260	7.8391	3	4	6	9	15
358	19,769	3.8000	1	2	3	4	7
359	26,817	2.2435	1	2	2	3	3
360	13,806	2.3374	1	1	2	3	4
361	268	3.0784	1	1	2	3	6
362	2	1.5000	1	1	2	2	2
363	1,809	4.1390	1	2	3	4	9
364	1,660	3.9054	1	1	3	5	8
365	1,529	7.8041	2	3	5	10	18
366	4,716	6.2386	1	3	4	8	12
367	440	3.0308	1	1	2	3	5
368	4,146	6.5766	2	3	5	8	12
369	3,707	3.1123	1	1	2	4	6
370	2,429	5.2575	2	3	4	5	8
371	2,869	3.3973	2	3	3	4	4
372	1,493	3.2390	2	2	2	3	4
373	5,378	2.3207	1	2	2	3	3
374	123	2.8537	1	2	2	3	5
375	10	5.8000	2	3	4	8	9
376	499	3.5524	1	2	2	4	7
377	88	5.6782	1	2	3	6	11
378	181	2.0608	1	1	2	3	3
379	497	2.7591	1	1	2	3	5
380	107	2.6449	1	1	1	2	4

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
381	188	2.6330	1	1	1	2	6
382	50	2.6600	1	1	1	1	3
383	3,082	3.8501	1	1	3	4	7
384	129	2.7752	1	1	1	2	5
386	1	65.0000	65	65	65	65	65
389	1	7.0000	7	7	7	7	7
392	1,943	9.1889	2	4	6	11	20
394	2,707	6.9819	1	2	5	9	15
395	102,692	4.0561	1	2	3	5	8
396	15	3.0667	1	2	2	3	6
397	15,199	5.1973	1	2	4	6	10
398	6,435	5.2248	1	2	4	7	10
399	1,003	3.1210	1	1	2	4	6
401	6,358	10.9924	2	5	9	14	22
402	1,191	3.9840	1	1	3	5	8
403	30,729	7.8057	2	3	6	10	16
404	3,414	3.9800	1	2	3	5	8
406	2,211	9.6383	2	4	7	12	20
407	558	3.3986	1	2	3	4	6
408	1,918	8.5727	1	2	5	10	19
409	1,515	5.9874	1	3	4	6	12
410	28,076	3.7196	1	2	3	4	6
411	3	5.0000	1	1	2	12	12
412	8	3.0000	1	1	2	5	5
413	4,931	6.7113	2	3	5	8	13
414	456	3.6674	1	2	3	4	7
417	35	6.2000	1	2	4	7	14
418	29,523	6.0100	2	3	5	7	11
419	17,335	4.2610	1	2	3	5	8
420	2,722	3.0898	1	2	3	4	5
421	11,518	4.1047	1	2	3	5	8
422	55	3.4815	1	2	3	4	6
423	9,086	8.0894	2	3	6	10	16
424	985	11.3610	1	4	8	14	23
425	10,770	3.2202	1	1	2	4	6
426	5,083	4.1506	1	2	3	5	7
427	1,825	4.4489	1	2	3	5	7
428	841	7.4118	1	2	4	8	13
429	23,577	5.4058	2	3	4	6	9
430	83,653	7.6171	2	3	6	9	13
431	414	5.9390	1	2	4	6	9
432	446	4.5925	1	2	3	5	8
433	5,079	2.9767	1	1	2	3	4
439	1,771	8.8932	1	3	5	9	17
440	4,836	8.1083	2	3	5	9	17
441	754	3.2943	1	1	2	4	6
442	18,906	8.6115	2	3	6	10	17
443	3,296	3.3745	1	1	3	4	7
444	5,837	4.0427	1	2	3	5	8
445	2,126	2.6778	1	1	2	3	5
446	1	1.0000	1	1	1	1	1
447	6,374	2.5062	1	1	2	3	5
449	42,610	3.6921	1	1	3	4	7
450	7,159	1.9949	1	1	1	2	4
451	2	4.0000	2	2	6	6	6
452	29,623	4.8122	1	2	3	6	9
453	5,106	2.8213	1	1	2	3	5
454	4,544	4.0475	1	2	3	5	8
455	803	2.4770	1	1	2	3	4
461	2,236	5.6670	1	2	4	7	12
462	10,305	9.4779	4	5	7	9	11
463	33,817	3.8352	1	2	3	5	7
464	7,616	2.9074	1	1	2	4	5
465	193	3.1746	1	1	2	3	6
466	1,183	3.9942	1	1	2	4	6
467	1,019	3.7708	1	1	2	3	6
468	52,003	12.1213	3	6	9	15	23
470	19	3.3684	2	2	3	4	6
471	15,412	4.5818	3	3	4	5	7
473	8,326	11.7260	2	3	6	15	31

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
476	2,617	9.4923	2	4	8	13	19
477	26,701	8.6649	1	3	7	11	17
479	28,698	2.2900	1	1	1	3	5
480	930	19.3817	6	9	13	23	42
481	1,389	21.8301	10	15	20	24	33
482	4,742	11.2108	4	6	8	13	21
484	457	12.2105	2	6	10	16	23
485	3,773	9.4954	4	5	7	11	18
486	2,851	12.6014	2	6	10	16	25
487	5,168	6.6943	1	3	5	8	13
488	839	16.9509	4	7	13	21	34
489	13,781	8.2563	2	3	6	10	16
490	5,119	5.2595	1	2	4	6	10
491	23,975	2.9996	1	2	2	3	5
492	3,954	13.6789	3	5	6	23	32
493	60,423	5.9498	2	3	5	8	11
494	22,581	2.7089	1	1	2	4	5
495	378	17.2566	8	10	14	20	29
496	4,285	8.4126	3	4	6	10	17
497	32,795	5.5022	3	3	4	6	9
498	22,332	3.5496	2	2	3	4	5
499	34,590	4.0072	1	2	3	5	8
500	44,952	2.0954	1	1	2	3	4
501	3,051	9.3862	4	5	7	11	17
502	694	5.4046	2	3	5	7	9
503	5,501	3.8369	1	2	3	5	7
504	188	28.7861	9	15	25	38	52
505	160	5.9114	1	1	2	6	12
506	1,000	14.8004	3	7	12	19	29
507	280	7.3718	2	3	6	11	15
508	563	7.3826	2	3	5	9	14
509	146	4.6763	1	2	3	5	8
510	1,721	6.0481	1	2	4	7	12
511	510	3.8270	1	1	3	5	8
512	583	11.8045	6	7	9	13	20
513	182	10.4890	6	7	9	12	16
515	57,972	3.5777	1	1	1	4	9
518	25,043	2.4104	1	1	1	3	5
519	14,023	4.5367	1	1	2	6	11
520	17,615	1.8731	1	1	1	2	3
521	33,931	5.3752	1	2	4	6	8
522	5,512	10.5479	3	4	5	7	9
523	15,764	3.7672	1	2	3	4	5
524	104,648	3.0672	1	2	3	4	6
525	154	12.0260	1	2	7	16	34
528	1,731	16.5380	5	9	15	21	29
529	5,136	6.8812	1	2	4	8	16
530	3,247	2.8688	1	1	2	3	5
531	5,321	9.2281	2	3	7	12	19
532	3,018	3.6205	1	1	3	5	7
533	40,612	3.5337	1	1	2	4	8
534	34,525	1.6712	1	1	1	2	3
535	8,653	8.7874	2	4	7	11	17
536	7,826	7.1736	2	3	6	9	14
537	9,526	6.5102	1	3	5	8	13
538	5,106	2.8812	1	1	2	4	6
539	4,776	10.5928	2	3	7	14	23
540	1,424	3.4040	1	1	2	4	7
541	24,418	40.6333	16	23	34	49	71
542	22,162	29.3309	11	17	24	35	50
543	5,726	11.3068	2	4	9	15	23
544	444,140	4.3213	3	3	4	5	7
545	44,068	5.0758	3	3	4	6	8
546	3,637	7.8084	3	4	6	9	14
547	29,849	12.1407	6	8	10	14	20
548	26,598	8.6902	5	6	8	10	13
549	12,969	10.1156	5	6	8	12	18
550	29,780	6.6674	4	5	6	8	10
551	51,330	6.0799	1	2	5	8	12
552	78,735	3.3420	1	1	2	4	7

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PERCENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V24.0 CMS DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
553	44,667	8.8671	1	3	7	12	18
554	78,338	5.1191	1	2	3	7	11
555	37,904	4.6521	1	2	3	6	9
556	17,924	1.9017	1	1	1	2	4
557	129,504	3.9574	1	2	3	5	8
558	185,260	1.7497	1	1	1	2	3
559	4,850	6.8469	2	4	5	8	13
560	3,401	10.0047	3	5	8	13	19
561	2,983	9.4530	3	5	8	12	18
562	53,381	4.7061	1	2	4	6	9
563	20,263	3.1483	1	2	3	4	6
564	16,650	3.3843	1	2	3	4	6
565	46,695	14.9666	6	9	13	18	25
566	80,036	7.2764	1	3	6	10	14
567	10,028	15.6091	6	8	12	19	29
568	16,182	11.0602	2	5	8	14	22
569	59,084	14.2085	5	8	12	18	26
570	69,076	9.8967	4	6	8	12	18
571	11,056	4.8116	2	2	4	6	9
572	55,040	6.9411	2	3	5	8	13
573	6,500	10.8933	4	6	8	12	19
574	27,832	5.7540	2	3	4	7	11
575	13,964	15.2777	6	8	13	19	26
576	297,949	7.1004	2	3	6	9	14
577	11,261	2.3454	1	1	1	2	5
578	39,116	15.6778	5	8	12	19	29
579	19,915	10.6805	3	5	8	13	21
	11,792,587	.....	.....	.....	.....	.....	.....

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1	652	45.5567	10	18	32	57	96
2	336	22.8304	8	10	15	27	46
3	24,550	40.6297	16	23	34	49	71
4	22,030	29.2666	11	17	24	35	50
5	634	23.5221	7	10	17	29	51
6	296	10.5135	6	7	9	12	17
7	378	17.2566	8	10	14	20	29
8	583	11.8045	6	7	9	13	20
9	1,389	21.8301	10	15	20	24	33
10	182	10.4890	6	7	9	12	16
11	1,301	16.1742	6	8	13	20	28
12	1,961	10.9218	4	6	9	13	19
13	1,480	7.2324	3	4	7	9	12
20	910	19.0868	6	11	18	25	34
21	571	15.4823	7	10	14	20	25
22	250	9.6225	3	5	9	13	16
23	3,571	12.7811	3	5	10	17	26
24	2,177	8.8745	1	3	7	12	18
25	8,513	13.3366	4	7	11	17	25
26	12,081	8.1992	3	4	7	10	15
27	14,221	4.6096	1	2	4	6	9
28	1,633	14.6554	4	7	11	18	27
29	3,097	7.3448	2	3	6	10	14
30	3,609	3.7074	1	1	3	5	7
31	1,062	13.1723	3	5	10	18	26
32	3,069	5.7546	1	2	4	7	13
33	4,254	3.0634	1	1	2	4	6
34	825	7.2676	1	2	6	10	14
35	2,918	2.9170	1	1	2	3	7
36	7,515	1.5828	1	1	1	1	3
37	4,807	8.6796	2	3	7	11	18
38	16,551	3.6657	1	1	2	5	8
39	53,705	1.8335	1	1	1	2	3
40	4,593	13.6251	4	6	10	17	26

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
41	8,017	7.3476	2	3	6	9	14
42	5,229	3.5723	1	1	2	5	8
52	1,200	7.0253	2	3	5	8	12
53	593	3.9746	1	2	3	5	7
54	4,763	7.2143	2	3	5	9	14
55	16,986	5.0092	1	2	4	6	10
56	8,007	7.7908	2	4	6	9	14
57	51,293	4.9238	2	3	4	6	8
58	798	8.0163	2	4	6	9	16
59	2,687	5.2069	2	3	4	6	9
60	4,254	4.0790	2	2	4	5	7
61	1,374	9.6435	2	5	8	12	18
62	2,325	6.3388	3	4	5	8	11
63	1,151	4.5426	2	3	4	6	8
64	56,608	7.6480	2	3	6	10	15
65	115,679	5.2835	2	3	4	7	9
66	91,935	3.7778	1	2	3	5	7
67	1,409	6.2038	2	3	5	8	12
68	12,587	3.5853	1	2	3	5	7
69	104,648	3.0672	1	2	3	4	6
0	7,180	7.9051	2	4	6	10	15
71	10,352	5.5978	2	3	4	7	10
72	5,837	3.7341	1	2	3	5	7
73	8,739	6.4320	2	3	5	8	13
74	32,871	4.3650	1	2	3	5	8
75	1,233	7.5899	3	4	6	10	14
76	861	4.1754	2	2	3	5	8
77	1,112	7.1772	2	3	6	9	14
78	1,388	4.5779	2	2	4	6	8
79	899	3.4370	1	2	3	4	6
80	2,109	4.8807	1	2	4	6	9
81	8,355	3.4116	1	2	3	4	6
82	1,675	6.4225	1	1	4	9	15
83	2,083	5.2018	1	2	4	7	10
84	2,538	3.0977	1	1	2	4	6
85	5,392	7.9164	2	3	6	10	16
86	10,952	5.0955	1	3	4	6	9
87	11,869	3.3660	1	2	3	4	6
88	732	6.1274	1	3	4	7	12
89	2,839	3.7800	1	2	3	5	7
90	3,290	2.4551	1	1	2	3	5
91	6,782	6.5786	2	3	5	8	13
92	15,510	4.4400	1	2	4	5	8
93	15,104	3.2086	1	2	3	4	6
94	1,543	12.5251	4	7	11	16	23
95	1,104	9.1098	3	5	8	12	16
96	754	6.1680	2	3	5	8	11
97	1,274	11.8508	4	6	10	16	22
98	1,068	8.5052	3	5	7	11	15
99	641	6.2684	2	3	5	8	11
100	16,087	6.2910	2	3	5	8	12
101	57,584	3.7147	1	2	3	5	7
102	1,379	5.0736	1	2	3	6	10
103	15,278	3.2312	1	2	3	4	6
113	598	5.5321	1	2	4	7	11
114	601	2.6588	1	1	2	3	5
115	1,124	4.4811	1	2	4	5	8
116	748	3.4154	1	1	2	4	6
117	1,558	1.9488	1	1	1	1	2
121	612	5.8164	2	3	5	7	11
122	671	4.0511	1	2	3	5	7
123	2,879	2.9292	1	2	2	4	5
124	687	5.2617	1	2	4	6	10
125	4,779	3.4889	1	2	3	4	7
129	1,407	5.0928	1	2	4	6	10
130	1,072	3.1502	1	1	2	4	6
131	904	5.7709	1	2	4	7	11
132	918	2.6312	1	1	2	3	5
133	2,062	5.8060	1	2	4	7	12
134	3,797	2.1470	1	1	1	2	4

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
135	431	6.4419	1	2	5	8	13
136	504	2.5516	1	1	1	3	6
137	848	5.3554	1	2	4	7	11
138	931	2.4391	1	1	2	3	5
139	1,721	1.7952	1	1	1	2	3
146	702	10.3233	2	4	7	13	19
147	1,467	5.7570	1	2	4	7	11
148	939	3.5184	1	1	2	4	7
149	39,649	2.7318	1	1	2	3	5
150	946	5.4508	1	2	4	7	11
151	6,859	2.8897	1	1	2	4	5
152	2,377	4.7012	1	2	4	6	9
153	16,251	3.3586	1	2	3	4	6
154	1,865	6.4604	2	3	5	8	12
155	4,447	4.5269	1	2	4	6	8
156	4,998	3.1613	1	2	3	4	6
157	1,169	6.8720	2	3	5	9	14
158	3,177	4.4338	1	2	3	6	8
159	2,384	3.0715	1	1	2	4	6
163	13,518	14.9887	5	8	13	19	27
164	18,509	8.3443	3	5	7	10	15
165	14,288	5.3509	2	3	5	7	9
166	20,428	13.0045	4	7	10	16	24
167	21,107	8.1304	3	4	7	10	15
168	5,566	5.3600	1	2	4	7	10
175	12,045	7.4063	3	4	6	9	13
176	40,393	5.5083	2	4	5	7	9
177	57,709	9.1913	3	5	8	12	17
178	72,756	7.4385	3	4	6	9	13
179	26,648	5.6435	2	3	5	7	10
180	22,681	7.9583	2	4	6	10	15
181	32,515	5.9571	2	3	5	8	12
182	6,137	4.2633	1	2	3	6	8
183	1,683	7.1768	2	4	6	9	14
184	4,287	4.6476	2	3	4	6	8
185	2,616	3.2524	1	2	3	4	6
186	8,607	7.5299	2	4	6	10	14
187	10,397	5.4614	2	3	4	7	11
188	4,873	4.1095	1	2	3	5	8
189	105,233	6.2370	2	3	5	8	11
190	57,533	6.4769	2	3	5	8	12
191	126,916	5.0839	2	3	4	6	9
192	194,511	4.0376	2	2	3	5	7
193	88,975	6.8748	2	4	6	9	13
194	274,931	5.3303	2	3	5	7	9
195	143,367	4.1461	2	2	4	5	7
196	5,190	7.3424	2	4	6	9	14
197	7,120	5.4098	2	3	5	7	10
198	4,857	4.2758	1	2	4	5	8
199	3,289	8.5018	3	4	7	11	16
200	8,332	5.1418	1	2	4	7	10
201	3,477	4.0916	1	2	3	5	8
202	33,053	4.4693	2	2	4	6	8
203	41,262	3.4712	1	2	3	4	6
204	26,393	2.8814	1	1	2	4	5
205	5,841	5.6256	1	3	4	7	11
206	22,713	3.4881	1	2	3	4	7
207	46,696	14.9666	6	9	13	18	25
208	80,038	7.2763	1	3	6	10	14
215	154	12.0260	1	2	7	16	34
216	8,460	18.6820	8	11	16	23	32
217	7,967	12.2103	6	8	11	15	20
218	2,970	9.0567	5	6	8	11	14
219	10,122	14.4709	6	8	11	18	27
220	14,319	8.5997	5	6	7	10	14
221	7,663	6.4206	4	5	6	7	9
222	2,869	13.2588	5	7	11	17	24
223	5,784	6.5683	1	3	6	9	12
224	1,931	11.5132	4	6	9	14	22
225	5,895	5.7509	2	3	5	7	11

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
226	7,086	9.4049	1	3	8	13	19
227	50,886	2.7659	1	1	1	3	7
228	3,103	14.6322	6	8	12	18	26
229	4,361	9.0317	4	6	8	11	15
230	1,804	6.5506	3	4	6	8	11
231	1,485	13.2042	5	7	11	16	24
232	1,800	8.9917	5	6	8	11	14
233	17,013	14.2907	7	9	12	17	24
234	39,434	8.8844	5	6	8	10	13
235	9,687	11.4952	5	7	9	14	21
236	33,062	6.6047	4	5	6	8	10
237	23,038	11.1783	2	5	9	14	22
238	44,047	4.8558	1	2	4	7	10
239	13,928	15.5736	5	8	12	19	29
240	13,892	10.5067	3	6	8	13	19
241	2,933	6.9207	3	4	6	8	13
242	17,269	8.9297	3	4	7	11	17
243	40,665	5.1161	1	2	4	7	10
244	66,031	2.9236	1	1	2	4	6
245	6,100	3.2570	1	1	2	4	7
246	41,369	5.4900	1	2	4	7	12
247	273,395	2.2293	1	1	1	3	5
248	5,567	6.1648	1	2	5	8	13
249	29,411	2.5265	1	1	2	3	5
250	5,786	7.5358	1	3	6	10	15
251	40,107	2.9564	1	1	2	4	6
252	44,977	8.7562	1	3	6	12	19
253	52,589	6.0291	1	2	4	8	13
254	54,137	2.8061	1	1	2	4	6
255	2,631	9.9444	2	4	8	13	19
256	3,964	7.5188	2	4	6	10	14
257	695	4.9395	1	2	4	7	10
258	604	7.5710	2	3	6	10	15
259	7,390	2.6352	1	1	2	3	6
260	873	10.2099	2	4	8	13	21
261	2,926	3.9415	1	1	3	5	8
262	3,298	2.4562	1	1	2	3	5
263	793	5.4823	1	1	4	8	12
264	30,375	9.0225	1	3	6	12	19
280	61,214	7.4518	2	4	6	9	14
281	62,199	4.8944	2	3	4	6	9
282	57,400	3.2473	1	1	3	4	6
283	16,074	5.4700	1	1	3	7	12
284	5,105	3.4644	1	1	2	4	7
285	3,017	2.2286	1	1	1	3	5
286	23,416	7.0662	2	3	6	9	14
287	173,552	3.1960	1	1	2	4	6
288	3,271	12.2393	4	7	10	15	22
289	1,477	8.7390	3	5	7	11	15
290	449	6.6540	2	3	5	8	12
291	185,221	6.6250	2	3	5	8	13
292	245,842	4.9694	2	3	4	6	9
293	201,752	3.6863	1	2	3	5	6
294	1,757	5.5435	2	3	5	7	9
295	1,633	4.3838	2	3	4	6	7
296	1,849	3.2595	1	1	1	4	8
297	897	1.9406	1	1	1	2	4
298	522	1.4489	1	1	1	1	2
299	17,629	6.8540	2	3	6	9	13
300	49,709	5.1087	2	3	4	7	9
301	37,931	3.7859	1	2	3	5	7
302	7,954	4.3585	1	2	3	5	8
303	82,241	2.5502	1	1	2	3	5
304	2,137	5.2303	1	2	4	7	10
305	36,235	2.8712	1	1	2	4	5
306	1,393	6.4830	2	3	5	8	12
307	6,517	3.4997	1	2	3	4	7
308	33,848	5.7543	1	3	4	7	11
309	85,559	3.9165	1	2	3	5	7
310	156,708	2.7567	1	1	2	4	5

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
311	25,370	2.3401	1	1	2	3	4
312	170,871	3.1499	1	2	3	4	6
313	223,238	2.1145	1	1	2	3	4
314	60,733	7.1134	2	3	5	9	14
315	33,454	4.5725	1	2	4	6	9
316	18,221	3.0111	1	1	2	4	6
326	11,638	17.2269	6	9	14	22	32
327	11,374	10.2860	3	6	9	13	19
328	9,012	4.4444	1	2	3	6	9
329	48,463	15.9021	6	9	13	20	29
330	68,609	9.8383	4	6	8	12	17
331	29,683	6.0198	3	4	5	7	10
332	1,899	14.7387	6	8	12	18	26
333	6,507	8.9062	4	6	8	10	15
334	3,760	5.5993	2	4	5	7	9
335	7,204	14.3612	6	8	12	18	25
336	12,829	9.2615	3	5	8	12	16
337	8,655	5.6547	1	3	5	8	11
338	1,517	10.8864	4	6	9	14	19
339	3,296	7.1173	3	4	6	9	12
340	3,557	4.2751	2	2	4	6	7
341	879	7.2608	2	3	5	10	15
342	2,668	4.2975	1	2	3	6	8
343	6,825	2.2682	1	1	2	3	4
344	899	12.0022	4	6	9	15	23
345	3,098	7.2494	3	4	6	9	12
346	2,766	4.9869	2	3	5	6	8
347	1,577	8.3621	2	4	7	11	16
348	4,310	5.4832	1	2	4	7	11
349	5,554	3.0422	1	1	2	4	6
350	1,802	8.0522	2	4	6	11	16
351	4,671	4.5384	1	2	4	6	9
352	8,873	2.4406	1	1	2	3	5
353	3,082	8.7554	2	4	7	11	17
354	9,068	5.0871	1	3	4	7	9
355	16,686	2.8741	1	1	2	4	5
356	8,432	13.2866	3	6	10	17	26
357	8,349	8.0433	2	4	6	10	16
358	2,482	4.5864	1	2	4	6	9
368	3,078	6.6334	2	3	5	8	13
369	4,865	4.5727	2	3	4	6	8
370	3,113	3.3837	1	2	3	4	6
371	16,988	8.7626	3	4	7	11	17
372	23,793	6.8007	2	4	6	8	13
373	14,261	5.0064	2	3	4	6	9
374	9,560	8.8091	2	4	7	11	17
375	20,262	6.0325	2	3	5	8	11
376	4,554	4.0862	1	2	3	5	8
377	50,940	6.4763	2	3	5	8	12
378	119,194	4.4546	2	3	4	6	8
379	95,794	3.4227	1	2	3	4	6
380	2,940	7.2202	2	4	5	9	14
381	5,711	5.1154	2	3	4	6	9
382	4,694	3.6166	1	2	3	5	6
383	1,311	5.8562	2	3	5	7	11
384	8,755	3.8483	1	2	3	5	7
385	2,119	9.0047	3	4	7	11	18
386	7,460	5.7384	2	3	5	7	11
387	5,117	4.4158	2	2	4	6	8
388	18,446	7.4271	2	3	6	9	14
389	47,969	5.0467	2	3	4	6	9
390	47,176	3.5860	1	2	3	4	6
391	47,998	5.4705	2	2	4	7	11
392	309,576	3.5460	1	2	3	4	7
393	24,127	6.9736	2	3	5	9	14
394	48,220	4.8901	1	2	4	6	9
395	24,889	3.3693	1	2	3	4	6
405	3,961	17.3051	5	8	13	22	34
406	5,427	9.4785	2	5	8	12	18
407	2,201	5.4683	1	3	5	7	10

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
408	1,686	15.0856	6	8	12	19	28
409	1,775	9.9041	4	6	8	12	17
410	696	6.8038	3	4	6	8	11
411	986	13.1239	5	7	11	16	23
412	1,100	8.8135	4	5	8	11	15
413	855	6.0458	2	4	5	8	10
414	5,653	11.8583	5	7	10	15	21
415	7,175	7.6965	3	5	7	9	13
416	6,049	4.8541	2	3	4	6	8
417	16,760	8.4056	3	4	7	10	16
418	28,699	5.6203	2	3	5	7	10
419	37,545	3.1565	1	1	3	4	6
420	739	14.2182	3	6	11	18	27
421	1,120	7.8479	2	3	6	10	16
422	362	4.4680	1	2	4	6	8
423	1,536	15.5134	4	7	12	20	29
424	939	10.2495	3	5	8	13	19
425	150	5.6149	1	3	5	7	10
432	16,502	6.8906	2	3	5	8	13
433	9,190	4.8530	1	2	4	6	9
434	951	3.5768	1	2	3	5	6
435	12,049	7.6790	2	3	6	10	15
436	14,223	5.8718	2	3	5	8	11
437	4,332	4.3679	1	2	3	6	9
438	14,544	7.7403	2	3	6	10	16
439	26,026	5.4173	2	3	4	7	10
440	26,628	3.8636	1	2	3	5	7
441	14,101	7.0004	2	3	5	9	14
442	13,238	5.1119	2	3	4	6	10
443	6,508	3.8369	1	2	3	5	7
444	12,603	6.6379	2	3	5	8	13
445	17,466	4.7804	2	2	4	6	9
446	16,635	3.3170	1	2	3	4	6
453	854	15.9027	6	8	13	20	28
454	1,710	8.3647	3	4	6	10	15
455	1,721	4.7391	2	3	4	6	8
456	772	15.8846	5	7	12	19	30
457	2,089	7.8140	3	4	6	9	14
458	1,289	4.6337	2	3	4	6	7
459	3,217	9.6149	4	5	7	11	18
460	51,397	4.3318	2	3	4	5	7
461	1,073	8.4762	4	5	7	9	15
462	14,339	4.2905	3	3	4	5	7
463	5,325	16.8522	5	7	12	21	33
464	6,596	10.3724	3	5	8	13	20
465	2,753	6.1608	1	3	5	8	12
466	3,917	9.4940	3	5	7	11	18
467	14,368	5.6062	3	3	4	6	9
468	21,516	4.0483	3	3	4	5	6
469	29,924	8.4449	3	5	7	10	15
470	414,313	4.0233	3	3	4	4	6
471	2,244	10.1173	2	4	8	13	20
472	6,654	4.3227	1	1	3	6	10
473	22,740	1.9847	1	1	1	2	4
474	2,864	12.5383	4	6	10	16	24
475	3,719	8.5570	3	4	7	11	16
476	1,566	4.9635	1	2	4	6	10
477	2,264	12.5080	4	6	10	15	23
478	7,389	6.8456	1	3	6	9	14
479	10,143	2.8312	1	1	1	4	7
480	26,057	9.4641	4	5	8	11	17
481	74,787	5.9956	3	4	5	7	9
482	49,933	4.8792	3	4	4	6	7
483	6,585	4.3756	2	2	3	5	8
484	17,391	2.4770	1	2	2	3	4
485	1,157	12.4541	5	7	10	15	23
486	2,070	8.1209	3	5	7	10	14
487	1,350	5.7587	3	4	5	7	10
488	2,548	5.0916	2	3	4	6	9
489	6,227	3.0966	1	2	3	4	5

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
490	21,725	4.7077	1	2	3	6	10
491	57,817	2.2583	1	1	2	3	4
492	4,772	8.7485	3	5	7	11	16
493	16,865	5.3415	2	3	4	7	9
494	29,549	3.3618	1	2	3	4	6
495	1,895	11.0768	3	5	8	14	21
496	5,514	5.9973	2	3	5	8	11
497	7,223	3.1410	1	1	2	4	6
498	1,262	8.2075	2	3	6	10	15
499	1,176	3.1422	1	1	2	4	6
500	1,364	11.2693	3	5	8	14	21
501	3,962	5.9171	2	3	5	7	12
502	6,678	2.9232	1	1	2	3	6
503	745	8.8694	2	4	7	11	17
504	2,281	6.4435	2	3	5	8	12
505	3,170	3.3561	1	1	3	4	7
506	932	3.2432	1	1	2	4	7
507	841	5.1726	1	2	4	6	10
508	2,736	2.0217	1	1	2	2	4
509	681	2.8383	1	1	2	3	6
510	996	6.6087	2	3	5	8	12
511	4,189	3.9410	1	2	3	5	7
512	12,149	2.1159	1	1	2	3	4
513	1,110	5.1250	1	2	4	7	10
514	1,187	2.5940	1	1	2	3	5
515	3,603	10.8592	3	5	9	14	20
516	11,526	5.9497	1	3	5	8	11
517	17,984	2.8981	1	1	2	4	7
533	840	6.8864	2	3	5	9	13
534	3,667	4.0041	1	2	3	5	7
535	6,910	6.3778	2	3	5	8	12
536	34,621	3.9732	1	3	3	5	7
537	696	4.6657	2	3	4	6	8
538	1,140	3.1150	1	2	3	4	5
539	3,422	10.2180	3	5	8	12	19
540	4,343	7.2446	3	4	6	9	13
541	1,809	5.6586	2	3	5	7	10
542	6,210	8.7037	3	4	7	11	17
543	18,875	5.9810	2	3	5	7	11
544	12,411	4.4645	2	3	4	6	8
545	4,078	9.0047	2	4	7	11	18
546	6,186	5.5263	2	3	4	7	10
547	4,746	3.9204	1	2	3	5	7
548	597	9.3137	3	4	7	11	17
549	1,151	6.2279	2	3	5	8	11
550	868	4.5088	1	3	4	6	8
551	9,600	7.2310	2	3	6	9	14
552	88,827	4.1724	1	2	3	5	7
553	2,835	6.0790	2	3	5	7	11
554	20,589	3.7203	1	2	3	5	7
555	2,011	4.9083	1	2	4	6	10
556	19,394	3.1832	1	2	3	4	6
557	3,207	6.9418	2	4	6	8	13
558	14,373	4.2654	2	2	4	5	7
559	1,658	7.3092	2	3	5	9	14
560	4,230	4.7453	1	2	4	6	9
561	7,478	2.7344	1	1	2	3	5
562	5,065	6.5166	2	3	5	8	12
563	36,518	3.7146	1	2	3	4	6
564	1,633	7.1141	2	3	5	9	14
565	3,411	5.1043	2	3	4	6	9
566	2,695	3.7195	1	2	3	5	7
573	5,730	13.8472	4	6	10	16	28
574	12,495	9.5050	3	5	7	11	18
575	6,238	5.9317	2	3	5	7	10
576	563	12.1226	2	4	8	15	26
577	2,311	6.0022	1	2	4	8	12
578	3,238	3.4145	1	1	2	4	7
579	3,366	11.0955	3	5	8	14	22
580	11,047	5.4644	1	2	4	7	12

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
581	12,294	2.5715	1	1	2	3	6
582	5,804	2.8655	1	1	2	3	6
583	9,404	1.8207	1	1	1	2	3
584	802	5.7129	1	2	4	8	12
585	1,709	2.1908	1	1	1	2	4
592	4,054	8.8697	3	4	7	11	16
593	13,169	6.4859	2	4	5	8	11
594	2,863	4.8992	2	3	4	6	9
595	1,096	8.1848	2	4	6	10	16
596	5,816	4.8319	2	2	4	6	9
597	565	8.1924	2	3	6	10	14
598	1,523	5.5806	2	3	4	7	10
599	359	3.6082	1	1	3	4	6
600	612	5.3781	2	3	4	7	10
601	843	3.8038	1	2	3	5	7
602	21,567	7.0322	2	4	6	9	13
603	132,865	4.7352	2	3	4	6	8
604	2,664	5.4212	1	3	4	7	10
605	23,070	3.4788	1	2	3	4	6
606	1,380	5.8848	1	2	4	7	11
607	7,290	3.7550	1	2	3	5	7
614	1,434	7.2972	2	3	5	8	14
615	1,596	3.3733	1	2	3	4	6
616	1,151	15.5480	6	8	13	19	27
617	6,965	9.0012	3	5	8	11	16
618	271	6.0970	2	3	5	8	11
619	675	9.2815	3	4	6	10	21
620	2,010	4.2210	2	2	3	5	7
621	6,570	2.4256	1	1	2	3	4
622	1,242	13.2047	4	6	9	16	27
623	3,403	8.6979	3	5	7	10	15
624	393	5.8852	2	3	5	7	10
625	1,110	7.5343	2	2	5	9	17
626	2,754	3.2536	1	1	2	4	7
627	14,220	1.5421	1	1	1	2	2
628	3,305	11.8138	2	4	9	15	24
629	4,148	8.8483	3	5	7	11	16
630	552	5.1379	1	2	4	7	10
637	16,527	6.1871	2	3	5	7	12
638	46,959	4.2747	1	2	3	5	8
639	36,496	3.0760	1	2	3	4	6
640	56,340	5.6229	1	2	4	7	11
641	190,108	3.8600	1	2	3	5	7
642	1,589	5.2780	1	2	4	6	10
643	5,101	7.7768	2	4	6	10	15
644	12,255	5.4336	2	3	4	7	10
645	8,194	3.9185	1	2	3	5	7
652	10,721	7.8878	4	5	6	9	13
653	1,591	16.7536	6	9	13	20	31
654	3,392	10.0608	5	7	8	12	17
655	1,517	6.5971	3	4	7	8	10
656	3,746	10.7713	4	5	8	13	21
657	7,960	6.0560	3	4	5	7	10
658	7,978	3.8343	2	3	4	5	6
659	4,490	11.3196	3	5	8	14	22
660	8,000	6.5269	2	3	5	8	13
661	4,278	3.3237	1	2	3	4	6
662	1,007	10.5180	2	4	8	13	21
663	2,297	5.2587	1	2	4	7	11
664	4,568	2.0629	1	1	1	2	4
665	693	12.1688	3	6	10	15	22
666	2,406	6.3360	1	2	4	9	14
667	3,777	2.6993	1	1	2	3	6
668	3,775	8.6210	2	4	7	11	17
669	13,328	4.3579	1	2	3	6	9
670	12,728	2.4749	1	1	2	3	5
671	918	5.7961	1	2	4	8	12
672	943	2.4862	1	1	2	3	5
673	12,702	10.1687	1	3	7	13	22
674	13,867	6.5518	1	2	4	9	14

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
675	8,401	1.9467	1	1	1	2	4
682	76,732	7.3062	2	3	6	9	14
683	128,569	5.6890	2	3	5	7	10
684	28,562	3.8061	1	2	3	5	7
685	2,527	3.4998	1	1	2	4	7
686	1,602	8.0589	2	4	6	10	15
687	3,478	5.2671	1	2	4	7	10
688	1,109	3.2229	1	1	2	4	6
689	56,092	6.3682	2	3	5	8	12
690	202,328	4.2998	2	2	4	5	8
691	910	4.1474	1	2	3	5	9
692	655	2.2508	1	1	2	3	4
693	2,262	5.1834	1	2	4	7	10
694	19,406	2.5707	1	1	2	3	5
695	992	5.7202	2	3	4	7	11
696	10,693	3.2297	1	2	3	4	6
697	588	3.3111	1	1	2	4	6
698	21,307	6.7858	2	3	5	8	13
699	27,179	4.8652	1	2	4	6	9
700	11,199	3.4601	1	2	3	4	7
707	6,060	4.5306	2	2	3	5	8
708	16,051	2.3801	1	1	2	3	4
709	796	6.4598	1	1	3	8	15
710	2,019	1.8983	1	1	1	2	3
711	956	7.8312	1	3	6	10	16
712	798	2.9533	1	1	2	3	7
713	12,037	4.1562	1	2	3	5	9
714	32,775	1.9941	1	1	2	2	3
715	665	6.0695	1	2	4	8	14
716	1,378	1.4989	1	1	1	1	2
717	671	7.5195	1	3	5	9	15
718	604	2.6794	1	1	2	3	5
722	887	7.4415	2	3	6	9	14
723	2,096	5.3802	2	3	4	7	10
724	657	3.3380	1	1	3	4	6
725	814	5.6609	2	3	4	7	11
726	3,986	3.5251	1	2	3	4	6
727	1,111	6.5452	2	3	5	8	12
728	6,264	4.0490	1	2	3	5	7
729	604	5.1327	1	2	4	7	10
730	537	3.1857	1	1	2	4	6
734	1,530	7.5975	3	4	5	9	15
735	1,284	3.4875	1	2	3	4	6
736	847	13.9062	5	8	12	17	25
737	3,495	7.3976	3	4	6	9	13
738	918	3.9344	2	3	4	5	6
739	981	10.2071	4	5	7	13	20
740	4,653	5.1719	2	3	4	6	9
741	6,363	3.1178	2	2	3	4	5
742	11,722	4.5771	2	2	3	5	8
743	34,864	2.3419	1	2	2	3	3
744	1,639	5.7572	1	2	4	7	12
745	2,100	2.5449	1	1	2	3	5
746	2,675	4.0979	1	2	3	5	8
747	11,131	1.9143	1	1	2	2	3
748	21,423	1.8025	1	1	1	2	3
749	1,050	9.8475	2	4	7	13	21
750	479	3.3103	1	2	3	4	6
754	1,102	8.8578	2	4	6	11	18
755	3,248	5.6431	1	2	4	7	11
756	806	3.2886	1	1	2	4	6
757	1,329	8.9057	3	4	7	11	17
758	1,666	6.0838	2	3	5	7	11
759	1,151	4.5863	2	2	4	6	8
760	1,825	3.7577	1	2	3	5	7
761	1,882	2.4767	1	1	2	3	5
765	2,623	5.2840	2	3	4	5	8
766	2,675	3.2388	2	2	3	4	4
767	123	2.8537	1	2	2	3	5
768	10	5.8000	2	3	4	8	9

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
769	88	5.6782	1	2	3	6	11
770	188	2.6330	1	1	1	2	6
774	1,493	3.2390	2	2	2	3	4
775	5,378	2.3207	1	2	2	3	3
776	499	3.5524	1	2	2	4	7
777	181	2.0608	1	1	2	3	3
778	497	2.7591	1	1	2	3	5
779	107	2.6449	1	1	1	2	4
780	50	2.6600	1	1	1	1	3
781	3,082	3.8501	1	1	3	4	7
782	129	2.7752	1	1	1	2	5
790	1	65.0000	65	65	65	65	65
793	1	7.0000	7	7	7	7	7
799	631	14.2979	4	7	11	19	28
800	731	8.2312	3	4	6	10	17
801	581	4.8451	2	2	4	6	9
802	696	12.9164	3	6	10	16	26
803	1,032	6.5325	1	3	5	8	13
804	979	3.2444	1	1	2	4	7
808	8,292	7.9993	2	4	6	10	15
809	15,830	5.0060	2	2	4	6	9
810	3,710	3.9202	1	2	3	5	7
811	18,558	5.5472	1	2	4	7	11
812	84,150	3.7268	1	2	3	5	7
813	15,199	5.1973	1	2	4	6	10
814	1,655	7.1680	2	3	5	9	15
815	3,494	4.9013	1	2	4	6	9
816	2,289	3.3961	1	2	3	4	6
820	1,492	18.4047	5	8	14	24	36
821	2,598	7.7857	1	3	6	10	16
822	2,119	3.6957	1	1	3	5	8
823	2,456	15.3824	5	8	13	19	28
824	3,136	8.7831	2	4	7	12	17
825	1,946	4.7330	1	2	3	6	10
826	566	17.3852	5	8	13	22	34
827	1,355	7.5495	2	4	6	9	15
828	853	3.7051	1	2	3	5	7
829	1,389	10.4658	2	4	7	14	22
830	524	3.5462	1	1	2	4	7
834	5,306	14.6560	2	4	9	23	35
835	1,459	8.1996	1	3	5	9	20
836	1,561	5.0528	1	2	3	6	10
837	1,641	22.6943	5	9	23	30	39
838	942	9.0446	3	4	5	7	25
839	1,371	6.0687	3	4	5	6	8
840	15,295	9.5887	2	4	7	12	20
841	11,381	6.5776	2	3	5	8	13
842	7,469	4.2783	1	2	3	6	8
843	1,501	8.7016	2	4	7	11	17
844	2,900	6.0297	2	3	5	8	12
845	997	4.2753	1	2	3	5	8
846	2,504	8.4896	2	3	5	10	19
847	23,868	3.2756	1	2	3	4	6
848	1,704	2.9316	1	1	2	4	5
849	1,515	5.9874	1	3	4	6	12
853	31,699	16.7841	5	8	13	21	31
854	6,958	11.1833	4	6	9	14	20
855	429	7.3077	2	4	6	10	14
856	6,230	16.1966	5	7	12	20	32
857	10,308	8.8878	3	4	7	11	17
858	3,375	5.9762	2	3	5	7	11
862	7,498	8.3120	2	4	6	10	16
863	22,027	5.2255	2	3	4	7	9
864	20,089	4.1010	1	2	3	5	7
865	2,035	6.8455	2	3	5	8	14
866	9,506	3.5183	1	2	3	4	6
867	5,408	9.8846	3	4	7	13	19
868	2,523	5.9071	2	3	5	7	10
869	1,155	4.3735	2	2	3	5	8
870	13,968	15.2784	6	8	13	19	26

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
871	205,298	7.6922	2	4	6	10	15
872	92,712	5.7913	2	3	5	7	10
876	981	11.3738	1	4	8	14	23
880	10,771	3.2201	1	1	2	4	6
881	5,083	4.1506	1	2	3	5	7
882	1,825	4.4489	1	2	3	5	7
883	841	7.4118	1	2	4	8	13
884	23,580	5.4065	2	3	4	6	9
885	83,653	7.6171	2	3	6	9	13
886	414	5.9390	1	2	4	6	9
887	446	4.5925	1	2	3	5	8
894	5,079	2.9767	1	1	2	3	4
895	10,306	10.5223	3	4	6	8	9
896	5,570	6.6093	2	3	5	8	12
897	39,332	4.1198	1	2	3	5	6
901	925	14.4242	3	5	9	17	30
902	2,220	7.9436	2	3	6	9	16
903	1,691	4.8673	1	2	4	6	10
904	984	12.2029	2	4	7	13	22
905	787	4.7253	1	2	4	6	8
906	754	3.2943	1	1	2	4	6
907	8,177	11.6843	3	5	8	14	24
908	8,576	6.8610	2	3	5	8	13
909	5,449	3.5868	1	1	3	5	7
913	836	6.1739	2	3	5	8	12
914	7,129	3.3884	1	2	3	4	6
915	932	4.6541	1	2	3	6	10
916	5,442	2.1384	1	1	2	3	4
917	14,534	5.1977	1	2	4	6	11
918	35,238	2.7248	1	1	2	3	5
919	10,709	6.2394	1	3	4	8	13
920	14,309	4.3065	1	2	3	5	8
921	9,716	2.9383	1	1	2	4	5
922	1,034	6.0448	1	2	4	8	13
923	4,313	3.2778	1	1	2	4	6
927	188	28.7861	9	15	25	38	52
928	826	16.1693	4	8	13	20	31
929	454	7.6987	2	3	6	11	15
933	160	5.9114	1	1	2	6	12
934	709	6.8459	1	3	5	8	13
935	2,231	5.5423	1	2	4	7	11
939	435	10.9206	2	4	8	14	22
940	735	6.4044	1	3	5	8	14
941	1,065	3.0321	1	1	2	4	6
945	6,307	10.2789	4	6	8	11	14
946	3,998	7.8844	3	5	6	7	8
947	6,629	4.9880	1	2	4	6	10
948	34,805	3.4130	1	2	3	4	6
949	857	4.1317	1	1	2	4	7
950	519	3.4320	1	1	2	4	5
951	1,019	3.7708	1	1	2	3	6
955	457	12.2105	2	6	10	16	23
956	3,773	9.4954	4	5	7	11	18
957	1,326	16.0023	2	7	13	20	30
958	1,227	10.4857	3	6	9	13	19
959	298	6.0949	2	3	5	8	10
963	1,516	9.2677	1	4	7	13	19
964	2,543	6.2813	2	3	5	8	11
965	1,109	4.1285	1	2	3	5	8
969	679	18.7115	5	8	14	23	37
970	160	9.4654	2	4	7	12	20
974	6,395	10.4471	2	4	7	13	21
975	4,561	7.2542	2	3	5	9	14
976	2,825	4.8614	1	2	4	6	8
977	5,119	5.2595	1	2	4	6	10
981	26,495	15.2659	5	8	12	19	28
982	19,350	9.9611	3	5	8	13	19
983	6,154	5.3856	1	2	4	7	11
984	671	14.5768	5	8	13	18	27
985	1,110	9.7085	2	5	9	13	18

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM SELECTED PECENTILE LENGTHS OF STAY FY 2006 MEDPAR UPDATE MARCH 2007 GROUPER V25.0 MS–DRGS—Continued

DRG	Number of discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
986	836	5.1092	1	2	3	7	11
987	8,060	13.1893	4	6	11	17	25
988	12,328	7.9772	2	4	7	10	15
989	6,176	4.1332	1	1	3	6	9
999	17	2.7333	1	2	8	18	24
	11,795,587						

TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS—JULY 2007

State	Urban	Rural
Alabama	0.257	0.337
Alaska	0.421	0.751
Arizona	0.282	0.404
Arkansas	0.333	0.356
California	0.227	0.328
Colorado	0.289	0.443
Connecticut	0.411	0.526
Delaware	0.494	0.514
District of Columbia *	0.352	
Florida	0.244	0.287
Georgia	0.337	0.391
Hawaii	0.376	0.45
Idaho	0.473	0.541
Illinois	0.312	0.4
Indiana	0.401	0.455
Iowa	0.369	0.448
Kansas	0.292	0.438
Kentucky	0.376	0.375
Louisiana	0.301	0.355
Maine	0.492	0.466
Maryland	0.732	0.794
Massachusetts *	0.475	
Michigan	0.369	0.457
Minnesota	0.384	0.524
Mississippi	0.308	0.37
Missouri	0.328	0.37
Montana	0.423	0.49
Nebraska	0.342	0.455
Nevada	0.221	0.475
New Hampshire	0.453	0.465
New Jersey *	0.183	
New Mexico	0.383	0.376
New York	0.356	0.523
North Carolina	0.43	0.414
North Dakota	0.43	0.473
Ohio	0.354	0.531
Oklahoma	0.304	0.391
Oregon	0.462	0.418
Pennsylvania	0.271	0.428
Puerto Rico *	0.455	
Rhode Island *	0.391	
South Carolina	0.283	0.314
South Dakota	0.346	0.441
Tennessee	0.306	0.379
Texas	0.26	0.344
Utah	0.42	0.566
Vermont	0.54	0.637
Virginia	0.361	0.364
Washington	0.397	0.448
West Virginia	0.476	0.471
Wisconsin	0.425	0.475

TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS—JULY 2007—Continued

State	Urban	Rural
Wyoming	0.431	0.571

* All counties in the State or Territory are classified as urban, with the exception of Massachusetts, which has areas designated as rural. However, no short-term acute care IPPS hospitals are located in those areas as of July 2007.

TABLE 8B.—STATEWIDE AVERAGE CAPITAL COST-TO-CHARGE RATIOS—JULY 2007

State	Ratio
Alabama	0.024
Alaska	0.037
Arizona	0.024
Arkansas	0.026
California	0.015
Colorado	0.029
Connecticut	0.029
Delaware	0.035
District of Columbia	0.023
Florida	0.023
Georgia	0.029
Hawaii	0.03
Idaho	0.039
Illinois	0.025
Indiana	0.037
Iowa	0.029
Kansas	0.03
Kentucky	0.029
Louisiana	0.027
Maine	0.033
Maryland	0.055
Massachusetts	0.032
Michigan	0.029
Minnesota	0.029
Mississippi	0.027
Missouri	0.027
Montana	0.036
Nebraska	0.039
Nevada	0.022
New Hampshire	0.035
New Jersey	0.013
New Mexico	0.032
New York	0.028
North Carolina	0.036
North Dakota	0.039
Ohio	0.029
Oklahoma	0.029
Oregon	0.033
Pennsylvania	0.022
Puerto Rico	0.034
Rhode Island	0.02

TABLE 8B.—STATEWIDE AVERAGE CAPITAL COST-TO-CHARGE RATIOS—JULY 2007—Continued

State	Ratio
South Carolina	0.025
South Dakota	0.032
Tennessee	0.03
Texas	0.026
Utah	0.035
Vermont	0.042
Virginia	0.036
Washington	0.031
West Virginia	0.033
Wisconsin	0.037
Wyoming	0.045

TABLE 8C.—STATEWIDE AVERAGE TOTAL COST-TO-CHARGE RATIOS FOR LTCHS—JULY 2007

State	Urban	Rural
Alabama	0.279	0.368
Alaska	0.454	0.811
Arizona	0.306	0.435
Arkansas	0.356	0.388
California	0.241	0.349
Colorado	0.316	0.49
Connecticut	0.439	0.574
Delaware	0.528	0.553
District of Columbia *	0.374	
Florida	0.266	0.318
Georgia	0.364	0.426
Hawaii	0.404	0.487
Idaho	0.512	0.585
Illinois	0.337	0.432
Indiana	0.438	0.499
Iowa	0.393	0.488
Kansas	0.318	0.479
Kentucky	0.405	0.405
Louisiana	0.328	0.383
Maine	0.526	0.495
Maryland **	0.444	0.347
Massachusetts *	0.506	
Michigan	0.398	0.491
Minnesota	0.411	0.564
Mississippi	0.334	0.399
Missouri	0.353	0.403
Montana	0.454	0.533
Nebraska	0.378	0.502
Nevada	0.242	0.535
New Hampshire	0.487	0.502
New Jersey *	0.197	
New Mexico	0.415	0.41
New York	0.383	0.559
North Carolina	0.466	0.45
North Dakota	0.465	0.52
Ohio	0.381	0.572

TABLE 8C.—STATEWIDE AVERAGE TOTAL COST-TO-CHARGE RATIOS FOR LTCHS—JULY 2007—Continued

State	Urban	Rural
Oklahoma	0.332	0.424
Oregon	0.496	0.448
Pennsylvania	0.292	0.46
Puerto Rico *	0.489	.....
Rhode Island *	0.411	.....
South Carolina	0.307	0.341
South Dakota	0.375	0.479
Tennessee	0.336	0.412
Texas	0.285	0.375
Utah	0.453	0.62
Vermont	0.584	0.676
Virginia	0.4	0.401
Washington	0.428	0.48
West Virginia	0.509	0.504
Wisconsin	0.462	0.516
Wyoming	0.467	0.626

* All counties in the State or Territory are classified as urban, with the exception of Massachusetts, which has areas designated as rural. However, no short-term acute care IPPS hospitals or LTCHs are located in those areas as of July 2007.

** National average IPPS total cost-to-charge ratios, as discussed in section VI.E. of this final rule.

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
010005	01	26620	
010009	19460	26620	
010010	01	13820	
010012	01	40660	
010022	01	12060	LUGAR
010025	01	17980	
010029	12220	17980	
010035	01	13820	
010044	01	13820	
010045	01	13820	
010054	19460	26620	
010059	19460	26620	
010065	01	13820	
010083	01	33660	
010085	19460	26620	
010090	33660	37700	
010100	01	37860	
010101	01	13820	LUGAR
010118	01	46220	
010126	01	33860	
010143	01	13820	
010150	01	33860	
010158	01	19460	
010164	01	11500	LUGAR
020008	02	11260	
030007	39140	22380	LUGAR
030033	03	22380	
030055	29420	39140	
030101	29420	29820	
040014	04	30780	
040017	04	22220	
040019	04	32820	
040020	27860	32820	
040027	04	44180	
040039	04	26	
040041	04	30780	
040069	04	32820	
040071	38220	30780	
040076	04	30780	LUGAR
040080	04	27860	
040085	04	32820	
040088	04	33740	
040091	04	45500	
040100	04	30780	
040119	04	30780	
050006	05	39820	
050009	34900	46700	
050013	34900	46700	
050014	05	40900	
050022	40140	42044	
050042	05	39820	
050046	37100	31084	
050054	40140	42044	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
050069	42044	31084	
050071	41940	36084	
050073	46700	36084	
050076	41884	36084	
050082	37100	31084	
050089	40140	31084	
050090	42220	41884	
050099	40140	31084	
050101	46700	36084	
050102	40140	42044	
050118	44700	33700	
050129	40140	31084	
050133	49700	40900	
050136	42220	41884	
050140	40140	31084	
050150	05	40900	
050159	37100	31084	
050168	42044	31084	
050173	42044	31084	
050174	42220	41884	
050193	42044	31084	
050197	41884	36084	
050224	42044	31084	
050226	42044	31084	
050230	42044	31084	
050236	37100	31084	
050243	40140	42044	
050245	40140	31084	
050272	40140	31084	
050279	40140	31084	
050291	42220	41884	
050292	40140	42044	
050298	40140	31084	
050300	40140	31084	
050301	05	42220	
050327	40140	31084	
050329	40140	42044	
050348	42044	31084	
050367	46700	36084	
050385	42220	41884	
050390	40140	42044	
050394	37100	31084	
050423	40140	42044	
050426	42044	31084	
050476	05	42220	
050494	05	40900	
050510	41884	36084	
050517	40140	31084	
050526	42044	31084	
050534	40140	42044	
050541	41884	36084	
050543	42044	31084	
050547	42220	41884	
050548	42044	31084	
050549	37100	31084	
050551	42044	31084	
050567	42044	31084	
050570	42044	31084	
050573	40140	42044	
050580	42044	31084	
050584	40140	31084	
050586	40140	31084	
050589	42044	31084	
050603	42044	31084	
050609	42044	31084	
050616	37100	31084	
050667	34900	46700	
050678	42044	31084	
050680	46700	36084	
050684	40140	42044	
050686	40140	42044	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
050690	42220	41884	
050693	42044	31084	
050694	40140	42044	
050701	40140	42044	
050709	40140	31084	
050720	42044	31084	
050749	37100	31084	
060001	24540	19740	
060003	14500	19740	
060012	39380	17820	
060023	24300	19740	
060027	14500	19740	
060049	06	22660	
060075	06	24300	
060096	06	19740	
060103	14500	19740	
060116	14500	19740	
070001	35300	35004	
070003	07	25540	LUGAR
070004	07	25540	
070005	35300	35004	
070006	14860	35644	
070010	14860	35644	
070011	07	25540	
070015	25540	35644	
070016	35300	35004	
070017	35300	35004	
070018	14860	35644	
070019	35300	35004	
070022	35300	35004	
070028	14860	35644	
070031	35300	35004	
070033	14860	35644	
070034	14860	35644	
070036	25540	35300	
070038	35300	35004	
070039	35300	35004	
080001	48864	37964	
080003	48864	37964	
080004	20100	48864	
080006	08	20100	
080007	08	36140	
090011	47894	13644	
100002	48424	22744	
100014	19660	36740	
100017	19660	36740	
100022	33124	22744	
100023	10	36740	
100024	10	33124	
100045	19660	36740	
100047	39460	42260	
100049	10	29460	
100068	19660	36740	
100072	19660	36740	
100077	39460	42260	
100080	48424	22744	
100081	10	23020	LUGAR
100105	42680	38940	
100109	10	36740	
100118	37380	27260	
100130	48424	22744	
100139	10	23540	LUGAR
100150	10	33124	
100156	10	23540	
100157	29460	45300	
100168	48424	22744	
100176	48424	22744	
100217	42680	38940	
100232	10	23540	
100234	48424	22744	
100236	39460	42260	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
100239	45300	42260	
100249	10	45300	
100252	10	42680	
100253	48424	22744	
100258	48424	22744	
100268	48424	22744	
100269	48424	22744	
100275	48424	22744	
100287	48424	22744	
100288	48424	22744	
100292	10	23020	LUGAR
110002	11	12060	
110016	11	17980	
110023	11	12060	
110029	23580	12060	
110038	11	45220	
110040	11	12060	LUGAR
110041	11	12060	
110054	40660	12060	
110069	47580	31420	
110075	11	42340	
110095	11	10500	
110121	11	45220	
110122	46660	45220	
110125	11	31420	
110128	11	42340	
110146	11	27260	
110150	11	12060	
110153	47580	31420	
110168	40660	12060	
110187	11	12060	LUGAR
110189	11	12060	
120028	12	26180	
130002	13	29	
130003	30300	28420	
130049	17660	44060	
130067	13	26820	LUGAR
140B10	29404	16974	
140012	14	16974	
140015	14	41180	
140032	14	41180	
140033	29404	16974	
140034	14	41180	
140040	14	37900	
140043	14	19340	
140046	14	41180	
140058	14	41180	
140064	14	37900	
140084	29404	16974	
140100	29404	16974	
140110	14	16974	
140130	29404	16974	
140143	14	16974	
140155	28100	16974	
140160	14	40420	
140161	14	16974	
140164	14	41180	
140186	28100	16974	
140202	29404	16974	
140233	40420	16974	
140291	29404	16974	
150002	23844	16974	
150004	23844	16974	
150006	33140	43780	
150008	23844	16974	
150011	15	26900	
150023	45460	26900	
150030	15	26900	LUGAR
150034	23844	16974	
150042	15	14020	
150045	15	23060	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
150048	15	17140	
150051	14020	26900	
150065	15	26900	
150069	15	17140	
150076	15	43780	
150088	11300	26900	
150090	23844	16974	
150091	15	23060	
150102	15	23844	LUGAR
150112	18020	26900	
150113	11300	26900	
150115	15	21780	
150125	23844	16974	
150126	23844	16974	
150133	15	23060	
150146	15	23060	
150147	23844	16974	
160001	16	11180	
160016	16	11180	
160057	16	26980	
160064	16	47940	
160080	16	19340	
160089	16	26980	
160147	16	11180	
170006	17	27900	
170012	17	48620	
170013	17	48620	
170020	17	48620	
170023	17	48620	
170033	17	48620	
170058	17	28140	
170068	17	11100	
170120	17	27900	
170142	17	45820	
170175	17	48620	
170190	17	45820	
170193	17	48620	
180002	18	49	
180005	18	26580	
180011	18	30460	
180012	21060	31140	
180013	14540	34980	
180017	18	21060	
180019	18	17140	
180024	18	31140	
180027	18	17300	
180029	18	30460	
180044	18	26580	
180048	18	31140	
180049	18	30460	
180050	18	28700	
180066	18	34980	
180069	18	26580	
180078	18	26580	
180080	18	28940	
180093	18	21780	
180102	18	17300	
180104	18	17300	
180116	18	17300	
180124	14540	34980	
180127	18	31140	
180132	18	30460	
190003	19	29180	
190015	19	35380	
190086	19	33740	
190088	19	43340	
190099	19	12940	
190106	19	10780	
190144	19	43340	
190164	19	45	
190167	19	29180	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
190184	19	33740	
190191	19	29180	
190208	19	04	
190218	19	43340	
200020	38860	40484	
200024	30340	38860	
200034	30340	38860	
200039	20	38860	
200050	20	12620	
200063	20	38860	
220008	39300	14484	
220010	37764	14484	
220020	39300	14484	
220029	37764	14484	
220033	37764	14484	
220035	37764	14484	
220073	39300	14484	
220074	39300	14484	
220077	44140	25540	
220080	37764	14484	
220174	37764	14484	
230002	19804	11460	
230003	26100	34740	
230013	47644	22420	
230019	47644	22420	
230020	19804	11460	
230021	35660	28020	
230022	23	29620	
230024	19804	11460	
230029	47644	22420	
230030	23	40980	
230035	23	24340	LUGAR
230036	23	13020	
230037	23	11460	
230038	24340	34740	
230047	47644	19804	
230053	19804	11460	
230054	23	24580	
230059	24340	34740	
230069	47644	11460	
230071	47644	22420	
230072	26100	34740	
230077	40980	22420	
230080	23	13020	
230089	19804	11460	
230092	27100	11460	
230096	23	28020	
230097	23	24340	
230099	33780	11460	
230104	19804	11460	
230105	23	13020	
230106	24340	34740	
230119	19804	11460	
230121	23	29620	LUGAR
230130	47644	22420	
230135	19804	11460	
230142	19804	11460	
230146	19804	11460	
230151	47644	22420	
230165	19804	11460	
230174	26100	34740	
230176	19804	11460	
230195	47644	19804	
230204	47644	19804	
230207	47644	22420	
230208	23	24340	LUGAR
230222	23	13020	
230223	47644	22420	
230227	47644	19804	
230236	24340	34740	
230244	19804	11460	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
230254	47644	22420	
230257	47644	19804	
230264	47644	19804	
230269	47644	22420	
230270	19804	11460	
230273	19804	11460	
230277	47644	22420	
230279	47644	11460	
240030	24	41060	
240064	24	20260	
240069	24	40340	
240071	24	40340	
240075	24	41060	
240088	24	41060	
240093	24	33460	
240187	24	33460	
250002	25	22520	
250004	25	32820	
250006	25	32820	
250009	25	27180	
250023	25	25060	LUGAR
250031	25	27140	
250034	25	32820	
250040	37700	25060	
250042	25	32820	
250044	25	22520	
250069	25	46220	
250078	25620	25060	
250079	25	27140	
250081	25	46220	
250082	25	38220	
250094	25620	25060	
250097	25	12940	
250099	25	27140	
250100	25	46220	
250104	25	46220	
250117	25	25060	LUGAR
260009	26	28140	
260015	26	27860	
260017	26	27620	
260022	26	16	
260025	26	41180	
260050	26	41140	
260064	26	17860	
260074	26	17860	
260094	26	44180	
260110	26	41180	
260113	26	14	
260119	26	27860	
260175	26	28140	
260183	26	41180	
260186	26	27620	
270003	27	24500	
270017	27	33540	
280009	28	30700	
280023	28	30700	
280032	28	30700	
280061	28	53	
280065	28	24540	
280125	28	43580	
290002	29	16180	LUGAR
290006	29	39900	
290019	16180	39900	
300001	30	31700	
300014	40484	31700	
300018	40484	31700	
300019	30	15764	
310002	35084	35644	
310009	35084	35644	
310013	35084	35644	
310014	15804	37964	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
310015	35084	35644	
310017	35084	35644	
310018	35084	35644	
310021	45940	35084	
310031	15804	20764	
310032	47220	48864	
310038	20764	35644	
310039	20764	35644	
310048	20764	35084	
310050	35084	35644	
310054	35084	35644	
310070	20764	35644	
310076	35084	35644	
310081	15804	37964	
310083	35084	35644	
310093	35084	35644	
310096	35084	35644	
310108	20764	35644	
310119	35084	35644	
320003	32	42140	
320005	22140	10740	
320006	32	10740	
320013	32	42140	
320014	32	29740	
320033	32	42140	LUGAR
320063	32	36220	
320065	32	36220	
330004	28740	39100	
330008	33	15380	LUGAR
330023	39100	14860	
330027	35004	35644	
330049	39100	14860	
330067	39100	14860	
330073	33	40380	LUGAR
330079	33	47	
330085	33	45060	
330094	33	28740	
330103	33	39	
330106	35004	35644	
330126	39100	35644	
330136	33	45060	
330157	33	45060	
330167	35004	35644	
330181	35004	35644	
330182	35004	35644	
330191	24020	10580	
330198	35004	35644	
330224	28740	39100	
330225	35004	35644	
330229	33	21500	
330235	33	45060	LUGAR
330239	33	21500	
330250	33	15540	
330259	35004	35644	
330277	33	27060	
330331	35004	35644	
330332	35004	35644	
330372	35004	35644	
330386	33	35084	
340004	24660	49180	
340008	34	16740	
340010	24140	39580	
340013	34	16740	
340015	34	16740	
340021	34	16740	
340023	11700	24860	
340027	34	24780	
340039	34	16740	
340050	34	22180	
340051	34	25860	
340068	34	48900	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
340069	39580	20500	
340070	15500	24660	
340071	34	39580	LUGAR
340073	39580	20500	
340091	24660	49180	
340109	34	47260	
340114	39580	20500	
340115	34	20500	
340124	34	39580	LUGAR
340126	34	39580	
340127	34	20500	LUGAR
340129	34	16740	
340131	34	24780	
340138	39580	20500	
340144	34	16740	
340145	34	16740	LUGAR
340147	40580	39580	
340173	39580	20500	
350003	35	13900	
350006	35	13900	
350009	35	22020	
360008	36	26580	
360010	36	15940	
360011	36	18140	
360013	36	30620	
360014	36	18140	
360019	10420	17460	
360020	10420	17460	
360025	41780	45780	
360027	10420	17460	
360036	36	17460	
360039	36	18140	
360054	36	26580	
360065	36	45780	
360078	10420	17460	
360079	19380	17140	
360086	44220	19380	
360095	36	45780	
360096	36	49660	LUGAR
360107	36	45780	
360121	36	45780	
360150	10420	17460	
360159	36	18140	
360175	36	18140	
360185	36	49660	LUGAR
360187	44220	19380	
360197	36	18140	
360211	48260	38300	
360245	36	17460	LUGAR
360253	19380	17140	
370004	37	27900	
370006	37	46140	
370014	37	43300	
370015	37	46140	
370016	37	36420	
370018	37	46140	
370022	37	30020	
370025	37	46140	
370026	37	36420	
370047	37	36420	
370049	37	36420	
370113	37	22220	
370149	37	36420	
380001	38	38900	
380022	38	18700	LUGAR
380027	38	21660	
380050	38	32780	
380090	38	21660	
390006	39	25420	
390013	39	25420	
390016	39	36	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
390030	39	10900	
390031	39	39740	LUGAR
390044	39740	37964	
390046	49620	29540	
390048	39	25420	
390065	39	12580	
390066	30140	25420	
390071	39	48700	LUGAR
390079	39	13780	
390086	39	27780	
390091	39	49660	
390093	39	38300	
390096	39740	37964	
390110	27780	38300	
390113	39	49660	
390133	10900	37964	
390138	39	25420	
390151	39	13644	
390162	10900	35084	
390246	39	48700	
390313	39	39740	LUGAR
400048	25020	41980	
410001	39300	14484	
410004	39300	14484	
410005	39300	14484	
410007	39300	14484	
410010	39300	14484	
410011	39300	14484	
410012	39300	14484	
410013	39300	35980	
420007	43900	24860	
420009	42	24860	LUGAR
420020	42	16770	
420027	11340	24860	
420030	42	16700	
420036	42	16740	
420039	42	43900	LUGAR
420062	42	16740	
420067	42	42340	
420068	42	16700	
420069	42	44940	LUGAR
420071	42	24860	
420080	42	42340	
420083	43900	24860	
420085	34820	48900	
420098	42	34820	
430012	43	43620	
430013	43	43620	
440002	27180	32820	
440008	44	27180	
440020	44	26620	
440024	17420	16860	
440025	44	34	
440035	17300	34980	
440056	34100	28940	
440060	44	27180	
440068	44	16860	
440072	44	32820	
440073	44	34980	
440144	44	34980	
440148	44	34980	
440151	44	34980	
440175	44	34980	
440185	17420	16860	
440192	44	34980	
450007	45	41700	
450032	45	43340	
450039	23104	19124	
450059	41700	12420	
450064	23104	19124	
450080	45	30980	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
450087	23104	19124	
450099	45	11100	
450135	23104	19124	
450137	23104	19124	
450148	23104	19124	
450178	45	36220	
450187	45	26420	
450196	45	19124	
450211	45	30980	
450214	45	26420	
450224	45	46340	
450283	45	19124	LUGAR
450324	43300	19124	
450347	45	26420	
450351	45	23104	
450389	45	19124	LUGAR
450393	43300	19124	
450395	45	26420	
450419	23104	19124	
450438	45	26420	
450447	45	19124	
450465	45	26420	
450469	43300	19124	
450484	45	30980	
450508	45	30980	
450563	23104	19124	
450596	45	23104	
450639	23104	19124	
450656	45	30980	
450672	23104	19124	
450675	23104	19124	
450677	23104	19124	
450747	45	46340	
450770	45	12420	LUGAR
450779	23104	19124	
450813	45	41700	
450830	45	36220	
450839	45	43340	
450872	23104	19124	
450880	23104	19124	
460004	36260	41620	
460005	36260	41620	
460007	46	41100	
460011	46	39340	
460021	41100	29820	
460026	46	39340	
460039	46	30860	
460041	36260	41620	
460042	36260	41620	
470001	47	30	
470012	47	38340	
490004	25500	16820	
490005	49020	47894	
490013	49	31340	
490018	49	16820	
490019	49	47894	
490042	13980	40220	
490079	49	49180	
490092	49	40060	
490097	49	40060	
490106	49	16820	
490109	47260	40060	
500002	50	28420	
500003	34580	42644	
500007	34580	42644	
500016	48300	42644	
500021	45104	42644	
500031	50	36500	
500039	14740	42644	
500041	31020	38900	
500072	50	14740	

TABLE 9A.—HOSPITAL RECLASSIFICATIONS AND REDESIGNATIONS—FY 2008—Continued

Provider No.	Geographic CBSA	Reclassified CBSA	LUGAR
500079	45104	42644	
500108	45104	42644	
500129	45104	42644	
510001	34060	38300	
510002	51	40220	
510006	51	34060	
510018	51	16620	LUGAR
510030	51	34060	
510046	51	13980	
510047	51	38300	
510062	51	16620	
510070	51	16620	
510071	51	13980	
510077	51	26580	
520002	52	48140	
520021	29404	16974	
520028	52	31540	LUGAR
520037	52	48140	
520059	39540	29404	
520071	52	33340	LUGAR
520076	52	31540	
520095	52	31540	
520102	52	33340	LUGAR
520107	52	22540	
520113	52	24580	
520116	52	33340	LUGAR
520189	29404	16974	
530015	53	26820	

TABLE 9C.—HOSPITALS REDESIGNATED AS RURAL UNDER SECTION 1886(D)(8)(E) OF THE ACT—FY 2008

Provider No.	Geographic CBSA	Redesignated rural area
050192	23420	05
050528	32900	05
050618	40140	05
100048	37860	10
100134	27260	10
140167	14	14
170137	29940	17
220051	38340	22
230078	35660	23
250017	25	25
250126	32820	25
260006	41140	26
260195	44180	26
330044	46540	33
330268	10580	33
360125	36	36
370054	36420	37
380040	13460	38
390130	27780	39
390183	39	39
390185	42540	39
390201	39	39
440135	34980	44
450052	45	45
450078	10180	45
450243	10180	45
450348	45	45
500148	48300	50

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]

MS–DRG	Number of cases	Threshold
.		
1	652	$344,972
2	335	$178,084
3	24,400	$248,259
4	21,825	$149,229
5	634	$167,704
6	296	$92,307
7	378	$134,547
8	583	$92,298
9	1,388	$97,039
10	182	$73,445
11	1,297	$71,635
12	1,956	$51,554
13	1,476	$36,941
20	910	$138,402
21	566	$108,066
22	249	$74,805
23	3,564	$81,024
24	2,168	$57,356
25	8,493	$77,715
26	12,059	$52,351
27	14,191	$41,285
28	1,623	$74,169
29	3,089	$45,899
30	3,592	$30,000
31	1,061	$60,326
32	3,064	$35,479
33	4,237	$28,788
34	821	$58,372
35	2,911	$41,566
36	7,454	$36,543
37	4,803	$51,766
38	16,531	$32,789
39	53,619	$23,940
40	4,585	$57,541
41	8,005	$39,482
42	5,216	$34,232
52	1,188	$29,320
53	590	$21,941
54	4,750	$30,214
55	16,945	$24,920
56	7,800	$28,299
57	48,665	$18,154
58	796	$28,691
59	2,676	$21,475
60	4,240	$16,415
61	1,368	$53,028
62	2,320	$42,000
63	1,150	$36,285
64	56,448	$33,845
65	115,423	$26,274
66	91,644	$19,975
67	1,403	$30,791
68	12,512	$21,801
69	104,325	$17,613
70	7,165	$33,370
71	10,283	$26,043
72	5,811	$19,097
73	8,728	$27,013

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
74	32,760	$19,857
75	1,229	$33,946
76	861	$22,530
77	1,112	$33,096
78	1,386	$23,660
79	896	$18,688
80	2,095	$24,178
81	8,250	$15,979
82	1,664	$34,229
83	2,070	$28,417
84	2,527	$21,042
85	5,383	$34,777
86	10,921	$26,138
87	11,827	$18,483
88	730	$30,531
89	2,836	$22,350
90	3,285	$16,402
91	6,763	$29,354
92	15,467	$20,636
93	15,043	$15,988
94	1,533	$55,255
95	1,101	$41,891
96	749	$35,515
97	1,266	$50,373
98	1,065	$35,777
99	637	$30,000
100	16,012	$28,458
101	57,312	$17,754
102	1,373	$24,469
103	15,199	$15,977
113	592	$31,359
114	593	$19,667
115	1,110	$25,665
116	715	$23,533
117	1,406	$15,540
121	609	$21,777
122	666	$12,422
123	2,865	$17,881
124	684	$24,203
125	4,742	$15,308
129	1,401	$38,054
130	1,063	$27,826
131	895	$36,608
132	910	$26,200
133	2,057	$31,616
134	3,781	$19,478
135	430	$34,413
136	503	$21,916
137	847	$26,995
138	926	$17,071
139	1,710	$19,625
146	696	$35,195
147	1,457	$25,206
148	924	$17,390
149	39,487	$14,828
150	945	$25,227
151	6,840	$12,717
152	2,363	$22,142
153	16,167	$14,126

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
154	1,857	$28,012
155	4,431	$20,298
156	4,969	$14,819
157	1,164	$28,373
158	3,158	$19,955
159	2,365	$14,144
163	13,502	$78,302
164	18,484	$47,957
165	14,267	$37,903
166	20,398	$57,270
167	21,074	$39,819
168	5,555	$30,197
175	12,032	$33,122
176	40,330	$25,127
177	57,526	$35,859
178	72,497	$29,849
179	26,495	$23,293
180	22,628	$33,012
181	32,425	$26,937
182	6,085	$21,762
183	1,679	$29,889
184	4,279	$21,041
185	2,607	$14,730
186	8,586	$31,513
187	10,362	$25,629
188	4,840	$19,425
189	105,009	$28,877
190	57,361	$27,675
191	126,608	$22,656
192	193,798	$17,011
193	88,637	$29,447
194	274,002	$23,196
195	142,476	$16,909
196	5,173	$30,810
197	7,087	$25,433
198	4,822	$19,617
199	3,279	$33,342
200	8,321	$23,384
201	3,470	$16,338
202	32,849	$19,060
203	40,990	$13,891
204	26,244	$16,200
205	5,816	$26,189
206	22,615	$17,512
207	46,394	$81,122
208	79,797	$41,204
215	154	$151,766
216	8,437	$161,671
217	7,940	$116,693
218	2,963	$97,867
219	10,112	$131,302
220	14,302	$93,773
221	7,644	$81,213
222	2,862	$150,236
223	5,774	$116,596
224	1,930	$138,303
225	5,882	$109,289
226	7,078	$112,853
227	50,687	$88,692

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
228	3,099	$124,484
229	4,351	$88,309
230	1,797	$72,663
231	1,484	$138,738
232	1,799	$107,841
233	16,996	$118,266
234	39,349	$86,707
235	9,680	$95,709
236	33,005	$68,284
237	22,981	$84,128
238	43,967	$53,458
239	13,900	$59,235
240	13,862	$40,599
241	2,927	$30,264
242	17,243	$63,738
243	40,609	$50,008
244	65,831	$42,222
245	6,081	$54,185
246	41,300	$65,056
247	272,543	$46,585
248	5,558	$58,102
249	29,332	$41,932
250	5,768	$53,604
251	39,992	$38,463
252	44,846	$48,386
253	52,457	$42,805
254	53,894	$34,650
255	2,624	$38,481
256	3,944	$29,789
257	694	$21,430
258	599	$49,941
259	7,342	$35,275
260	872	$47,350
261	2,921	$28,440
262	3,284	$21,635
263	792	$29,057
264	30,336	$39,273
280	61,020	$35,562
281	62,050	$27,923
282	57,249	$21,202
283	16,022	$31,166
284	5,089	$23,429
285	3,008	$16,066
286	23,379	$40,316
287	173,151	$27,701
288	3,262	$48,403
289	1,471	$35,164
290	447	$27,561
291	184,689	$28,984
292	245,075	$22,187
293	200,858	$16,283
294	1,756	$20,506
295	1,631	$12,987
296	1,844	$26,653
297	893	$18,216
298	518	$11,608
299	17,570	$27,658
300	49,533	$20,057
301	37,733	$14,452

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
302	7,919	$23,176
303	81,896	$14,065
304	2,116	$24,255
305	36,019	$13,919
306	1,385	$27,627
307	6,479	$17,568
308	33,741	$27,332
309	85,320	$19,164
310	156,223	$13,820
311	25,143	$12,408
312	170,267	$16,986
313	222,163	$13,782
314	60,587	$30,470
315	33,354	$22,371
316	18,077	$15,239
326	11,616	$86,242
327	11,348	$49,564
328	8,994	$31,783
329	48,381	$78,387
330	68,497	$46,866
331	29,611	$34,881
332	1,897	$72,507
333	6,490	$45,775
334	3,751	$33,992
335	7,194	$67,336
336	12,815	$43,034
337	8,636	$32,651
338	1,513	$58,118
339	3,289	$39,790
340	3,551	$29,763
341	878	$43,015
342	2,662	$32,037
343	6,796	$22,560
344	897	$51,699
345	3,090	$33,750
346	2,758	$25,650
347	1,577	$36,665
348	4,295	$27,844
349	5,539	$17,498
350	1,802	$41,248
351	4,663	$28,402
352	8,835	$18,578
353	3,076	$44,781
354	9,041	$30,877
355	16,621	$21,562
356	8,411	$57,529
357	8,336	$39,734
358	2,477	$30,907
368	3,069	$31,649
369	4,850	$24,300
370	3,104	$18,383
371	16,940	$31,947
372	23,722	$26,571
373	14,227	$19,299
374	9,505	$34,336
375	20,165	$26,493
376	4,486	$20,960
377	50,797	$30,746
378	118,928	$22,456

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
379	95,521	$17,322
380	2,934	$32,401
381	5,702	$25,732
382	4,681	$18,936
383	1,307	$28,326
384	8,723	$19,941
385	2,119	$33,554
386	7,449	$24,853
387	5,105	$19,162
388	18,375	$29,409
389	47,827	$21,609
390	47,010	$15,176
391	47,836	$24,951
392	308,502	$16,603
393	24,053	$29,057
394	48,058	$22,377
395	24,695	$16,159
405	3,949	$82,207
406	5,420	$49,157
407	2,195	$36,266
408	1,682	$68,553
409	1,771	$46,888
410	693	$35,868
411	985	$65,611
412	1,098	$47,835
413	850	$37,471
414	5,643	$59,255
415	7,154	$40,657
416	6,018	$30,408
417	16,735	$46,510
418	28,654	$36,535
419	37,427	$27,109
420	738	$62,577
421	1,118	$37,072
422	359	$28,797
423	1,528	$64,735
424	934	$44,742
425	148	$35,273
432	16,397	$30,669
433	9,146	$21,794
434	931	$15,756
435	12,004	$32,775
436	14,157	$26,550
437	4,304	$23,750
438	14,497	$31,776
439	25,932	$25,153
440	26,506	$17,450
441	14,036	$29,001
442	13,192	$22,508
443	6,445	$16,775
444	12,529	$31,104
445	17,390	$25,361
446	16,434	$18,758
453	852	$162,887
454	1,700	$108,936
455	1,715	$83,977
456	770	$132,661
457	2,084	$93,332
458	1,282	$76,740

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
459	3,212	$91,544
460	51,227	$61,564
461	1,071	$78,546
462	14,292	$59,077
463	5,317	$58,659
464	6,589	$40,817
465	2,748	$30,426
466	3,914	$70,273
467	14,340	$53,217
468	21,479	$45,760
469	29,879	$56,067
470	412,628	$41,647
471	2,241	$71,684
472	6,629	$48,438
473	22,659	$39,710
474	2,857	$47,799
475	3,709	$34,430
476	1,560	$23,529
477	2,262	$56,473
478	7,379	$41,535
479	10,118	$33,437
480	25,993	$50,045
481	74,669	$37,407
482	49,780	$31,682
483	6,572	$44,230
484	17,287	$37,116
485	1,152	$55,605
486	2,066	$41,452
487	1,345	$33,445
488	2,541	$33,298
489	6,198	$25,879
490	21,668	$34,194
491	57,424	$22,157
492	4,761	$47,695
493	16,833	$36,100
494	29,419	$27,047
495	1,888	$49,247
496	5,499	$34,237
497	7,196	$26,140
498	1,258	$36,490
499	1,173	$20,709
500	1,359	$47,252
501	3,956	$30,666
502	6,635	$21,338
503	743	$38,514
504	2,274	$30,843
505	3,142	$22,627
506	921	$23,455
507	840	$33,141
508	2,717	$24,377
509	674	$24,413
510	994	$38,909
511	4,183	$30,425
512	12,088	$21,576
513	1,104	$28,452
514	1,175	$18,054
515	3,601	$50,791
516	11,512	$37,225
517	17,926	$30,519

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
533	835	$26,648
534	3,647	$14,482
535	6,888	$26,452
536	34,492	$14,330
537	694	$19,017
538	1,139	$12,077
539	3,397	$33,217
540	4,317	$26,851
541	1,787	$20,216
542	6,196	$32,544
543	18,834	$24,660
544	12,389	$16,758
545	4,061	$33,836
546	6,159	$23,684
547	4,717	$16,961
548	592	$32,771
549	1,139	$25,057
550	855	$16,440
551	9,580	$29,107
552	88,568	$17,262
553	2,820	$24,400
554	20,429	$13,865
555	2,006	$21,701
556	19,316	$13,456
557	3,196	$28,869
558	14,252	$17,984
559	1,646	$27,886
560	4,208	$19,203
561	7,439	$12,631
562	5,051	$26,441
563	36,361	$14,373
564	1,622	$27,213
565	3,385	$19,726
566	2,673	$14,394
573	5,721	$44,181
574	12,468	$32,298
575	6,221	$24,293
576	563	$44,962
577	2,305	$31,201
578	3,228	$21,726
579	3,359	$42,784
580	11,019	$28,964
581	12,249	$19,890
582	5,787	$22,538
583	9,356	$17,024
584	801	$29,768
585	1,687	$19,824
592	4,026	$29,343
593	13,080	$21,992
594	2,828	$15,050
595	1,092	$29,676
596	5,792	$18,108
597	555	$29,885
598	1,502	$23,607
599	342	$14,643
600	611	$21,165
601	841	$13,706
602	21,456	$26,696
603	132,037	$16,799

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
604	2,652	$25,279
605	22,943	$15,043
606	1,371	$23,075
607	7,242	$13,623
614	1,429	$44,375
615	1,594	$32,682
616	1,145	$57,766
617	6,944	$36,252
618	268	$26,622
619	675	$60,360
620	2,007	$41,188
621	6,560	$35,408
622	1,241	$43,105
623	3,392	$32,380
624	392	$23,639
625	1,107	$40,323
626	2,751	$27,124
627	14,146	$17,672
628	3,297	$50,940
629	4,125	$39,861
630	551	$30,359
637	16,431	$26,711
638	46,657	$17,852
639	36,178	$12,405
640	56,149	$23,948
641	189,293	$15,306
642	1,570	$23,220
643	5,072	$30,688
644	12,220	$23,221
645	8,140	$17,134
652	10,695	$57,598
653	1,591	$83,573
654	3,387	$53,557
655	1,514	$40,260
656	3,739	$56,731
657	7,946	$38,721
658	7,957	$31,512
659	4,484	$50,345
660	7,985	$36,157
661	4,264	$28,963
662	998	$41,819
663	2,288	$29,509
664	4,543	$21,878
665	693	$47,203
666	2,405	$30,729
667	3,765	$17,825
668	3,768	$39,717
669	13,307	$27,864
670	12,685	$17,652
671	917	$28,730
672	940	$17,260
673	12,678	$43,306
674	13,848	$38,503
675	8,371	$31,046
682	76,428	$30,010
683	128,229	$25,096
684	28,358	$16,191
685	2,520	$18,480
686	1,596	$31,207

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
687	3,467	$24,323
688	1,098	$16,621
689	55,794	$25,635
690	201,347	$16,948
691	908	$32,082
692	653	$23,510
693	2,256	$27,732
694	19,345	$16,454
695	982	$24,045
696	10,646	$13,740
697	585	$16,016
698	21,255	$27,675
699	27,064	$21,858
700	11,141	$15,265
707	6,053	$34,725
708	15,996	$27,483
709	796	$33,770
710	2,015	$28,020
711	953	$34,001
712	793	$18,806
713	12,009	$24,773
714	32,647	$14,452
715	662	$34,063
716	1,367	$26,199
717	666	$31,483
718	601	$17,543
722	881	$29,143
723	2,078	$23,828
724	648	$14,696
725	808	$23,676
726	3,956	$15,110
727	1,106	$26,379
728	6,224	$15,600
729	603	$22,516
730	533	$13,176
734	1,528	$39,515
735	1,278	$24,152
736	842	$68,890
737	3,487	$39,497
738	912	$26,791
739	980	$48,238
740	4,638	$31,707
741	6,330	$22,182
742	11,685	$29,883
743	34,686	$19,452
744	1,634	$28,628
745	2,080	$18,005
746	2,664	$27,839
747	11,073	$19,176
748	21,289	$18,499
749	1,048	$42,919
750	477	$22,403
754	1,097	$31,826
755	3,219	$24,291
756	783	$15,311
757	1,326	$31,148
758	1,659	$24,086
759	1,141	$17,474
760	1,815	$17,766
761	1,844	$12,285
765	2,606	$19,738
766	2,664	$13,500
767	123	$14,158
768	10	$28,485
769	87	$30,005
770	188	$15,884
774	1,476	$11,268
775	5,343	$8,224
776	495	$14,028
777	180	$17,674
778	494	$7,925
779	107	$12,859
780	50	$5,097
781	3,062	$11,922
782	129	$7,495
790	1	$10,833
793	1	$7,090
799	631	$76,349
800	730	$45,475
801	581	$35,346
802	693	$51,863
803	1,030	$33,789
804	978	$23,443
808	8,276	$33,959
809	15,783	$24,984
810	3,694	$19,852
811	18,481	$24,763
812	83,743	$16,735
813	15,112	$25,353
814	1,649	$29,809
815	3,483	$23,384
816	2,274	$16,506
820	1,490	$83,865
821	2,593	$40,857
822	2,108	$28,934
823	2,452	$64,905
824	3,130	$40,661
825	1,940	$29,667
826	566	$77,477
827	1,354	$40,261
828	851	$29,066
829	1,386	$44,427
830	520	$24,753
834	5,293	$50,478
835	1,458	$30,789
836	1,554	$23,578
837	1,638	$85,982
838	942	$41,591
839	1,368	$27,115
840	15,248	$37,650
841	11,355	$28,759
842	7,431	$22,903
843	1,498	$32,667
844	2,893	$25,181
845	988	$19,989
846	2,498	$37,579
847	23,816	$25,378
848	1,695	$18,894
849	1,507	$26,993
853	31,591	$74,761
854	6,945	$48,947
855	429	$35,398
856	6,215	$64,096
857	10,284	$35,984
858	3,362	$28,311
862	7,481	$32,142
863	21,957	$20,215
864	19,959	$19,205
865	2,032	$28,094
866	9,474	$15,750
867	5,387	$37,568
868	2,507	$24,368
869	1,129	$18,549
870	13,815	$88,048
871	204,810	$33,442
872	92,533	$25,285
876	971	$40,650
880	10,578	$14,303
881	4,636	$10,640
882	1,673	$11,353
883	799	$16,323
884	21,747	$17,521
885	78,937	$14,233
886	377	$13,044
887	427	$17,908
894	4,627	$7,335
895	6,777	$14,018
896	5,447	$25,167
897	36,860	$12,339
901	924	$48,924
902	2,217	$31,735
903	1,687	$22,773
904	980	$39,732
905	779	$24,032
906	751	$22,406
907	8,164	$52,970
908	8,553	$34,755
909	5,427	$25,547
913	828	$26,522
914	7,082	$15,123
915	928	$24,230
916	5,418	$9,886
917	14,498	$28,130
918	35,052	$13,329
919	10,672	$27,995
920	14,259	$20,512
921	9,672	$13,742
922	1,027	$26,635
923	4,264	$14,600
927	187	$176,300
928	819	$59,748
929	448	$32,846
933	158	$31,761
934	701	$23,844
935	2,209	$21,589
939	428	$42,833
940	732	$32,886

TABLE 10.—GEOMETRIC MEAN PLUS THE LESSER OF .75 OF THE NATIONAL ADJUSTED OPERATING STANDARDIZED PAYMENT AMOUNT (INCREASED TO REFLECT THE DIFFERENCE BETWEEN COSTS AND CHARGES) OR .75 OF ONE STANDARD DEVIATION OF MEAN CHARGES BY MEDICARE SEVERITY—DIAGNOSIS-RELATED GROUP (MS–DRG) JULY 2007 [1]—Continued

MS–DRG	Number of cases	Threshold
941	1,058	$25,659
945	5,485	$19,140
946	2,759	$16,452
947	6,597	$22,649
948	34,624	$14,331
949	767	$17,139
950	463	$11,233
951	1,008	$13,228
955	456	$82,510
956	3,769	$54,265
957	1,324	$98,340
958	1,221	$65,671
959	295	$44,675
963	1,509	$46,368
964	2,538	$32,378
965	1,105	$23,186
969	676	$74,013
970	159	$41,737
974	6,358	$38,805
975	4,516	$27,839
976	2,770	$20,952
977	5,016	$23,318
981	26,444	$75,138
982	19,320	$52,350
983	6,143	$37,859
984	671	$56,002
985	1,108	$38,757
986	833	$27,923
987	8,040	$53,132
988	12,302	$35,639
989	6,162	$25,762
999	30	$11,270

[1] Cases taken from the FY 2006 MedPAR file; MS–DRGs are from GROUPER Version 25.0.

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
001	Heart transplant or implant of heart assist system w MCC	0	0.0000	0.0	0.0	0.0
002	Heart transplant or implant of heart assist system w/o MCC.	0	0.0000	0.0	0.0	0.0
003	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	280	4.2380	64.3	53.6	53.6
004	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,067	3.0249	46.7	38.9	38.9
005	Liver transplant w MCC or intestinal transplant	0	0.0000	0.0	0.0	0.0
006	Liver transplant w/o MCC	0	0.0000	0.0	0.0	0.0
007	Lung transplant	0	0.0000	0.0	0.0	0.0
008	Simultaneous pancreas/kidney transplant	0	0.0000	0.0	0.0	0.0
009	Bone marrow transplant	0	1.1417	29.0	24.2	24.2
010	Pancreas transplant	0	1.1417	29.0	24.2	0.0
011	Tracheostomy for face, mouth & neck diagnoses w MCC	0	1.5545	35.2	29.3	25.2
012	Tracheostomy for face, mouth & neck diagnoses w CC	1	1.5545	35.2	29.3	16.7
013	Tracheostomy for face, mouth & neck diagnoses w/o CC/MCC.	0	1.5545	35.2	29.3	11.2
020	Intracranial vascular procedures w PDX hemorrhage w MCC.	0	1.5545	35.2	29.3	29.3
021	Intracranial vascular procedures w PDX hemorrhage w CC.	0	0.5472	20.3	16.9	16.9
022	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC.	0	0.5472	20.3	16.9	16.1
023	Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant.	0	1.5545	35.2	29.3	22.2
024	Cranio w major dev impl/acute complex CNS PDX w/o MCC.	0	0.5472	20.3	16.9	15.8
025	Craniotomy & endovascular intracranial procedures w MCC.	0	1.5545	35.2	29.3	22.1
026	Craniotomy & endovascular intracranial procedures w CC	2	1.5545	35.2	29.3	13.2
027	Craniotomy & endovascular intracranial procedures w/o CC/MCC.	0	1.5545	35.2	29.3	7.5
028	Spinal procedures w MCC	6	1.1417	29.0	24.2	24.2
029	Spinal procedures w CC or spinal neurostimulators	4	1.1417	29.0	24.2	12.4
030	Spinal procedures w/o CC/MCC	2	0.5472	20.3	16.9	5.9
031	Ventricular shunt procedures w MCC	2	1.5545	35.2	29.3	22.9
032	Ventricular shunt procedures w CC	1	0.5472	20.3	16.9	9.4
033	Ventricular shunt procedures w/o CC/MCC	1	0.5472	20.3	16.9	4.7

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
034	Carotid artery stent procedure w MCC	0	1.5545	35.2	29.3	12.5
035	Carotid artery stent procedure w CC	0	1.1417	29.0	24.2	4.4
036	Carotid artery stent procedure w/o CC/MCC	0	1.1417	29.0	24.2	2.2
037	Extracranial procedures w MCC	12	1.5545	35.2	29.3	14.9
038	Extracranial procedures w CC	8	1.1417	29.0	24.2	5.8
039	Extracranial procedures w/o CC/MCC	0	1.1417	29.0	24.2	2.6
040	Periph/cranial nerve & other nerv syst proc w MCC	153	1.2704	36.2	30.2	22.7
041	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim.	100	1.0810	34.3	28.6	12.3
042	Periph/cranial nerve & other nerv syst proc w/o CC/MCC	9	0.7305	22.9	19.1	5.7
052	Spinal disorders & injuries w CC/MCC	78	1.0629	32.3	26.9	10.7
053	Spinal disorders & injuries w/o CC/MCC	18	1.0629	32.3	26.9	6.4
054	Nervous system neoplasms w MCC	50	0.7205	23.6	19.7	11.7
055	Nervous system neoplasms w/o MCC	67	0.6779	22.0	18.3	8.1
056	Degenerative nervous system disorders w MCC	1,335	0.7407	26.4	22.0	12.3
057	Degenerative nervous system disorders w/o MCC	2,607	0.6309	24.4	20.3	7.6
058	Multiple sclerosis & cerebellar ataxia w MCC	23	0.7305	22.9	19.1	12.5
059	Multiple sclerosis & cerebellar ataxia w CC	44	0.5595	22.6	18.8	8.0
060	Multiple sclerosis & cerebellar ataxia w/o CC/MCC	22	0.5472	20.3	16.9	6.2
061	Acute ischemic stroke w use of thrombolytic agent w MCC.	0	0.7897	24.2	20.2	16.0
062	Acute ischemic stroke w use of thrombolytic agent w CC	0	0.6563	22.7	18.9	9.6
063	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC.	0	0.5472	20.3	16.9	6.8
064	Intracranial hemorrhage or cerebral infarction w MCC	126	0.7746	25.1	20.9	12.7
065	Intracranial hemorrhage or cerebral infarction w CC	119	0.6691	23.3	19.4	8.2
066	Intracranial hemorrhage or cerebral infarction w/o CC/MCC.	22	0.5472	20.3	16.9	5.8
067	Nonspecific cva & precerebral occlusion w/o infarct w MCC.	5	0.5472	20.3	16.9	10.1
068	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC.	8	0.5472	20.3	16.9	5.6
069	Transient ischemia	17	0.5472	20.3	16.9	4.7
070	Nonspecific cerebrovascular disorders w MCC	104	0.7897	24.2	20.2	12.7
071	Nonspecific cerebrovascular disorders w CC	86	0.6563	22.7	18.9	8.8
072	Nonspecific cerebrovascular disorders w/o CC/MCC	9	0.5472	20.3	16.9	5.8
073	Cranial & peripheral nerve disorders w MCC	86	0.7849	25.6	21.3	10.2
074	Cranial & peripheral nerve disorders w/o MCC	175	0.6260	23.4	19.5	6.9
075	Viral meningitis w CC/MCC	21	0.7305	22.9	19.1	12.1
076	Viral meningitis w/o CC/MCC	1	0.5472	20.3	16.9	6.5
077	Hypertensive encephalopathy w MCC	4	0.7305	22.9	19.1	11.4
078	Hypertensive encephalopathy w CC	9	0.7305	22.9	19.1	7.2
079	Hypertensive encephalopathy w/o CC/MCC	1	0.5472	20.3	16.9	5.3
080	Nontraumatic stupor & coma w MCC	40	0.6312	24.6	20.5	7.8
081	Nontraumatic stupor & coma w/o MCC	71	0.5618	23.1	19.3	5.3
082	Traumatic stupor & coma, coma >1 hr w MCC	27	0.8864	29.5	24.6	10.9
083	Traumatic stupor & coma, coma >1 hr w CC	12	0.7305	22.9	19.1	8.6
084	Traumatic stupor & coma, coma >1 hr w/o CC/MCC	4	0.7305	22.9	19.1	4.9
085	Traumatic stupor & coma, coma <1 hr w MCC	105	0.9044	28.3	23.6	13.2
086	Traumatic stupor & coma, coma <1 hr w CC	89	0.7437	25.1	20.9	8.2
087	Traumatic stupor & coma, coma <1 hr w/o CC/MCC	28	0.6361	20.4	17.0	5.3
088	Concussion w MCC	1	1.1417	29.0	24.2	9.9
089	Concussion w CC	2	1.1417	29.0	24.2	6.0
090	Concussion w/o CC/MCC	0	1.1417	29.0	24.2	3.7
091	Other disorders of nervous system w MCC	242	0.8019	25.6	21.3	10.7
092	Other disorders of nervous system w CC	191	0.6704	22.0	18.3	6.9
093	Other disorders of nervous system w/o CC/MCC	53	0.5811	20.1	16.8	4.9
094	Bacterial & tuberculous infections of nervous system w MCC.	210	1.0328	27.9	23.3	20.8
095	Bacterial & tuberculous infections of nervous system w CC.	110	0.9306	27.0	22.5	14.9
096	Bacterial & tuberculous infections of nervous system w/o CC/MCC.	26	0.9306	27.0	22.5	10.1
097	Non-bacterial infect of nervous sys exc viral meningitis w MCC.	58	0.9289	26.8	22.3	19.6
098	Non-bacterial infect of nervous sys exc viral meningitis w CC.	33	0.8629	22.7	18.9	13.7

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
099	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC.	10	0.7305	22.9	19.1	10.1
100	Seizures w MCC	39	0.7904	26.5	22.1	10.1
101	Seizures w/o MCC	35	0.6177	21.4	17.8	5.8
102	Headaches w MCC	6	0.8249	25.0	20.8	8.1
103	Headaches w/o MCC	12	0.8249	25.0	20.8	5.0
113	Orbital procedures w CC/MCC	1	0.7305	22.9	19.1	9.2
114	Orbital procedures w/o CC/MCC	0	0.7305	22.9	19.1	4.1
115	Extraocular procedures except orbit	0	0.8249	25.0	20.8	7.2
116	Intraocular procedures w CC/MCC	0	0.8249	25.0	20.8	5.2
117	Intraocular procedures w/o CC/MCC	0	0.8249	25.0	20.8	2.8
121	Acute major eye infections w CC/MCC	8	0.7305	22.9	19.1	9.1
122	Acute major eye infections w/o CC/MCC	2	0.5472	20.3	16.9	6.3
123	Neurological eye disorders	3	0.5472	20.3	16.9	4.5
124	Other disorders of the eye w MCC	2	1.1417	29.0	24.2	8.4
125	Other disorders of the eye w/o MCC	9	0.8249	25.0	20.8	5.5
129	Major head & neck procedures w CC/MCC or major device.	0	1.1977	26.4	22.0	8.1
130	Major head & neck procedures w/o CC/MCC	0	0.7305	22.9	19.1	4.8
131	Cranial/facial procedures w CC/MCC	2	1.5545	35.2	29.3	9.5
132	Cranial/facial procedures w/o CC/MCC	0	1.5545	35.2	29.3	4.0
133	Other ear, nose, mouth & throat O.R. procedures w CC/MCC.	3	0.7305	22.9	19.1	9.4
134	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC.	1	0.7305	22.9	19.1	3.2
135	Sinus & mastoid procedures w CC/MCC	0	0.7305	22.9	19.1	10.8
136	Sinus & mastoid procedures w/o CC/MCC	0	0.7305	22.9	19.1	3.9
137	Mouth procedures w CC/MCC	1	1.5545	35.2	29.3	8.7
138	Mouth procedures w/o CC/MCC	0	1.5545	35.2	29.3	3.7
139	Salivary gland procedures	1	1.5545	35.2	29.3	2.5
146	Ear, nose, mouth & throat malignancy w MCC	43	1.1977	26.4	22.0	16.9
147	Ear, nose, mouth & throat malignancy w CC	36	1.0416	24.9	20.8	9.3
148	Ear, nose, mouth & throat malignancy w/o CC/MCC	4	0.7305	22.9	19.1	5.6
149	Dysequilibrium	9	0.5472	20.3	16.9	4.2
150	Epistaxis w MCC	0	0.7305	22.9	19.1	8.8
151	Epistaxis w/o MCC	0	0.7305	22.9	19.1	4.5
152	Otitis media & URI w MCC	10	0.7305	22.9	19.1	7.4
153	Otitis media & URI w/o MCC	23	0.7305	22.9	19.1	5.2
154	Nasal trauma & deformity w MCC	55	0.7703	21.0	17.5	10.5
155	Nasal trauma & deformity w CC	45	0.7703	21.0	17.5	7.2
156	Nasal trauma & deformity w/o CC/MCC	10	0.7305	22.9	19.1	4.9
157	Dental & Oral Diseases w MCC	9	0.8249	25.0	20.8	11.3
158	Dental & Oral Diseases w CC	19	0.8249	25.0	20.8	7.1
159	Dental & Oral Diseases w/o CC/MCC	1	0.5472	20.3	16.9	4.8
163	Major chest procedures w MCC	27	2.2157	39.7	33.1	23.6
164	Major chest procedures w CC	10	1.5545	35.2	29.3	13.0
165	Major chest procedures w/o CC/MCC	0	1.5545	35.2	29.3	8.3
166	Other resp system O.R. procedures w MCC	1,572	2.4392	42.3	35.3	20.6
167	Other resp system O.R. procedures w CC	233	2.1594	38.0	31.7	13.1
168	Other resp system O.R. procedures w/o CC/MCC	11	1.1417	29.0	24.2	8.9
175	Pulmonary embolism w MCC	103	0.7160	22.0	18.3	11.6
176	Pulmonary embolism w/o MCC	139	0.5989	20.1	16.8	8.4
177	Respiratory infections & inflammations w MCC	2,953	0.8393	23.5	19.6	14.9
178	Respiratory infections & inflammations w CC	2,265	0.7671	22.2	18.5	11.7
179	Respiratory infections & inflammations w/o CC/MCC	370	0.6885	19.0	15.8	8.9
180	Respiratory neoplasms w MCC	162	0.8140	20.2	16.8	13.1
181	Respiratory neoplasms w CC	109	0.7103	19.3	16.1	9.7
182	Respiratory neoplasms w/o CC/MCC	19	0.5472	20.3	16.9	6.9
183	Major chest trauma w MCC	1	0.5472	20.3	16.9	11.5
184	Major chest trauma w CC	1	0.5472	20.3	16.9	7.3
185	Major chest trauma w/o CC/MCC	0	0.5472	20.3	16.9	5.0
186	Pleural effusion w MCC	137	0.8259	23.6	19.7	12.2
187	Pleural effusion w CC	63	0.7042	21.1	17.6	8.8
188	Pleural effusion w/o CC/MCC	14	0.7042	21.1	17.6	6.5
189	Pulmonary edema & respiratory failure	5,707	0.9743	24.0	20.0	10.1
190	Chronic obstructive pulmonary disease w MCC	1,657	0.6858	20.9	17.4	10.2
191	Chronic obstructive pulmonary disease w CC	1,558	0.6256	19.5	16.3	7.9
192	Chronic obstructive pulmonary disease w/o CC/MCC	871	0.5832	17.2	14.3	6.2

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
193	Simple pneumonia & pleurisy w MCC	1,689	0.7088	21.6	18.0	10.9
194	Simple pneumonia & pleurisy w CC	2,110	0.6429	19.8	16.5	8.2
195	Simple pneumonia & pleurisy w/o CC/MCC	455	0.5962	18.2	15.2	6.3
196	Interstitial lung disease w MCC	114	0.6529	20.0	16.7	11.6
197	Interstitial lung disease w CC	95	0.6133	19.6	16.3	8.5
198	Interstitial lung disease w/o CC/MCC	44	0.5956	19.7	16.4	6.7
199	Pneumothorax w MCC	24	0.8249	25.0	20.8	13.8
200	Pneumothorax w CC	17	0.7305	22.9	19.1	8.3
201	Pneumothorax w/o CC/MCC	10	0.5472	20.3	16.9	6.5
202	Bronchitis & asthma w CC/MCC	96	0.6903	21.1	17.6	6.9
203	Bronchitis & asthma w/o CC/MCC	34	0.5650	17.1	14.3	5.3
204	Respiratory signs & symptoms	309	0.8187	22.0	18.3	4.4
205	Other respiratory system diagnoses w MCC	261	0.8207	22.4	18.7	9.0
206	Other respiratory system diagnoses w/o MCC	167	0.7667	21.5	17.9	5.5
207	Respiratory system diagnosis w ventilator support 96+ hours.	12,448	2.0266	34.3	28.6	22.6
208	Respiratory system diagnosis w ventilator support <96 hours.	1,890	1.5514	27.8	23.2	12.5
215	Other heart assist system implant	0	0.8249	25.0	20.8	20.5
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC.	0	1.5545	35.2	29.3	28.7
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC.	0	0.8249	25.0	20.8	17.7
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC.	0	0.8249	25.0	20.8	12.7
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC.	0	1.5545	35.2	29.3	22.6
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC.	0	0.8249	25.0	20.8	12.5
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC.	0	0.8249	25.0	20.8	8.7
222	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC.	0	1.5545	35.2	29.3	20.9
223	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC.	0	1.5545	35.2	29.3	11.0
224	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC.	0	1.5545	35.2	29.3	18.2
225	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC.	0	1.5545	35.2	29.3	9.2
226	Cardiac defibrillator implant w/o cardiac cath w MCC	11	1.5545	35.2	29.3	16.8
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC	4	1.5545	35.2	29.3	4.1
228	Other cardiothoracic procedures w MCC	0	1.5410	35.0	29.2	23.2
229	Other cardiothoracic procedures w CC	0	1.2681	30.8	25.7	13.5
230	Other cardiothoracic procedures w/o CC/MCC	0	0.8249	25.0	20.8	10.2
231	Coronary bypass w PTCA w MCC	0	1.5545	35.2	29.3	20.9
232	Coronary bypass w PTCA w/o MCC	0	0.8249	25.0	20.8	13.1
233	Coronary bypass w cardiac cath w MCC	0	1.5545	35.2	29.3	21.0
234	Coronary bypass w cardiac cath w/o MCC	0	0.8249	25.0	20.8	12.2
235	Coronary bypass w/o cardiac cath w MCC	0	1.5545	35.2	29.3	17.0
236	Coronary bypass w/o cardiac cath w/o MCC	0	0.8249	25.0	20.8	9.0
237	Major cardiovasc procedures w MCC or thoracic aortic anuerysm repair.	3	1.5545	35.2	29.3	19.6
238	Major cardiovasc procedures w/o MCC	3	0.8249	25.0	20.8	8.1
239	Amputation for circ sys disorders exc upper limb & toe w MCC.	171	1.3794	37.4	31.2	24.7
240	Amputation for circ sys disorders exc upper limb & toe w CC.	94	1.2872	36.1	30.1	16.6
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC.	5	1.1417	29.0	24.2	10.7
242	Permanent cardiac pacemaker implant w MCC	14	1.5545	35.2	29.3	14.5
243	Permanent cardiac pacemaker implant w CC	9	1.5545	35.2	29.3	8.5
244	Permanent cardiac pacemaker implant w/o CC/MCC	3	1.1417	29.0	24.2	4.6
245	AICD lead & generator procedures	2	0.7305	22.9	19.1	4.9
246	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents.	1	0.8249	25.0	20.8	9.1
247	Perc cardiovasc proc w drug-eluting stent w/o MCC	0	0.8249	25.0	20.8	3.3
248	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents.	1	1.5545	35.2	29.3	10.3

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	0	1.5545	35.2	29.3	3.9
250	Perc cardiovasc proc w/o coronary artery stent or AMI w MCC.	1	0.8249	25.0	20.8	12.7
251	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC.	0	0.8249	25.0	20.8	4.6
252	Other vascular procedures w MCC	108	1.5410	35.0	29.2	15.1
253	Other vascular procedures w CC	56	1.2681	30.8	25.7	10.2
254	Other vascular procedures w/o CC/MCC	5	0.8249	25.0	20.8	4.3
255	Upper limb & toe amputation for circ system disorders w MCC.	45	1.1713	33.7	28.1	16.7
256	Upper limb & toe amputation for circ system disorders w CC.	37	0.9516	29.4	24.5	12.3
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC.	1	0.9516	29.4	24.5	8.2
258	Cardiac pacemaker device replacement w MCC	1	1.5545	35.2	29.3	12.6
259	Cardiac pacemaker device replacement w/o MCC	0	1.5545	35.2	29.3	4.0
260	Cardiac pacemaker revision except device replacement w MCC.	1	1.5545	35.2	29.3	17.4
261	Cardiac pacemaker revision except device replacement w CC.	2	0.5472	20.3	16.9	6.4
262	Cardiac pacemaker revision except device replacement w/o CC/MCC.	0	0.5472	20.3	16.9	3.7
263	Vein ligation & stripping	1	0.8249	25.0	20.8	9.2
264	Other circulatory system O.R. procedures	595	1.0667	31.6	26.3	15.4
280	Acute myocardial infarction, discharged alive w MCC	107	0.7263	21.4	17.8	12.0
281	Acute myocardial infarction, discharged alive w CC	60	0.6931	22.8	19.0	7.8
282	Acute myocardia infarction, discharged alive w/o CC/MCC.	7	0.6931	22.8	19.0	5.1
283	Acute myocardial infarction, expired w MCC	26	0.6609	17.0	14.2	9.0
284	Acute myocardial infarction, expired w CC	5	0.6609	17.0	14.2	5.4
285	Acute myocardial infarction, expired w/o CC/MCC	1	0.6609	17.0	14.2	3.3
286	Circulatory disorders except AMI, w card cath w MCC	15	1.1417	29.0	24.2	11.6
287	Circulatory disorders except AMI, w card cath w/o MCC	7	0.8249	25.0	20.8	5.0
288	Acute & subacute endocarditis w MCC	453	0.9082	26.4	22.0	19.7
289	Acute & subacute endocarditis w CC	225	0.8580	26.4	22.0	13.7
290	Acute & subacute endocarditis w/o CC/MCC	53	0.7664	25.5	21.3	10.6
291	Heart failure & shock w MCC	1,601	0.6968	21.4	17.8	10.7
292	Heart failure & shock w CC	1,183	0.6252	20.4	17.0	7.7
293	Heart failure & shock w/o CC/MCC	387	0.5775	18.5	15.4	5.6
294	Deep vein thrombophlebitis w CC/MCC	7	0.8249	25.0	20.8	8.6
295	Deep vein thrombophlebitis w/o CC/MCC	0	0.8249	25.0	20.8	6.7
296	Cardiac arrest, unexplained w MCC	0	0.6609	17.0	14.2	4.8
297	Cardiac arrest, unexplained w CC	0	0.6609	17.0	14.2	2.7
298	Cardiac arrest, unexplained w/o CC/MCC	0	0.6609	17.0	14.2	1.9
299	Peripheral vascular disorders w MCC	551	0.7152	24.8	20.7	11.2
300	Peripheral vascular disorders w CC	800	0.6150	22.2	18.5	8.2
301	Peripheral vascular disorders w/o CC/MCC	93	0.5557	19.4	16.2	6.0
302	Atherosclerosis w MCC	69	0.6170	21.9	18.3	6.9
303	Atherosclerosis w/o MCC	93	0.5673	20.5	17.1	3.9
304	Hypertension w MCC	12	0.8249	25.0	20.8	8.3
305	Hypertension w/o MCC	39	0.5856	22.6	18.8	4.4
306	Cardiac congenital & valvular disorders w MCC	54	0.8786	24.2	20.2	10.2
307	Cardiac congenital & valvular disorders w/o MCC	39	0.7767	23.1	19.3	5.5
308	Cardiac arrhythmia & conduction disorders w MCC	88	0.7431	24.7	20.6	9.3
309	Cardiac arrhythmia & conduction disorders w CC	76	0.5940	20.4	17.0	6.2
310	Cardiac arrhythmia & conduction disorders w/o CC/MCC	39	0.5184	17.0	14.2	4.2
311	Angina pectoris	4	0.7305	22.9	19.1	3.5
312	Syncope & collapse	44	0.5336	19.7	16.4	4.9
313	Chest pain	5	0.5472	20.3	16.9	3.1
314	Other circulatory system diagnoses w MCC	1,399	0.8123	23.1	19.3	11.8
315	Other circulatory system diagnoses w CC	451	0.7114	21.6	18.0	7.3
316	Other circulatory system diagnoses w/o CC/MCC	98	0.6243	18.9	15.8	4.7
326	Stomach, esophageal & duodenal proc w MCC	34	1.8646	36.2	30.2	28.1
327	Stomach, esophageal & duodenal proc w CC	9	1.5545	35.2	29.3	16.8
328	Stomach, esophageal & duodenal proc w/o CC/MCC	1	0.5472	20.3	16.9	7.2
329	Major small & large bowel procedures w MCC	24	1.5545	35.2	29.3	25.3
330	Major small & large bowel procedures w CC	20	1.5545	35.2	29.3	14.6
331	Major small & large bowel procedures w/o CC/MCC	1	0.5472	20.3	16.9	8.7

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
332	Rectal resection w MCC	0	1.5057	36.1	30.1	22.6
333	Rectal resection w CC	0	1.3309	30.7	25.6	13.0
334	Rectal resection w/o CC/MCC	0	0.8249	25.0	20.8	8.6
335	Peritoneal adhesiolysis w MCC	4	1.5545	35.2	29.3	22.9
336	Peritoneal adhesiolysis w CC	2	0.7305	22.9	19.1	14.6
337	Peritoneal adhesiolysis w/o CC/MCC	0	0.7305	22.9	19.1	9.3
338	Appendectomy w complicated principal diag w MCC	0	0.8884	24.1	20.1	16.7
339	Appendectomy w complicated principal diag w CC	0	0.7667	22.2	18.5	10.8
340	Appendectomy w complicated principal diag w/o CC/MCC.	0	0.6856	19.9	16.6	6.6
341	Appendectomy w/o complicated principal diag w MCC	0	0.8884	24.1	20.1	12.0
342	Appendectomy w/o complicated principal diag w CC	0	0.7667	22.2	18.5	6.8
343	Appendectomy w/o complicated principal diag w/o CC/MCC.	0	0.6856	19.9	16.6	3.4
344	Minor small & large bowel procedures w MCC	0	0.8884	24.1	20.1	19.1
345	Minor small & large bowel procedures w CC	0	0.7667	22.2	18.5	10.9
346	Minor small & large bowel procedures w/o CC/MCC	0	0.6856	19.9	16.6	7.4
347	Anal & stomal procedures w MCC	5	1.1417	29.0	24.2	13.8
348	Anal & stomal procedures w CC	3	0.8249	25.0	20.8	8.9
349	Anal & stomal procedures w/o CC/MCC	1	0.5472	20.3	16.9	4.7
350	Inguinal & femoral hernia procedures w MCC	1	1.5545	35.2	29.3	13.6
351	Inguinal & femoral hernia procedures w CC	1	1.1417	29.0	24.2	7.4
352	Inguinal & femoral hernia procedures w/o CC/MCC	1	0.8249	25.0	20.8	3.7
353	Hernia procedures except inguinal & femoral w MCC	0	0.8249	25.0	20.8	14.5
354	Hernia procedures except inguinal & femoral w CC	1	0.8249	25.0	20.8	8.2
355	Hernia procedures except inguinal & femoral w/o CC/MCC.	0	0.8249	25.0	20.8	4.4
356	Other digestive system O.R. procedures w MCC	109	1.5057	36.1	30.1	22.5
357	Other digestive system O.R. procedures w CC	46	1.3309	30.7	25.6	13.3
358	Other digestive system O.R. procedures w/o CC/MCC	3	0.8249	25.0	20.8	7.6
368	Major esophageal disorders w MCC	22	1.1417	29.0	24.2	10.5
369	Major esophageal disorders w CC	8	1.1417	29.0	24.2	7.1
370	Major esophageal disorders w/o CC/MCC	1	1.1417	29.0	24.2	5.2
371	Major gastrointestinal disorders & peritoneal infections w MCC.	666	0.8884	24.1	20.1	14.1
372	Major gastrointestinal disorders & peritoneal infections w CC.	426	0.7667	22.2	18.5	10.6
373	Major gastrointestinal disorders & peritoneal infections w/o CC/MCC.	52	0.6856	19.9	16.6	7.7
374	Digestive malignancy w MCC	122	0.8340	22.9	19.1	14.4
375	Digestive malignancy w CC	81	0.7563	19.7	16.4	9.7
376	Digestive malignancy w/o CC/MCC	9	0.5472	20.3	16.9	6.5
377	G.I. hemorrhage w MCC	94	0.7032	22.5	18.8	10.3
378	G.I. hemorrhage w CC	60	0.6334	21.5	17.9	6.8
379	G.I. hemorrhage w/o CC/MCC	20	0.5472	20.3	16.9	5.2
380	Complicated peptic ulcer w MCC	14	0.8249	25.0	20.8	11.4
381	Complicated peptic ulcer w CC	16	0.8249	25.0	20.8	7.9
382	Complicated peptic ulcer w/o CC/MCC	6	0.7305	22.9	19.1	5.5
383	Uncomplicated peptic ulcer w MCC	6	0.8249	25.0	20.8	9.1
384	Uncomplicated peptic ulcer w/o MCC	6	0.7305	22.9	19.1	5.9
385	Inflammatory bowel disease w MCC	32	0.8874	24.6	20.5	14.4
386	Inflammatory bowel disease w CC	26	0.7655	22.9	19.1	9.0
387	Inflammatory bowel disease w/o CC/MCC	5	0.7655	22.9	19.1	6.9
388	G.I. obstruction w MCC	191	0.8967	22.8	19.0	12.0
389	G.I. obstruction w CC	91	0.7893	21.9	18.3	8.0
390	G.I. obstruction w/o CC/MCC	12	0.7893	21.9	18.3	5.5
391	Esophagitis, gastroent & misc digest disorders w MCC	246	0.8509	24.4	20.3	8.7
392	Esophagitis, gastroent & misc digest disorders w/o MCC	266	0.6943	20.4	17.0	5.5
393	Other digestive system diagnoses w MCC	678	0.9915	25.5	21.3	11.4
394	Other digestive system diagnoses w CC	388	0.8523	22.0	18.3	7.7
395	Other digestive system diagnoses w/o CC/MCC	31	0.7214	20.9	17.4	5.3
405	Pancreas, liver & shunt procedures w MCC	9	1.5545	35.2	29.3	29.0
406	Pancreas, liver & shunt procedures w CC	2	1.5545	35.2	29.3	16.0
407	Pancreas, liver & shunt procedures w/o CC/MCC	1	1.1417	29.0	24.2	9.2
408	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC.	1	1.5545	35.2	29.3	23.7
409	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC.	1	1.5545	35.2	29.3	15.4

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
410	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC.	0	1.5545	35.2	29.3	10.6
411	Cholecystectomy w c.d.e. w MCC	0	1.1417	29.0	24.2	20.3
412	Cholecystectomy w c.d.e. w CC	1	1.1417	29.0	24.2	13.5
413	Cholecystectomy w c.d.e. w/o CC/MCC	0	1.1417	29.0	24.2	9.3
414	Cholecystectomy except by laparoscope w/o c.d.e. w MCC.	2	1.1417	29.0	24.2	18.4
415	Cholecystectomy except by laparoscope w/o c.d.e. w CC	3	1.1417	29.0	24.2	11.6
416	Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC.	0	1.1417	29.0	24.2	7.5
417	Laparoscopic cholecystectomy w/o c.d.e. w MCC	7	1.5545	35.2	29.3	13.5
418	Laparoscopic cholecystectomy w/o c.d.e. w CC	5	1.1417	29.0	24.2	9.0
419	Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	0	1.1417	29.0	24.2	5.0
420	Hepatobiliary diagnostic procedures w MCC	2	1.1417	29.0	24.2	24.2
421	Hepatobiliary diagnostic procedures w CC	1	0.8249	25.0	20.8	12.9
422	Hepatobiliary diagnostic procedures w/o CC/MCC	0	0.8249	25.0	20.8	7.3
423	Other hepatobiliary or pancreas O.R. procedures w MCC	23	1.1417	29.0	24.2	24.2
424	Other hepatobiliary or pancreas O.R. procedures w CC	5	0.8249	25.0	20.8	17.1
425	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC.	0	0.8249	25.0	20.8	9.2
432	Cirrhosis & alcoholic hepatitis w MCC	98	0.6223	19.0	15.8	11.1
433	Cirrhosis & alcoholic hepatitis w CC	21	0.6223	19.0	15.8	7.7
434	Cirrhosis & alcoholic hepatitis w/o CC/MCC	1	0.5472	20.3	16.9	5.7
435	Malignancy of hepatobiliary system or pancreas w MCC	47	0.7422	20.2	16.8	12.6
436	Malignancy of hepatobiliary system or pancreas w CC	34	0.7086	19.6	16.3	9.5
437	Malignancy of hepatobiliary system or pancreas w/o CC/MCC.	4	0.7086	19.6	16.3	7.1
438	Disorders of pancreas except malignancy w MCC	251	1.0057	24.3	20.3	12.5
439	Disorders of pancreas except malignancy w CC	166	0.8437	21.9	18.3	8.5
440	Disorders of pancreas except malignancy w/o CC/MCC	28	0.7204	18.8	15.7	5.9
441	Disorders of liver except malig, cirr, alc hepa w MCC	116	0.7588	21.8	18.2	11.3
442	Disorders of liver except malig, cirr, alc hepa w CC	67	0.6925	21.2	17.7	8.1
443	Disorders of liver except malig, cirr, alc hepa w/o CC/MCC.	12	0.6925	21.2	17.7	6.0
444	Disorders of the biliary tract w MCC	71	0.8181	24.0	20.0	10.7
445	Disorders of the biliary tract w CC	41	0.6977	21.7	18.1	7.6
446	Disorders of the biliary tract w/o CC/MCC	7	0.5472	20.3	16.9	5.2
453	Combined anterior/posterior spinal fusion w MCC	0	1.5545	35.2	29.3	24.9
454	Combined anterior/posterior spinal fusion w CC	1	1.5545	35.2	29.3	12.7
455	Combined anterior/posterior spinal fusion w/o CC/MCC	0	1.5545	35.2	29.3	7.1
456	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC.	1	1.5545	35.2	29.3	24.9
457	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC.	0	1.5545	35.2	29.3	11.6
458	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC.	0	1.5545	35.2	29.3	6.8
459	Spinal fusion except cervical w MCC	2	1.5545	35.2	29.3	14.7
460	Spinal fusion except cervical w/o MCC	3	1.5545	35.2	29.3	6.4
461	Bilateral or multiple major joint procs of lower extremity w MCC.	0	1.5545	35.2	29.3	12.6
462	Bilateral or multiple major joint procs of lower extremity w/o MCC.	0	1.1417	29.0	24.2	5.8
463	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC.	507	1.3514	38.8	32.3	27.4
464	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC.	311	1.1906	36.3	30.3	16.8
465	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC.	60	1.0747	29.6	24.7	10.0
466	Revision of hip or knee replacement w MCC	3	1.5545	35.2	29.3	14.5
467	Revision of hip or knee replacement w CC	4	1.5545	35.2	29.3	8.0
468	Revision of hip or knee replacement w/o CC/MCC	0	1.5545	35.2	29.3	5.5
469	Major joint replacement or reattachment of lower extremity w MCC.	2	1.5545	35.2	29.3	12.6
470	Major joint replacement or reattachment of lower extremity w/o MCC.	2	1.5545	35.2	29.3	5.4
471	Cervical spinal fusion w MCC	5	1.5545	35.2	29.3	17.3
472	Cervical spinal fusion w CC	2	1.5545	35.2	29.3	7.0
473	Cervical spinal fusion w/o CC/MCC	0	1.5545	35.2	29.3	2.9

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
474	Amputation for musculoskeletal sys & conn tissue dis w MCC.	91	1.3338	36.6	30.5	20.4
475	Amputation for musculoskeletal sys & conn tissue dis w CC.	53	1.1390	32.7	27.3	13.9
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC.	8	1.1390	32.7	27.3	8.0
477	Biopsies of musculoskeletal system & connective tissue w MCC.	13	1.5545	35.2	29.3	20.7
478	Biopsies of musculoskeletal system & connective tissue w CC.	14	1.1417	29.0	24.2	11.9
479	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC.	5	1.1417	29.0	24.2	4.3
480	Hip & femur procedures except major joint w MCC	11	1.5545	35.2	29.3	14.1
481	Hip & femur procedures except major joint w CC	19	1.5545	35.2	29.3	8.4
482	Hip & femur procedures except major joint w/o CC/MCC	1	1.1417	29.0	24.2	6.8
483	Major joint & limb reattachment proc of upper extremity w CC/MCC.	0	1.5545	35.2	29.3	6.6
484	Major joint & limb reattachment proc of upper extremity w/o CC/MCC.	0	1.1417	29.0	24.2	3.6
485	Knee procedures w pdx of infection w MCC	10	1.5545	35.2	29.3	18.9
486	Knee procedures w pdx of infection w CC	9	1.1417	29.0	24.2	12.3
487	Knee procedures w pdx of infection w/o CC/MCC	1	1.1417	29.0	24.2	8.5
488	Knee procedures w/o pdx of infection w CC/MCC	2	1.5545	35.2	29.3	7.8
489	Knee procedures w/o pdx of infection w/o CC/MCC	0	1.5545	35.2	29.3	4.7
490	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim.	7	1.1417	29.0	24.2	7.6
491	Back & neck proc exc spinal fusion w/o CC/MCC	0	1.1417	29.0	24.2	3.4
492	Lower extrem & humer proc except hip, foot, femur w MCC.	5	1.5545	35.2	29.3	13.6
493	Lower extrem & humer proc except hip, foot, femur w CC	19	1.1417	29.0	24.2	8.2
494	Lower extrem & humer proc except hip, foot, femur w/o CC/MCC.	1	0.8249	25.0	20.8	5.1
495	Local excision & removal int fix devices exc hip & femur w MCC.	32	1.3650	38.1	31.8	18.2
496	Local excision & removal int fix devices exc hip & femur w CC.	25	1.1981	36.8	30.7	9.8
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC.	3	1.1417	29.0	24.2	4.9
498	Local excision & removal int fix devices of hip & femur w CC/MCC.	8	1.5545	35.2	29.3	13.4
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC.	2	0.7305	22.9	19.1	4.9
500	Soft tissue procedures w MCC	46	1.3212	35.2	29.3	18.8
501	Soft tissue procedures w CC	28	1.2903	30.7	25.6	9.6
502	Soft tissue procedures w/o CC/MCC	3	0.8249	25.0	20.8	4.5
503	Foot procedures w MCC	18	1.1417	29.0	24.2	14.6
504	Foot procedures w CC	13	0.8249	25.0	20.8	10.5
505	Foot procedures w/o CC/MCC	1	0.5472	20.3	16.9	5.3
506	Major thumb or joint procedures	0	0.7305	22.9	19.1	5.0
507	Major shoulder or elbow joint procedures w CC/MCC	3	0.8249	25.0	20.8	8.4
508	Major shoulder or elbow joint procedures w/o CC/MCC	0	0.8249	25.0	20.8	3.0
509	Arthroscopy	0	0.5472	20.3	16.9	4.2
510	Shoulder, elbow or forearm proc, exc major joint proc w MCC.	0	1.1417	29.0	24.2	10.7
511	Shoulder, elbow or forearm proc, exc major joint proc w CC.	4	1.1417	29.0	24.2	6.2
512	Shoulder, elbow or forearm proc, exc major joint proc w/o CC/MCC.	1	0.5472	20.3	16.9	3.1
513	Hand or wrist proc, except major thumb or joint proc w CC/MCC.	4	1.5545	35.2	29.3	8.4
514	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC.	4	0.7305	22.9	19.1	4.0
515	Other musculoskelet sys & conn tiss O.R. proc w MCC	49	1.3230	34.8	29.0	18.1
516	Other musculoskelet sys & conn tiss O.R. proc w CC	21	1.1417	29.0	24.2	10.1
517	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC.	6	0.8249	25.0	20.8	4.5
533	Fractures of femur w MCC	3	0.8249	25.0	20.8	11.2
534	Fractures of femur w/o MCC	7	0.7305	22.9	19.1	6.3

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
535	Fractures of hip & pelvis w MCC	19	0.7305	22.9	19.1	10.1
536	Fractures of hip & pelvis w/o MCC	33	0.5998	23.7	19.8	6.0
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC.	0	0.5472	20.3	16.9	7.3
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC.	0	0.5472	20.3	16.9	4.8
539	Osteomyelitis w MCC	936	0.9013	29.7	24.8	16.2
540	Osteomyelitis w CC	767	0.8107	28.7	23.9	11.3
541	Osteomyelitis w/o CC/MCC	252	0.7787	26.9	22.4	8.9
542	Pathological fractures & musculoskelet & conn tiss malig w MCC.	56	0.7359	21.7	18.1	14.0
543	Pathological fractures & musculoskelet & conn tiss malig w CC.	61	0.6347	21.3	17.8	9.4
544	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC.	17	0.5472	20.3	16.9	6.8
545	Connective tissue disorders w MCC	57	0.8501	23.9	19.9	14.7
546	Connective tissue disorders w CC	38	0.6492	20.7	17.3	8.7
547	Connective tissue disorders w/o CC/MCC	14	0.5472	20.3	16.9	6.1
548	Septic arthritis w MCC	167	0.8584	28.2	23.5	15.0
549	Septic arthritis w CC	199	0.7347	26.4	22.0	9.8
550	Septic arthritis w/o CC/MCC	66	0.6704	23.5	19.6	7.2
551	Medical back problems w MCC	107	0.7305	26.6	22.2	11.6
552	Medical back problems w/o MCC	241	0.6022	22.8	19.0	6.5
553	Bone diseases & arthropathies w MCC	24	0.8249	25.0	20.8	9.6
554	Bone diseases & arthropathies w/o MCC	66	0.4822	20.5	17.1	5.8
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC.	13	0.7305	22.9	19.1	7.8
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC.	16	0.7305	22.9	19.1	5.0
557	Tendonitis, myositis & bursitis w MCC	86	0.8177	25.9	21.6	11.0
558	Tendonitis, myositis & bursitis w/o MCC	113	0.6919	21.4	17.8	6.6
559	Aftercare, musculoskeletal system & connective tissue w MCC.	1,370	0.7157	26.2	21.8	11.9
560	Aftercare, musculoskeletal system & connective tissue w CC.	2,078	0.6393	24.6	20.5	7.5
561	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC.	970	0.5889	21.7	18.1	4.2
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC.	6	1.1417	29.0	24.2	10.4
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC.	22	0.5472	20.3	16.9	5.7
564	Other musculoskeletal sys & connective tissue diagnoses w MCC.	241	0.8134	24.9	20.8	11.6
565	Other musculoskeletal sys & connective tissue diagnoses w CC.	239	0.7382	24.8	20.7	8.1
566	Other musculoskeletal sys & connective tissue diagnoses w/o CC/MCC.	62	0.6862	22.1	18.4	5.9
573	Skin graft &/or debrid for skn ulcer or cellulitis w MCC	1,864	1.3068	38.0	31.7	22.2
574	Skin graft &/or debrid for skn ulcer or cellulitis w CC	1,911	1.1567	37.1	30.9	14.9
575	Skin graft &/or debrid for skn ulcer or cellulitis w/o CC/MCC.	193	0.9938	31.7	26.4	9.4
576	Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC.	22	1.5545	35.2	29.3	20.3
577	Skin graft &/or debrid exc for skin ulcer or cellulitis w CC	24	1.1417	29.0	24.2	9.9
578	Skin graft &/or debrid exc for skin ulcer or cellulitis w/o CC/MCC.	5	0.7305	22.9	19.1	5.4
579	Other skin, subcut tiss & breast proc w MCC	493	1.2793	36.8	30.7	18.5
580	Other skin, subcut tiss & breast proc w CC	418	1.1001	34.8	29.0	9.0
581	Other skin, subcut tiss & breast proc w/o CC/MCC	29	0.9100	29.9	24.9	3.9
582	Mastectomy for malignancy w CC/MCC	2	1.5545	35.2	29.3	4.3
583	Mastectomy for malignancy w/o CC/MCC	0	1.5545	35.2	29.3	2.6
584	Breast biopsy, local excision & other breast procedures w CC/MCC.	2	1.1417	29.0	24.2	9.5
585	Breast biopsy, local excision & other breast procedures w/o CC/MCC.	0	1.1417	29.0	24.2	3.2
592	Skin ulcers w MCC	2,994	0.8875	27.1	22.6	14.2
593	Skin ulcers w CC	3,139	0.7877	26.8	22.3	10.0
594	Skin ulcers w/o CC/MCC	405	0.7342	24.3	20.3	7.7

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
595	Major skin disorders w MCC	30	0.7525	24.5	20.4	13.2
596	Major skin disorders w/o MCC	53	0.6155	23.8	19.8	7.6
597	Malignant breast disorders w MCC	13	0.8249	25.0	20.8	13.7
598	Malignant breast disorders w CC	17	0.7305	22.9	19.1	9.0
599	Malignant breast disorders w/o CC/MCC	4	0.7305	22.9	19.1	5.7
600	Non-malignant breast disorders w CC/MCC	12	0.7305	22.9	19.1	8.5
601	Non-malignant breast disorders w/o CC/MCC	9	0.7305	22.9	19.1	6.0
602	Cellulitis w MCC	758	0.6643	22.5	18.8	11.1
603	Cellulitis w/o MCC	1,487	0.5528	19.4	16.2	7.3
604	Trauma to the skin, subcut tiss & breast w MCC	23	0.8249	25.0	20.8	8.8
605	Trauma to the skin, subcut tiss & breast w/o MCC	59	0.5685	21.2	17.7	5.4
606	Minor skin disorders w MCC	60	0.8324	23.2	19.3	9.5
607	Minor skin disorders w/o MCC	84	0.6776	22.6	18.8	5.9
614	Adrenal & pituitary procedures w CC/MCC	0	1.2008	33.1	27.6	11.6
615	Adrenal & pituitary procedures w/o CC/MCC	0	0.7305	22.9	19.1	5.1
616	Amputat of lower limb for endocrine, nutrit, & metabol dis w MCC.	62	1.4505	41.0	34.2	24.2
617	Amputat of lower limb for endocrine, nutrit, & metabol dis w CC.	117	1.2414	33.3	27.8	14.5
618	Amputat of lower limb for endocrine, nutrit, & metabol dis w/o CC/MCC.	2	0.8249	25.0	20.8	9.9
619	O.R. procedures for obesity w MCC	2	0.8249	25.0	20.8	14.6
620	O.R. procedures for obesity w CC	3	0.8249	25.0	20.8	6.3
621	O.R. procedures for obesity w/o CC/MCC	0	0.8249	25.0	20.8	3.6
622	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC.	165	1.1462	35.6	29.7	21.1
623	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC.	341	1.0197	32.2	26.8	13.5
624	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC.	13	0.8249	25.0	20.8	9.4
625	Thyroid, parathyroid & thyroglossal procedures w MCC	0	1.3385	36.6	30.5	12.4
626	Thyroid, parathyroid & thyroglossal procedures w CC	0	1.2008	33.1	27.6	5.0
627	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC.	0	0.7305	22.9	19.1	2.1
628	Other endocrine, nutrit & metab O.R. proc w MCC	54	1.3385	36.6	30.5	20.1
629	Other endocrine, nutrit & metab O.R. proc w CC	90	1.2008	33.1	27.6	14.3
630	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	4	0.7305	22.9	19.1	8.4
637	Diabetes w MCC	363	0.7726	25.8	21.5	9.8
638	Diabetes w CC	1,062	0.6757	24.0	20.0	6.7
639	Diabetes w/o CC/MCC	92	0.6064	20.6	17.2	4.7
640	Nutritional & misc metabolic disorders w MCC	607	0.7879	23.2	19.3	9.1
641	Nutritional & misc metabolic disorders w/o MCC	615	0.6889	22.0	18.3	6.0
642	Inborn errors of metabolism	4	0.7305	22.9	19.1	8.3
643	Endocrine disorders w MCC	29	0.7358	24.9	20.8	12.4
644	Endocrine disorders w CC	18	0.7358	24.9	20.8	8.6
645	Endocrine disorders w/o CC/MCC	6	0.5472	20.3	16.9	6.1
652	Kidney transplant	0	0.0000	0.0	0.0	0.0
653	Major bladder procedures w MCC	0	1.1417	29.0	24.2	24.2
654	Major bladder procedures w CC	0	0.7305	22.9	19.1	14.7
655	Major bladder procedures w/o CC/MCC	0	0.5472	20.3	16.9	10.0
656	Kidney & ureter procedures for neoplasm w MCC	0	0.8249	25.0	20.8	16.8
657	Kidney & ureter procedures forneoplasm w CC	1	0.8249	25.0	20.8	9.2
658	Kidney & ureter procedures for neoplasm w/o CC/MCC	0	0.8249	25.0	20.8	5.7
659	Kidney & ureter procedures for non-neoplasm w MCC	9	1.1417	29.0	24.2	18.5
660	Kidney & ureter procedures for non-neoplasm w CC	4	0.7305	22.9	19.1	10.6
661	Kidney & ureter procedures for non-neoplasm w/o CC/MCC.	1	0.5472	20.3	16.9	5.1
662	Minor bladder procedures w MCC	2	0.8249	25.0	20.8	17.7
663	Minor bladder procedures w CC	0	0.8249	25.0	20.8	8.5
664	Minor bladder procedures w/o CC/MCC	1	1.5545	35.2	29.3	3.0
665	Prostatectomy w MCC	2	0.8249	25.0	20.8	20.2
666	Prostatectomy w CC	0	0.8249	25.0	20.8	10.7
667	Prostatectomy w/o CC/MCC	1	1.1417	29.0	24.2	4.0
668	Transurethral procedures w MCC	8	1.5545	35.2	29.3	14.4
669	Transurethral procedures w CC	5	1.5545	35.2	29.3	7.0
670	Transurethral procedures w/o CC/MCC	0	0.8249	25.0	20.8	3.7
671	Urethral procedures w CC/MCC	0	0.7305	22.9	19.1	9.6
672	Urethral procedures w/o CC/MCC	0	0.5472	20.3	16.9	3.8

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
673	Other kidney & urinary tract procedures w MCC	226	1.3255	33.6	28.0	17.6
674	Other kidney & urinary tract procedures w CC	95	1.2557	30.6	25.5	11.1
675	Other kidney & urinary tract procedures w/o CC/MCC	6	1.1417	29.0	24.2	2.7
682	Renal failure w MCC	1,328	0.8553	23.6	19.7	12.1
683	Renal failure w CC	785	0.7752	21.8	18.2	9.0
684	Renal failure w/o CC/MCC	124	0.7121	20.5	17.1	5.9
685	Admit for renal dialysis	51	0.7726	26.0	21.7	5.4
686	Kidney & urinary tract neoplasms w MCC	31	0.8933	23.6	19.7	13.2
687	Kidney & urinary tract neoplasms w CC	17	0.7305	22.9	19.1	8.5
688	Kidney & urinary tract neoplasms w/o CC/MCC	3	0.5472	20.3	16.9	5.1
689	Kidney & urinary tract infections w MCC	763	0.6624	22.9	19.1	9.9
690	Kidney & urinary tract infections w/o MCC	724	0.5655	20.2	16.8	6.6
691	Urinary stones w esw lithotripsy w CC/MCC	4	1.5545	35.2	29.3	6.6
692	Urinary stones w esw lithotripsy w/o CC/MCC	0	1.5545	35.2	29.3	3.4
693	Urinary stones w/o esw lithotripsy w MCC	16	0.7305	22.9	19.1	8.4
694	Urinary stones w/o esw lithotripsy w/o MCC	12	0.7305	22.9	19.1	3.9
695	Kidney & urinary tract signs & symptoms w MCC	4	0.8249	25.0	20.8	9.1
696	Kidney & urinary tract signs & symptoms w/o MCC	1	0.5472	20.3	16.9	5.0
697	Urethral stricture	0	0.5472	20.3	16.9	5.1
698	Other kidney & urinary tract diagnoses w MCC	269	0.7919	22.6	18.8	10.9
699	Other kidney & urinary tract diagnoses w CC	179	0.7293	22.1	18.4	7.7
700	Other kidney & urinary tract diagnoses w/o CC/MCC	27	0.6052	19.6	16.3	5.4
707	Major male pelvic procedures w CC/MCC	0	0.7305	22.9	19.1	6.9
708	Major male pelvic procedures w/o CC/MCC	0	0.5472	20.3	16.9	3.5
709	Penis procedures w CC/MCC	6	1.1417	29.0	24.2	10.3
710	Penis procedures w/o CC/MCC	0	1.1417	29.0	24.2	2.7
711	Testes procedures w CC/MCC	8	1.1417	29.0	24.2	13.2
712	Testes procedures w/o CC/MCC	0	1.1417	29.0	24.2	4.6
713	Transurethral prostatectomy w CC/MCC	1	1.5545	35.2	29.3	6.5
714	Transurethral prostatectomy w/o CC/MCC	1	0.5472	20.3	16.9	2.9
715	Other male reproductive system O.R. proc for malignancy w CC/MCC.	1	1.5545	35.2	29.3	10.1
716	Other male reproductive system O.R. proc for malignancy w/o CC/MCC.	0	1.5545	35.2	29.3	2.0
717	Other male reproductive system O.R. proc exc malignancy w CC/MCC.	17	1.1417	29.0	24.2	12.4
718	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC.	2	0.5472	20.3	16.9	4.1
722	Malignancy, male reproductive system w MCC	12	0.8249	25.0	20.8	12.1
723	Malignancy, male reproductive system w CC	9	0.7305	22.9	19.1	8.6
724	Malignancy, male reproductive system w/o CC/MCC	1	0.5472	20.3	16.9	5.3
725	Benign prostatic hypertrophy w MCC	2	1.1417	29.0	24.2	9.0
726	Benign prostatic hypertrophy w/o MCC	3	0.5472	20.3	16.9	5.5
727	Inflammation of the male reproductive system w MCC	37	0.7754	25.9	21.6	10.4
728	Inflammation of the male reproductive system w/o MCC	56	0.6172	20.8	17.3	6.2
729	Other male reproductive system diagnoses w CC/MCC	34	1.0319	26.6	22.2	8.4
730	Other male reproductive system diagnoses w/o CC/MCC	2	0.7305	22.9	19.1	4.9
734	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC.	0	1.1417	29.0	24.2	11.8
735	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC.	0	0.5472	20.3	16.9	5.3
736	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC.	0	1.1417	29.0	24.2	21.5
737	Uterine & adnexa proc for ovarian or adnexal malignancy w CC.	0	0.8249	25.0	20.8	11.0
738	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC.	0	0.5472	20.3	16.9	5.6
739	Uterine, adnexa proc for non-ovarian/adnexal malig w MCC.	0	1.1417	29.0	24.2	15.9
740	Uterine, adnexa proc for non-ovarian/adnexal malig w CC.	0	0.8249	25.0	20.8	7.7
741	Uterine, adnexa proc for non-ovarian/adnexal malig w/o CC/MCC.	0	0.5472	20.3	16.9	4.5
742	Uterine & adnexa proc for non-malignancy w CC/MCC	0	0.8249	25.0	20.8	6.9
743	Uterine & adnexa proc for non-malignancy w/o CC/MCC	0	0.5472	20.3	16.9	3.3
744	D&C, conization, laparascopy & tubal interruption w CC/MCC.	1	0.8249	25.0	20.8	9.3

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
745	D&C, conization, laparascopy & tubal interruption w/o CC/MCC.	0	0.8249	25.0	20.8	3.8
746	Vagina, cervix & vulva procedures w CC/MCC	3	0.8249	25.0	20.8	6.4
747	Vagina, cervix & vulva procedures w/o CC/MCC	0	0.8249	25.0	20.8	2.8
748	Female reproductive system reconstructive procedures	0	0.8249	25.0	20.8	2.6
749	Other female reproductive system O.R. procedures w CC/MCC.	3	0.8249	25.0	20.8	16.3
750	Other female reproductive system O.R. procedures w/o CC/MCC.	0	0.8249	25.0	20.8	5.1
754	Malignancy, female reproductive system w MCC	14	1.1417	29.0	24.2	14.7
755	Malignancy, female reproductive system w CC	15	0.8249	25.0	20.8	9.1
756	Malignancy, female reproductive system w/o CC/MCC	1	0.5472	20.3	16.9	5.1
757	Infections, female reproductive system w MCC	29	0.8375	22.6	18.8	13.9
758	Infections, female reproductive system w CC	25	0.8317	27.2	22.7	9.5
759	Infections, female reproductive system w/o CC/MCC	4	0.5472	20.3	16.9	7.2
760	Menstrual & other female reproductive system disorders w CC/MCC.	3	1.1417	29.0	24.2	6.0
761	Menstrual & other female reproductive system disorders w/o CC/MCC.	1	0.5472	20.3	16.9	3.8
765	Cesarean section w CC/MCC	0	0.8249	25.0	20.8	7.4
766	Cesarean section w/o CC/MCC	0	0.7305	22.9	19.1	4.3
767	Vaginal delivery w sterilization &/or D&C	0	0.7305	22.9	19.1	4.1
768	Vaginal delivery w O.R. proc except steril &/or D&C	0	0.7305	22.9	19.1	8.9
769	Postpartum & post abortion diagnoses w O.R. procedure	1	0.7305	22.9	19.1	8.6
770	Abortion w D&C, aspiration curettage or hysterotomy	0	0.7305	22.9	19.1	3.5
774	Vaginal delivery w complicating diagnoses	0	0.7305	22.9	19.1	4.5
775	Vaginal delivery w/o complicating diagnoses	0	0.7305	22.9	19.1	3.1
776	Postpartum & post abortion diagnoses w/o O.R. procedure.	3	1.1417	29.0	24.2	5.4
777	Ectopic pregnancy	0	0.7305	22.9	19.1	3.0
778	Threatened abortion	0	0.5472	20.3	16.9	4.2
779	Abortion w/o D&C	0	0.5472	20.3	16.9	3.6
780	False labor	0	0.5472	20.3	16.9	2.7
781	Other antepartum diagnoses w medical complications	1	1.1417	29.0	24.2	5.9
782	Other antepartum diagnoses w/o medical complications	0	0.5472	20.3	16.9	3.6
789	Neonates, died or transferred to another acute care facility.	0	0.5472	20.3	16.9	1.5
790	Extreme immaturity or respiratory distress syndrome, neonate.	0	0.5472	20.3	16.9	16.9
791	Prematurity w major problems	0	1.1417	29.0	24.2	13.3
792	Prematurity w/o major problems	0	0.5472	20.3	16.9	8.6
793	Full term neonate w major problems	0	1.1417	29.0	24.2	17.6
794	Neonate w other significant problems	0	1.1417	29.0	24.2	1.7
795	Normal newborn	0	0.5472	20.3	16.9	3.1
799	Splenectomy w MCC	0	1.1417	29.0	24.2	23.5
800	Splenectomy w CC	0	0.8249	25.0	20.8	13.0
801	Splenectomy w/o CC/MCC	0	0.8249	25.0	20.8	7.5
802	Other O.R. proc of the blood & blood forming organs w MCC.	7	1.5545	35.2	29.3	21.4
803	Other O.R. proc of the blood & blood forming organs w CC.	3	0.7305	22.9	19.1	10.8
804	Other O.R. proc of the blood & blood forming organs w/o CC/MCC.	0	0.7305	22.9	19.1	5.2
808	Major hematol/immun diag exc sickle cell crisis & coagul w MCC.	26	0.8009	20.7	17.3	12.8
809	Major hematol/immun diag exc sickle cell crisis & coagul w CC.	23	0.8009	20.7	17.3	7.9
810	Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC.	3	0.8009	20.7	17.3	6.2
811	Red blood cell disorders w MCC	36	0.6655	23.2	19.3	9.0
812	Red blood cell disorders w/o MCC	45	0.5699	19.5	16.3	5.9
813	Coagulation disorders	48	0.8015	21.5	17.9	8.3
814	Reticuloendothelial & immunity disorders w MCC	40	0.7474	22.6	18.8	11.7
815	Reticuloendothelial & immunity disorders w CC	18	0.7305	22.9	19.1	7.8
816	Reticuloendothelial & immunity disorders w/o CC/MCC	5	0.7305	22.9	19.1	5.3
820	Lymphoma & leukemia w major O.R. procedure w MCC	0	0.8249	25.0	20.8	20.8
821	Lymphoma & leukemia w major O.R. procedure w CC	2	0.8249	25.0	20.8	13.3

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
822	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC.	0	0.8249	25.0	20.8	5.9
823	Lymphoma & non-acute leukemia w other O.R. proc w MCC.	12	1.1417	29.0	24.2	24.2
824	Lymphoma & non-acute leukemia w other O.R. proc w CC.	3	1.1417	29.0	24.2	14.8
825	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC.	1	0.5472	20.3	16.9	7.8
826	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC.	1	0.8249	25.0	20.8	20.8
827	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC.	0	0.8249	25.0	20.8	12.4
828	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC.	0	0.8249	25.0	20.8	5.9
829	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC.	9	1.5545	35.2	29.3	17.8
830	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC.	0	1.5545	35.2	29.3	5.5
834	Acute leukemia w/o major O.R. procedure w MCC	20	1.1417	29.0	24.2	24.2
835	Acute leukemia w/o major O.R. procedure w CC	3	0.8249	25.0	20.8	13.5
836	Acute leukemia w/o major O.R. procedure w/o CC/MCC	1	0.5472	20.3	16.9	8.0
837	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC.	1	1.5545	35.2	29.3	29.3
838	Chemo w acute leukemia as sdx w CC or high dose chemo agent.	2	0.8249	25.0	20.8	13.7
839	Chemo w acute leukemia as sdx w/o CC/MCC	0	1.5545	35.2	29.3	9.1
840	Lymphoma & non-acute leukemia w MCC	175	0.8718	20.8	17.3	16.1
841	Lymphoma & non-acute leukemia w CC	64	0.8026	20.1	16.8	10.7
842	Lymphoma & non-acute leukemia w/o CC/MCC	10	0.7305	22.9	19.1	6.9
843	Other myeloprolif dis or poorly diff neopl diag w MCC	19	1.1417	29.0	24.2	14.5
844	Other myeloprolif dis or poorly diff neopl diag w CC	13	1.1417	29.0	24.2	9.7
845	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC.	3	1.1417	29.0	24.2	6.8
846	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC.	32	1.6788	37.4	31.2	13.8
847	Chemotherapy w/o acute leukemia as secondary diagnosis w CC.	61	1.4350	27.6	23.0	5.0
848	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC.	1	0.7305	22.9	19.1	4.6
849	Radiotherapy	141	0.8994	23.5	19.6	9.5
853	Infectious & parasitic diseases w O.R. procedure w MCC	703	1.7687	38.1	31.8	27.6
854	Infectious & parasitic diseases w O.R. procedure w CC	95	1.4381	30.8	25.7	17.4
855	Infectious & parasitic diseases w O.R. procedure w/o CC/MCC.	1	0.7305	22.9	19.1	12.2
856	Postoperative or post-traumatic infections w O.R. proc w MCC.	335	1.4470	36.1	30.1	26.5
857	Postoperative or post-traumatic infections w O.R. proc w CC.	232	1.1886	31.5	26.3	14.1
858	Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC.	28	1.1109	28.4	23.7	9.5
862	Postoperative & post-traumatic infections w MCC	1,178	0.8670	25.2	21.0	13.4
863	Postoperative & post-traumatic infections w/o MCC	1,304	0.7478	23.4	19.5	8.2
864	Fever of unknown origin	16	0.7305	22.9	19.1	6.4
865	Viral illness w MCC	56	0.7823	21.8	18.2	11.0
866	Viral illness w/o MCC	33	0.6431	21.2	17.7	5.4
867	Other infectious & parasitic diseases diagnoses w MCC	292	1.0954	23.6	19.7	16.2
868	Other infectious & parasitic diseases diagnoses w CC	79	0.8869	22.0	18.3	9.3
869	Other infectious & parasitic diseases diagnoses w/o CC/MCC.	11	0.5472	20.3	16.9	6.8
870	Septicemia w MV 96+ hours	588	1.9505	30.5	25.4	23.6
871	Septicemia w/o MV 96+ hours w MCC	3,883	0.8299	23.5	19.6	13.0
872	Septicemia w/o MV 96+ hours w/o MCC	1,543	0.7340	21.9	18.3	9.1
876	O.R. procedure w principal diagnoses of mental illness	5	0.7305	22.9	19.1	19.1
880	Acute adjustment reaction & psychosocial dysfunction	19	0.5472	20.3	16.9	5.0
881	Depressive neuroses	15	0.5472	20.3	16.9	6.6
882	Neuroses except depressive	16	0.5472	20.3	16.9	6.9
883	Disorders of personality & impulse control	15	0.5472	20.3	16.9	11.8
884	Organic disturbances & mental retardation	200	0.4883	23.3	19.4	8.3

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
885	Psychoses	1,390	0.4140	23.8	19.8	12.3
886	Behavioral & developmental disorders	18	0.5472	20.3	16.9	9.4
887	Other mental disorder diagnoses	0	0.5472	20.3	16.9	7.1
894	Alcohol/drug abuse or dependence, left ama	1	0.5472	20.3	16.9	4.5
895	Alcohol/drug abuse or dependence w rehabilitation therapy.	1	0.5472	20.3	16.9	16.8
896	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC.	10	0.8249	25.0	20.8	10.6
897	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC.	23	0.5472	20.3	16.9	6.4
901	Wound debridements for injuries w MCC	222	1.3395	35.2	29.3	23.7
902	Wound debridements for injuries w CC	160	1.1605	33.5	27.9	12.9
903	Wound debridements for injuries w/o CC/MCC	23	0.7305	22.9	19.1	7.9
904	Skin grafts for injuries w CC/MCC	90	1.3351	40.8	34.0	18.8
905	Skin grafts for injuries w/o CC/MCC	6	0.7305	22.9	19.1	7.7
906	Hand procedures for injuries	1	0.5472	20.3	16.9	4.9
907	Other O.R. procedures for injuries w MCC	85	1.6622	36.8	30.7	19.4
908	Other O.R. procedures for injuries w CC	45	1.3966	34.1	28.4	11.3
909	Other O.R. procedures for injuries w/o CC/MCC	5	0.8249	25.0	20.8	5.7
913	Traumatic injury w MCC	51	0.8462	26.9	22.4	10.0
914	Traumatic injury w/o MCC	72	0.6448	21.9	18.3	5.3
915	Allergic reactions w MCC	0	0.5472	20.3	16.9	7.5
916	Allergic reactions w/o MCC	1	0.5472	20.3	16.9	3.2
917	Poisoning & toxic effects of drugs w MCC	7	0.7305	22.9	19.1	8.3
918	Poisoning & toxic effects of drugs w/o MCC	6	0.7305	22.9	19.1	4.2
919	Complications of treatment w MCC	1,072	0.9858	26.3	21.9	10.1
920	Complications of treatment w CC	826	0.8518	24.6	20.5	6.8
921	Complications of treatment w/o CC/MCC	95	0.7511	23.0	19.2	4.5
922	Other injury, poisoning & toxic effect diag w MCC	5	0.5472	20.3	16.9	10.0
923	Other injury, poisoning & toxic effect diag w/o MCC	9	0.5472	20.3	16.9	5.0
927	Extensive burns or full thickness burns w MV 96+ hrs w skin graft.	0	1.5545	35.2	29.3	29.3
928	Full thickness burn w skin graft or inhal inj w CC/MCC	10	1.1417	29.0	24.2	24.2
929	Full thickness burn w skin graft or inhal inj w/o CC/MCC	1	0.7305	22.9	19.1	13.1
933	Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft.	7	1.5545	35.2	29.3	8.5
934	Full thickness burn w/o skin grft or inhal inj	48	0.6998	24.2	20.2	11.1
935	Non-extensive burns	40	0.7525	24.9	20.8	8.8
939	O.R. proc w diagnoses of other contact w health services w MCC.	381	1.2500	33.8	28.2	18.9
940	O.R. proc w diagnoses of other contact w health services w CC.	212	1.1066	33.8	28.2	10.5
941	O.R. proc w diagnoses of other contact w health services w/o CC/MCC.	36	0.9719	28.8	24.0	4.8
945	Rehabilitation w CC/MCC	2,241	0.5867	22.2	18.5	16.3
946	Rehabilitation w/o CC/MCC	472	0.4935	18.9	15.8	11.7
947	Signs & symptoms w MCC	80	0.6340	22.7	18.9	7.9
948	Signs & symptoms w/o MCC	137	0.5642	23.4	19.5	5.3
949	Aftercare w CC/MCC	4,564	0.6693	22.1	18.4	6.1
950	Aftercare w/o CC/MCC	759	0.5735	18.5	15.4	5.1
951	Other factors influencing health status	38	1.5837	26.2	21.8	5.0
955	Craniotomy for multiple significant trauma	0	1.5545	35.2	29.3	21.9
956	Limb reattachment, hip & femur proc for multiple significant trauma.	1	0.7305	22.9	19.1	14.4
957	Other O.R. procedures for multiple significant trauma w MCC.	3	1.5545	35.2	29.3	29.1
958	Other O.R. procedures for multiple significant trauma w CC.	1	1.1417	29.0	24.2	17.9
959	Other O.R. procedures for multiple significant trauma w/o CC/MCC.	0	1.1417	29.0	24.2	9.9
963	Other multiple significant trauma w MCC	14	1.5545	35.2	29.3	16.5
964	Other multiple significant trauma w CC	10	0.7305	22.9	19.1	10.2
965	Other multiple significant trauma w/o CC/MCC	1	0.5472	20.3	16.9	6.5
969	HIV w extensive O.R. procedure w MCC	10	1.5545	35.2	29.3	29.3
970	HIV w extensive O.R. procedure w/o MCC	0	1.5545	35.2	29.3	15.8
974	HIV w major related condition w MCC	162	0.8908	21.9	18.3	17.5
975	HIV w major related condition w CC	74	0.7492	21.3	17.8	11.5
976	HIV w major related condition w/o CC/MCC	35	0.7382	18.0	15.0	7.7

TABLE 11.—FY 2008 MS–LTC–DRGS, RELATIVE WEIGHTS, GEOMETRIC AVERAGE LENGTH OF STAY, SHORT-STAY OUTLIER THRESHOLD, AND IPPS COMPARABLE THRESHOLD—Continued

MS–LTC–DRG	MS–DRG title	FY 2006 LTCH cases	Relative weight [1]	Geometric average length of stay	Short stay outlier Threshold [2]	IPPS Comparable Threshold [3]
977	HIV w or w/o other related condition	22	0.7305	22.9	19.1	8.3
981	Extensive O.R. procedure unrelated to principal diagnosis w MCC.	1,073	2.2339	42.0	35.0	24.6
982	Extensive O.R. procedure unrelated to principal diagnosis w CC.	282	1.8277	37.6	31.3	16.3
983	Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC.	19	1.1417	29.0	24.2	9.0
984	Prostatic O.R. procedure unrelated to principal diagnosis w MCC.	14	1.5545	35.2	29.3	23.7
985	Prostatic O.R. procedure unrelated to principal diagnosis w CC.	13	1.1417	29.0	24.2	16.6
986	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC.	1	1.1417	29.0	24.2	8.5
987	Non-extensive O.R. proc unrelated to principal diagnosis w MCC.	389	1.6972	37.9	31.6	21.9
988	Non-extensive O.R. proc unrelated to principal diagnosis w CC.	184	1.3386	33.2	27.7	13.2
989	Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC.	19	0.8249	25.0	20.8	6.7
998	Principal diagnosis invalid as discharge diagnosis	0	0.0000	0.0	0.0	0.0
999	Ungroupable	0	0.0000	0.0	0.0	0.0

[1] Transition blended relative weights for FY 2008 determined as described in Step 7 in section II.I.4. of the preamble of this final rule.

[2] The ''short-stay outlier threshold'' is calculated as 5/6ths of the geometric average length of stay of the LTC–DRG (as specified at § 412.529(a), in conjunction with new § 412.503).

[3] The ''IPPS-comparable threshold'' is calculated as one standard deviation from the geometric average length of stay of the same DRG under the IPPS as specified at § 412.529(c)(3)(i). Note, as discussed in the RY 2008 LTCH PPS final rule (72 FR 26907), for some MS–LTC–DRGs, it was sometimes necessary to supplement IPPS hospital statistical data due to a low volume of IPPS cases, and for some MS–LTC–DRGs although IPPS hospital data may be available, a value of zero was assigned. In addition, we note that the ''IPPS comparable threshold'' is only applicable in the context of the payment adjustment for short-stay outliers (SSOs) at § 412.529. A LTCH case that has a covered length of stay that exceeds the ''SSO threshold'' (and therefore is not an SSO case) but is within the value of the ''IPPS comparable threshold'' computed from IPPS statistical data would not be subject to the SSO adjustments at § 412.529. So that it is clear that the ''IPPS comparable threshold'' only applies to LTCH cases that are SSOs, in instances where the value of the ''IPPS comparable threshold'' computed from IPPS statistical data for an MS–LTC–DRG is greater than the ''SSO threshold'' for the same MS–LTC–DRG, in this table we have substituted the computed value of the ''IPPS comparable threshold'' for the MS–LTC–DRG with the value of the ''SSO threshold'' (in column 6) for the same MS–LTC–DRG.

Appendix A—Regulatory Impact Analysis

I. Overall Impact

We have examined the impacts of this final rule with comment period as required by Executive Order 12866 (September 1993, Regulatory Planning and Review) and the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96–354), section 1102(b) of the Social Security Act, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4), and Executive Order 13132.

Executive Order 12866 (as amended by Executive Order 13258, which merely reassigns responsibility of duties, and Executive Order 13422) directs agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). A regulatory impact analysis (RIA) must be prepared for major rules with economically significant effects ($100 million or more in any 1 year).

We have determined that this rule is a major rule as defined in 5 U.S.C. 804(2). We estimate that the changes for FY 2008 operating and capital payments will redistribute in excess of $100 million among different types of inpatient cases. The market basket update to the IPPS rates required by the statute, in conjunction with other payment changes in this final rule with comment period, will result in an approximate $3.8 billion increase in FY 2008 operating and capital payments. This amount does not reflect changes in hospital admissions or case-mix intensity in operating PPS payments, which will also affect overall payment changes. It does assume that the −1.2 percent adjustment to the IPPS standardized amounts for adoption of the MS–DRGs will be completely offset by increases in case-mix that are the result of documentation and coding changes and not real increases in patient severity of illness.

The RFA requires agencies to analyze options for regulatory relief of small businesses. For purposes of the RFA, small entities include small businesses, nonprofit organizations, and government agencies. Most hospitals and most other providers and suppliers are considered to be small entities, either by nonprofit status or by having revenues of $31.5 million or less in any 1 year. (For details on the latest standards for heath care providers, we refer readers to page 33 of the Table of Small Business Size Standards at the Small Business Administration Web site at: *http://www.sba.gov/services/contractingopportunities/sizestandardstopics/tableofsize/index.html.*) For purposes of the RFA, all hospitals and other providers and suppliers are considered to be small entities. Individuals and States are not included in the definition of a small entity. We believe that this final rule with comment period will have a significant impact on small entities as explained in this Appendix. Because we acknowledge that many of the affected entities are small entities, the analysis discussed throughout the preamble of this final rule with comment period constitutes our final regulatory flexibility analysis. In the proposed rule, we solicited comments on our estimates and analysis of the impact of the proposed rule on those small entities. We address any public comments that we received on the impact of the changes we are finalizing in the applicable sections of this appendix.

In addition, section 1102(b) of the Act requires us to prepare a regulatory impact analysis for any proposed or final rule that may have a significant impact on the operations of a substantial number of small rural hospitals. This analysis must conform to the provisions of section 604 of the RFA. With the exception of hospitals located in certain New England counties, for purposes of section 1102(b) of the Act, we now define a small rural hospital as a hospital that is located outside of an urban area and has fewer than 100 beds. Section 601(g) of the

Social Security Amendments of 1983 (Pub. L. 98–21) designated hospitals in certain New England counties as belonging to the adjacent urban area. Thus, for purposes of the IPPS, we continue to classify these hospitals as urban hospitals.

Section 202 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) also requires that agencies assess anticipated costs and benefits before issuing any rule whose mandates require spending in any 1 year of $100 million in 1995 dollars, updated annually for inflation. That threshold level is currently approximately $120 million. This final rule with comment period will not mandate any requirements for State, local, or tribal governments, nor will it affect private sector costs.

Executive Order 13132 establishes certain requirements that an agency must meet when it promulgates a proposed rule (and subsequent final rule) that imposes substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications. As stated above, this final rule with comment period would not have a substantial effect on State and local governments.

The following analysis, in conjunction with the remainder of this document, demonstrates that this rule is consistent with the regulatory philosophy and principles identified in Executive Order 12866, the RFA, and section 1102(b) of the Act. The rule will affect payments to a substantial number of small rural hospitals, as well as other classes of hospitals, and the effects on some hospitals may be significant.

II. Objectives

The primary objective of the IPPS is to create incentives for hospitals to operate efficiently and minimize unnecessary costs while at the same time ensuring that payments are sufficient to adequately compensate hospitals for their legitimate costs. In addition, we share national goals of preserving the Medicare Hospital Insurance Trust Fund.

We believe the changes in this final rule with comment period will further each of these goals while maintaining the financial viability of the hospital industry and ensuring access to high quality health care for Medicare beneficiaries. We expect that these changes will ensure that the outcomes of this payment system are reasonable and equitable while avoiding or minimizing unintended adverse consequences.

III. Limitations of Our Analysis

The following quantitative analysis presents the projected effects of our policy changes, as well as statutory changes effective for FY 2008, on various hospital groups. We estimate the effects of individual policy changes by estimating payments per case while holding all other payment policies constant. We use the best data available, but, generally, we do not attempt to make adjustments for future changes in such variables as admissions, lengths of stay, or case-mix. However, we believe that adoption of the MS–DRGs in this final rule with comment period will create a risk of increased aggregate levels of payment as a result of more comprehensive documentation and coding. As explained earlier in this final rule with comment period, the Secretary has broad discretion under section 1886(d)(3)(A)(vi) of the Act to adjust the standardized amount so as to eliminate the effect of changes in coding or classification of discharges that do not reflect real changes in case-mix. Using this authority, the Medicare Actuary estimates that a negative adjustment of 4.8 percent will be necessary to maintain budget neutrality for the transition to the MS–DRGs. However, with the 2-year implementation of the MS–DRG system, the 4.8 percent adjustment will be made over 3 years. Therefore, we are reducing the IPPS standardized amount by 1.2 percent for FY 2008. We will revisit the adjustment in 2 years if projected and actual data are different. The payment impacts shown below illustrate the impact of changes in hospital payment, including the −1.2 percent adjustment to the IPPS standardized amounts both prior to and following the estimated growth in case-mix. As we had done in the previous rules, we solicited comments and information about the anticipated effects of the proposed changes on hospitals and our methodology for estimating them.

IV. Hospitals Included In and Excluded From the IPPS

The prospective payment systems for hospital inpatient operating and capital related costs encompass most general short-term, acute care hospitals that participate in the Medicare program. There were 35 Indian Health Service hospitals in our database, which we excluded from the analysis due to the special characteristics of the prospective payment methodology for these hospitals. Among other short term, acute care hospitals, only the 46 such hospitals in Maryland remain excluded from the IPPS under the waiver at section 1814(b)(3) of the Act.

As of July 2007, there are 3,534 IPPS hospitals to be included in our analysis. This represents about 59 percent of all Medicare-participating hospitals. The majority of this impact analysis focuses on this set of hospitals. There are also approximately 1,286 CAHs. These small, limited service hospitals are paid on the basis of reasonable costs rather than under the IPPS. There are also 1,198 specialty hospitals and 2,262 specialty units that are excluded from the IPPS. These specialty hospitals include IPFs, IRFs, LTCHs, RNHCIs, children's hospitals, and cancer hospitals. Changes in payments for IPFs and IRFs are made through other separate rulemaking. Payment impacts for these specialty hospitals and units, other than the reasonable cost-based updates for IPFs paid under a blend, are not included in this final rule with comment period. There is also a separate rule to update and make changes to the LTCH PPS for its July 1 to June 30 rate year. However, we have traditionally used the IPPS rule to update the LTCH relative weights because the LTCH PPS uses the same DRGs as the IPPS, resulting in the LTCH relative weights being recalibrated according to the same schedule as the IPPS (that is, for each Federal fiscal year). The impacts of our policy changes on LTCHs, where applicable, are discussed below.

V. Effects on Excluded Hospitals and Hospital Units

As of July 2007, there were 1,198 hospitals excluded from the IPPS. Of these 1,187 hospitals, 485 IPFs, 4 LTCHs, 82 children's hospitals, 11 cancer hospitals, and 15 RNHCIs are either being paid, on a reasonable cost basis or have a portion of the PPS payment based on reasonable cost principles subject to the rate-of-increase ceiling under § 413.40. The remaining providers, 215 IRFs and 386 LTCHs, are paid 100 percent of the Federal prospective rate under the IRF PPS and the LTCH PPS, respectively. As stated above, IRFs and IPFs that are not under a transition period are not affected by this final rule with comment period. (IPFs under a transition period do have a portion of their PPS payment based on reasonable cost principles and thus are affected by this final rule with comment period.) The impacts of the changes to LTCHs are discussed separately below. In addition, there are 1,276 IPFs co-located in hospitals otherwise subject to the IPPS, paid on a blend of the IPF PPS per diem payment and the reasonable cost-based payment and 986 IRFs (paid under the IRF PPS) co-located in hospitals otherwise subject to the IPPS. Under § 413.40(a)(2)(i)(A), the rate-of-increase ceiling is not applicable to the 93 IPPS excluded hospitals and units in Maryland that are paid in accordance with the waiver at section 1814(b)(3) of the Act.

In the past, hospitals and units excluded from the IPPS have been paid based on their reasonable costs subject to limits as established by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Hospitals that continue to be paid fully on a reasonable cost basis are subject to TEFRA limits for FY 2008. For these hospitals (cancer and children's hospitals), consistent with section 1886(b)(3)(B)(ii) of the Act, the update is the percentage increase in the FY 2008 IPPS operating market basket, which is 3.3 percent, based on Global Insights, Inc.'s 2007 second quarter forecast of the IPPS operating market basket increase. In addition, in accordance with § 403.752(a) of the regulations, RNHCIs are paid under § 413.40, which also uses section 1886(b)(3)(B)(ii) of the Act to update target amounts by the rate-of-increase percentage. For RNHCIs, the update is the percentage increase in the FY 2008 IPPS operating market basket increase, which is 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the IPPS operating market basket increase.

Effective for cost reporting periods beginning on or after October 1, 2002, LTCHs that elected to be paid based on 100 percent of the LTCH PPS are paid, based on a Federal prospective payment amount that is updated annually. Existing LTCHs received a PPS blended payment that consisted of the Federal prospective payment rate and a reasonable cost-based payment rate over a 5-year transition period, unless the LTCH elected to be paid at 100 percent of the Federal prospective rate at the beginning of any of its cost reporting periods during the 5-year transition period. In accordance with § 412.533, for cost reporting periods beginning on or after October 1, 2006, the LTCH PPS transition blend percentages are

100 percent of the Federal prospective payment amount and zero percent of the PPS amount calculated under reasonable cost principles. FY 2007 was the fifth year of the 5-year transition period established under § 412.533. Because the reasonable cost-based amount is zero percent for cost reporting periods beginning during FY 2008, no LTCH will have a portion of its PPS payment that is based in part on reasonable cost subject to the rate-of-increase ceiling during FY 2008 or thereafter. Thus, there is no longer a need for an update factor for LTCHs' TEFRA target amount for FY 2008.

The final rule implementing the IPF PPS (69 FR 66922) established a 3-year transition to the IPF PPS during which some providers will received a blend of the IPF PPS per diem payment and the TEFRA reasonable cost-based payment. Under this final rule with comment period, the FY 2008 rate-of-increase percentage that is applied to FY 2007 target amounts in order to calculate FY 2008 target amounts is 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the excluded hospital market basket increase.

The impact on excluded hospitals and hospital units of the update in the rate-of-increase limit depends on the cumulative cost increases experienced by each excluded hospital or unit since its applicable base period. For excluded hospitals and units that have maintained their cost increases at a level below the rate-of-increase limits since their base period, the major effect is on the level of incentive payments these hospitals and hospital units receive. Conversely, for excluded hospitals and hospital units with per case cost increases above the cumulative update in their rate-of-increase limits, the major effect is the amount of excess costs that will not be reimbursed.

We note that, under § 413.40(d)(3), an excluded hospital or unit whose costs exceed 110 percent of its rate-of-increase limit receives its rate-of-increase limit plus 50 percent of the difference between its reasonable costs and 110 percent of the limit, not to exceed 110 percent of its limit. In addition, under the various provisions set forth in § 413.40, certain excluded hospitals and hospital units can obtain payment adjustments for justifiable increases in operating costs that exceed the limit.

VI. Quantitative Effects of the Policy Changes Under the IPPS for Operating Costs

A. Basis and Methodology of Estimates

In this final rule with comment period, we are announcing policy changes and payment rate updates for the IPPS for operating costs. Changes to the capital payments are discussed in section VIII. of this Appendix.

Based on the overall percentage change in payments per case estimated using our payment simulation model, we estimate that total FY 2008 operating payments will increase 3.5 percent compared to FY 2007, largely due to the statutorily mandated update to the IPPS rates. This amount reflects an adjustment of −1.2 percent to the IPPS standardized amounts to offset an anticipated increase in payments resulting from improved documentation and coding that does not represent real increases in underlying resource demands and patient acuity due to the adoption of MS–DRGs. The impacts do not illustrate changes in hospital admissions or real case-mix intensity, which will also affect overall payment changes.

We have prepared separate impact analyses of the changes to each system. This section deals with changes to the operating prospective payment system. Our payment simulation model relies on the most recent available data to enable us to estimate the impacts on payments per case of certain changes in this final rule with comment period. However, there are other changes for which we do not have data available that would allow us to estimate the payment impacts using this model. For those changes, we have attempted to predict the payment impacts based upon our experience and other more limited data.

The data used in developing the quantitative analyses of changes in payments per case presented below are taken from the FY 2006 MedPAR file and the most current Provider-Specific File that is used for payment purposes. Although the analyses of the changes to the operating PPS do not incorporate cost data, data from the most recently available hospital cost report were used to categorize hospitals. Our analysis has several qualifications. First, in this analysis, we do not make adjustments for future changes in such variables as admissions, lengths of stay, or underlying growth in real case-mix. Second, due to the interdependent nature of the IPPS payment components, it is very difficult to precisely quantify the impact associated with each change. Third, we use various sources for the data used to categorize hospitals in the tables. In some cases, particularly the number of beds, there is a fair degree of variation in the data from different sources. We have attempted to construct these variables with the best available source overall. However, for individual hospitals, some miscategorizations are possible.

Using cases from the FY 2006 MedPAR file, we simulated payments under the operating IPPS given various combinations of payment parameters. Any short-term, acute care hospitals not paid under the IPPS (Indian Health Service hospitals and hospitals in Maryland) were excluded from the simulations. The impact of payments under the capital IPPS, or the impact of payments for costs other than inpatient operating costs, are not analyzed in this section. Estimated payment impacts of FY 2008 changes to the capital IPPS are discussed in section VIII. of this Appendix.

The changes discussed separately below are the following:

- The effects of the annual reclassification of diagnoses and procedures, transition to the MS–DRG system, the recalibration of the DRG relative weights (including the expansion to 15 charge to cost ratios) as required by section 1886(d)(4)(C) of the Act.
- The effects of the changes in hospitals' wage index values reflecting wage data from hospitals' cost reporting periods beginning during FY 2004, compared to the FY 2003 wage data.
- The effects of the wage and recalibration budget neutrality factors.
- The effects of the expiration of the labor market area transition for those hospitals that were urban under the old labor market area designations and are now considered rural hospitals.
- The effects of geographic reclassifications by the MGCRB that will be effective in FY 2008.
- The effects of the adjustment to the application of the rural floor budget neutrality provision on the wage index instead of on the standardized amount.
- The effects of application of an imputed rural floor to States that have no rural areas and to States that have rural areas but no IPPS hospitals are located in those areas (69 FR 49109).
- The effects of the September 30, 2007 expiration of section 508 of Pub. L. 108–173, which allowed qualifying hospitals to appeal the wage index classification otherwise applicable to the hospital and apply for reclassification to another area of the State in which the hospital is located (or, at the discretion of the Secretary, to an area within a contiguous State).
- The effects of section 505 of Pub. L. 108–173, which provides for an increase in a hospital's wage index if the hospital qualifies by meeting a threshold percentage of residents of the county where the hospital is located who commute to work at hospitals in counties with higher wage indexes.
- The effect of the budget neutrality adjustment being made for the adoption of the MS–DRGs under section 1886(d)(3)(A)(iv) of the Act for the change in aggregate payments that is a result of changes in the coding or classification of discharges that do not reflect real changes in case-mix.
- The total estimated change in payments based on FY 2008 policies relative to payments based on FY 2007 policies.

To illustrate the impacts of the FY 2008 changes, our analysis begins with a FY 2007 baseline simulation model using: the FY 2008 update of 3.3 percent; the FY 2007 DRG GROUPER (Version 24.0); the most current CBSA designations for hospitals based on OMB's MSA definitions; the FY 2007 wage index; and no MGCRB reclassifications. Outlier payments are set at 5.1 percent of total operating DRG and outlier payments.

Section 1886(b)(3)(B)(viii) of the Act, as added by section 5001(a) of Pub. L. 109–171, provides that for FY 2007 and subsequent years, the update factor will be reduced by 2.0 percentage points for any hospital that does not submit quality data in a form and manner and at a time specified by the Secretary. At the time this impact was prepared, 146 providers did not receive the full market basket rate-of-increase for FY 2007 because they failed the quality data submission process. For purposes of the simulations shown below, we modeled the payment changes for FY 2008 using a reduced update for these 146 hospitals. However, we do not have enough information to determine which hospitals will not receive the full market basket rate-of-increase for FY 2008 at this time.

Each policy change, statutorily or otherwise, is then added incrementally to this baseline, finally arriving at an FY 2008 model incorporating all of the changes. This simulation allows us to isolate the effects of each change.

Our final comparison illustrates the percent change in payments per case from FY 2007 to FY 2008. Three factors not discussed separately have significant impacts here. The first is the update to the standardized amount. In accordance with section 1886(b)(3)(B)(i) of the Act, we are updating the standardized amounts for FY 2008 using the most recently forecasted hospital market basket increase for FY 2008 of 3.3 percent. (Hospitals that fail to comply with the quality data submission requirements to receive the full update will receive an update reduced by 2.0 percentage points to 1.3 percent.) Under section 1886(b)(3)(B)(iv) of the Act, the updates to the hospital-specific amounts for SCHs and for MDHs are also equal to the market basket increase, or 3.3 percent.

A second significant factor that affects the changes in hospitals' payments per case from FY 2007 to FY 2008 is the change in a hospital's geographic reclassification status from one year to the next. That is, payments may be reduced for hospitals reclassified in FY 2007 that are no longer reclassified in FY 2008. Conversely, payments may increase for hospitals not reclassified in FY 2007 that are reclassified in FY 2008. Particularly with the expiration of section 508 of Pub. L. 108–173, the reclassification provision, these impacts can be quite substantial, so if a relatively small number of hospitals in a particular category lose their reclassification status, the percentage change in payments for the category may be below the national mean.

A third significant factor is that we currently estimate that actual outlier payments during FY 2007 will be 4.6 percent of total DRG payments. When the FY 2007 final rule was published, we projected FY 2007 outlier payments would be 5.1 percent of total DRG plus outlier payments; the average standardized amounts were offset correspondingly. The effects of the lower than expected outlier payments during FY 2008 (as discussed in the Addendum to this final rule with comment period) are reflected in the analyses below comparing our current estimates of FY 2007 payments per case to estimated FY 2008 payments per case (with outlier payments projected to equal 5.1 percent of total DRG payments).

B. Analysis of Table I

Table I displays the results of our analysis of the changes for FY 2008. The table categorizes hospitals by various geographic and special payment consideration groups to illustrate the varying impacts on different types of hospitals. The top row of the table shows the overall impact on the 3,534 hospitals included in the analysis.

The next four rows of Table I contain hospitals categorized according to their geographic location: All urban, which is further divided into large urban and other urban; and rural. There are 2,539 hospitals located in urban areas included in our analysis. Among these, there are 1,406 hospitals located in large urban areas (populations over 1 million), and 1,133 hospitals in other urban areas (populations of 1 million or fewer). In addition, there are 995 hospitals in rural areas. The next two groupings are by bed-size categories, shown separately for urban and rural hospitals. The final groupings by geographic location are by census divisions, also shown separately for urban and rural hospitals.

The second part of Table I shows hospital groups based on hospitals' FY 2008 payment classifications, including any reclassifications under section 1886(d)(10) of the Act. For example, the rows labeled urban, large urban, other urban, and rural show that the number of hospitals paid based on these categorizations after consideration of geographic reclassifications (including reclassifications under section 1886(d)(8)(B) and section 1886(d)(8)(E) of the Act that have implications for capital payments) are 2,578, 1,425, 1,153 and 956, respectively.

The next three groupings examine the impacts of the changes on hospitals grouped by whether or not they have GME residency programs (teaching hospitals that receive an IME adjustment) or receive DSH payments, or some combination of these two adjustments. There are 2,480 nonteaching hospitals in our analysis, 815 teaching hospitals with fewer than 100 residents, and 239 teaching hospitals with 100 or more residents.

In the DSH categories, hospitals are grouped according to their DSH payment status, and whether they are considered urban or rural for DSH purposes. The next category groups together hospitals considered urban after geographic reclassification, in terms of whether they receive the IME adjustment, the DSH adjustment, both, or neither.

The next five rows examine the impacts of the changes on rural hospitals by special payment groups (SCHs, RRCs, and MDHs), as well as rural hospitals not receiving a special payment designation. There were 194 RRCs, 367 SCHs, 150 MDHs, 99 hospitals that are both SCHs and RRCs, and 8 hospitals that are both an MDH and an RRC.

The next series of groupings concern the geographic reclassification status of hospitals. The first grouping displays all urban hospitals that were reclassified by the MGCRB for FY 2008. The second grouping shows the MGCRB rural reclassifications.

The final two groupings are based on the type of ownership and the hospital's Medicare utilization expressed as a percent of total patient days. These data were taken from the FY 2004 Medicare cost reports.

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 2008

	Number of Hospitals [1]	FY 2008 Transitional 2/3 Cost 1/3 Charge Weights & DRG Changes [2]	FY 2008 Wage Data [3]	FY 2008 DRG, Rel. Wts. and Wage Index Changes [4]	FY 2008 Wage Index Expiration for the Transition for Hospitals Moving from Urban to Rural [5]	FY 2008 MGCRB Reclassifications [6]	Application of the Rural Floor [7]	Application of Imputed Rural Floor [8]	Expiration of Section 508 Provider Reclassification [9]	FY 2008 Out-Migration Adjustment [10]	All FY 2008 Changes w/ CMI Adjustment Prior to Estimated Growth [11]	All FY 2008 Changes w/ CMI Adjustment and Estimated Growth [12]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
All Hospitals	3534	0.4	−0.1	0	0	0	0	0	−0.1	0	2.3	3.5
By Geographic Location:												
Urban hospitals	2539	0.5	−0.1	0.1	0	−0.2	0	0	−0.1	0	2.6	3.9
Large urban areas	1406	0.9	−0.1	0.4	0	−0.3	0	0	−0.1	0	3.1	4.3
Other urban areas	1133	0.1	0	−0.2	0	−0.1	0.1	0	−0.2	0	2	3.2
Rural hospitals	995	−0.9	−0.1	−1.2	−0.2	1.8	−0.1	0	0	0.1	0	1.2
Bed Size (Urban):												
0–99 beds	630	−0.4	0	−0.6	−0.1	−0.4	0.1	0	−0.2	0	0.8	2.1
100–199 beds	851	0.6	0	0.3	0	−0.2	0.1	0	−0.2	0	2.3	3.6
200–299 beds	480	0.5	0	0.1	0	−0.2	0	0	−0.1	0	2.4	3.7
300–499 beds	411	0.6	0	0.2	0	−0.2	0	0	−0.1	0	3	4.2
500 or more beds	167	0.7	−0.3	0.1	0	−0.3	−0.1	−0.1	−0.1	0	2.9	4.1
Bed Size (Rural):												
0–49 beds	337	−1.8	−0.1	−1.9	−0.1	0.5	−0.1	0	−0.1	0.2	−1.6	−0.4
50–99 beds	372	−1.2	−0.1	−1.4	−0.1	1	−0.1	0	0	0.1	−0.3	0.9
100–149 beds	173	−0.8	0	−1.1	−0.4	2.3	−0.1	0	0	0.1	0.4	1.6
150–199 beds	68	−0.5	0	−0.8	0	2.5	−0.1	0	0	0	0.3	1.5
200 or more beds	45	−0.5	−0.1	−0.8	0	2.7	−0.1	0	0	0	0.9	2.1
Urban by Region:												
New England	122	0.1	0.5	0.3	0	0.5	0.9	−0.1	−0.2	0.1	2.4	3.6
Middle Atlantic	350	0.6	−0.3	−0.1	0	0.2	−0.2	0.3	−0.5	0	2.3	3.5
South Atlantic	390	0.6	−0.1	0.1	0	−0.4	−0.1	−0.1	0	0	2.7	4
East North Central	395	0.6	−0.2	0.1	0	−0.3	−0.1	−0.1	−0.1	0	2.4	3.7
East South Central	166	0.1	−0.4	−0.6	0	−0.3	−0.1	−0.1	0	0	2.1	3.3
West North Central	157	0	0.1	−0.2	0	−0.7	−0.2	−0.1	0	0	2.2	3.5
West South Central	355	0.7	−0.3	0.1	0	−0.6	−0.1	−0.1	0	0	2.6	3.8
Mountain	153	0.6	0	0.3	−0.1	−0.2	−0.1	−0.1	0	0	2.3	3.6
Pacific	398	0.9	0.5	1.1	0	−0.3	0.6	−0.1	−0.1	0	3.9	5.2
Puerto Rico	53	1.1	−0.3	0.4	0	−0.6	−0.1	0	0	0	2.9	4.2
Rural by Region:												
New England	23	−0.8	−1.2	−2.2	0	2.6	−0.1	0	0	0	0	1.2
Middle Atlantic	72	−1	0.2	−1	0.2	1.9	−0.1	0	−0.1	0	−0.2	1
South Atlantic	173	−0.4	−0.1	−0.8	−0.2	2.1	−0.1	0	0	0.1	0.8	2
East North Central	122	−1	0.1	−1.1	−0.1	1.3	−0.1	0	0	0.1	−0.1	1.1
East South Central	177	−0.9	−0.3	−1.4	−0.2	2.3	−0.2	−0.1	0	0.1	0.5	1.7
West North Central	115	−1.1	0	−1.2	0	1.2	−0.1	0	0	0	−0.2	1
West South Central	199	−1.4	−0.2	−1.8	−0.5	2.2	−0.1	0	0	0.1	−1.3	−0.1
Mountain	77	−0.8	0.2	−0.6	0	0.5	−0.1	0	0	0	−0.3	0.9
Pacific	37	−0.7	0.8	−0.1	0	1.7	−0.1	0	−0.2	0	1.3	2.5
By Payment Classification:												
Urban hospitals	2578	0.5	−0.1	0.1	0	−0.2	0	0	−0.1	0	2.6	3.8
Large urban areas	1425	0.8	−0.1	0.4	0	−0.3	0	0	−0.1	0	3.1	4.3
Other urban areas	1153	0.1	0	−0.2	0	0	0.1	0	−0.2	0	2	3.2
Rural areas	956	−0.9	−0.1	−1.2	−0.2	1.7	−0.1	0	−0.1	0.1	0	1.2
Teaching Status:												
Nonteaching	2480	0.1	0	−0.2	0	0.2	0.1	0	−0.1	0	1.8	3
Fewer than 100 residents	815	0.4	−0.1	0	0	−0.1	0	0	−0.1	0	2.4	3.7
100 or more residents	239	0.9	−0.2	0.3	0	−0.2	−0.1	0	−0.2	0	3.2	4.4
Urban DSH:												
Non-DSH	859	0	−0.2	−0.5	0	−0.1	0	0.1	−0.2	0	1.6	2.8

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 2008—Continued

	Number of Hospitals [1]	FY 2008 Transitional 2/3 Cost 1/3 Charge Weights & DRG Changes [2]	FY 2008 Wage Data [3]	FY 2008 DRG, Rel. Wts. and Wage Index Changes [4]	FY 2008 Wage Index Expiration for the Transition for Hospitals Moving from Urban to Rural [5]	FY 2008 MGCRB Reclassifications [6]	Application of the Rural Floor [7]	Application of Imputed Rural Floor [8]	Expiration of Section 508 Provider Reclassification [9]	FY 2008 Out-Migration Adjustment [10]	All FY 2008 Changes w/ CMI Adjustment Prior to Estimated Growth [11]	All FY 2008 Changes w/ CMI Adjustment and Estimated Growth [12]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
100 or more beds	1512	0.7	0	0.3	0	−0.2	0	0	−0.1	0	2.9	4.1
Less than 100 beds	355	−0.2	0.2	−0.3	−0.1	−0.1	0.1	−0.1	−0.1	0	1.7	3
Rural DSH:												
SCH	384	−1.4	0	−1.5	0	0.2	0	0	0	0.1	−0.8	0.4
RRC	203	−0.5	0	−0.8	−0.2	2.9	−0.1	0	−0.1	0	0.6	1.8
100 or more beds	46	−0.3	−0.1	−0.8	−0.8	1.5	−0.2	−0.1	−0.1	0.3	1.3	2.5
Less than 100 beds	175	−1.1	−0.1	−1.4	−0.4	1.2	−0.2	−0.1	−0.1	0.3	0.2	1.5
Urban teaching and DSH:												
Both teaching and DSH	807	0.7	−0.1	0.3	0	−0.3	0	0	−0.1	0	3	4.2
Teaching and no DSH	186	0.1	−0.3	−0.5	0	0	−0.1	0.1	−0.4	0.1	1.9	3.1
No teaching and DSH	1060	0.5	0.1	0.3	0	−0	0.1	0	0	0	2.5	3.8
No teaching and no DSH	525	0.1	−0.1	−0.3	0	−0.3	0	0	−0.1	0	1.6	2.9
Special Hospital Types:												
RRC	194	−0.3	−0.1	−0.7	−0.2	3.2	−0.1	−0.1	0	0	1.5	2.7
SCH	367	−1.4	0	−1.4	−0.1	0.1	0	0	0	0	−1	0.2
MDH	150	−1.6	−0.1	−1.8	0	0.3	−0.1	0	0	0.1	−0.6	0.6
SCH and RRC	99	−0.8	0	−0.9	0	0.7	−0.1	0	0	0	−0.4	0.8
MDH and RRC	8	−1.5	0	−1.5	0	0.8	−0	0	0	0	−1.1	0.1
Type of Ownership:												
Voluntary	2064	0.4	−0.1	−0.1	0	0	0	0	−0.1	0	2.2	3.5
Proprietary	823	0.5	0.1	0.3	0	0	0	0	−0.1	0	2.6	3.9
Government	597	0.4	0.1	0.2	0	−0	0.1	−0.1	0	0	2.4	3.6
Medicare Utilization as a Percent of Inpatient Days:												
0–25	230	1.5	0	1.2	0	−0.3	−0.1	−0.1	0	0	4.2	5.5
25–50	1289	0.7	0	0.3	0	−0.3	0	0	−0.1	0	3	4.3
50–65	1451	0	−0.1	−0.4	0	0.4	0	0	−0.1	0	1.6	2.9
Over 65	440	−0.7	−0.2	−1.2	0	0.4	−0.1	0	−0.3	0	0.5	1.8
FY 2008 Reclassifications by the Medicare Geographic Classification Review Board:												
All Reclassified Hospitals	757	0.1	0	−0.2	−0.1	2.2	−0.1	0	−0.2	0	1.8	3.1
Non-Reclassified Hospitals	2777	0.5	−0.1	0.1	0	−0.6	0	0	−0.1	0	2.5	3.7
Urban Hospitals Reclassified	393	0.5	0	0.1	0	2	−0.1	0	−0.3	0	2.4	3.6
Urban Nonreclassified, FY 2008:	2145	0.6	−0.1	0.1	0	−0.7	0	0	−0.1	0	2.7	3.9
All Rural Hospitals Reclassified Full Year FY 2008:	364	−0.7	0	−1	−0.2	2.9	−0.1	0	0	0	0.6	1.8

Rural Nonreclassified Hospitals Full Year FY 2008:	569	−1.2	−0.2	−1.5	−0.1	−0.2	−0.1	0	−0.1	0.2	−1	0.2
All Section 401 Reclassified Hospitals:	29	−0.8	0.1	−0.8	0	−0.8	−0	0	−0.6	0	−0.9	0.3
Other Reclassified Hospitals (Section 1886(d)(8)(B))	63	−0.7	−0.3	−1.3	0	3.3	−0.1	0	0	0	0.7	1.9
Former 508 Hospitals	107	0.5	−0.5	−0.3	0	0.4	−0.1	0	−2.5	0.1	−0.7	0.5
Specialty Hospitals.												
Cardiac specialty Hospitals	22	−2.5	−0.3	−2.9	0	−0.7	0.1	−0.1	0	0	−0.3	0.9

[1] Because data necessary to classify some hospitals by category were missing, the total number of hospitals in each category may not equal the national total. Discharge data are from FY 2006, and hospital cost report data are from reporting periods beginning in FY 2005 and FY 2004.

[2] This column displays the payment impact of the changes to the V25 GROUPER and the recalibration of the DRG weights based on FY 2006 MedPAR data in accordance with section 1886(d)(4)(C)(iii) of the Act.

[3] This column displays the payment impact of updating the wage index data to the FY 2004 cost report data.

[4] This column displays the payment impact of the budget neutrality factor for DRG and wage index changes in accordance with section 1886(d)(4)(C)(iii) of the Act and section 1886(d)(3)(E) of the Act.

[5] Shown here are the effects of the end of the three-year provision where rural hospitals that were formerly located in urban areas will now receive the wage index of the MSA that they are currently located in for FY 2008.

[6] Shown here are the effects of geographic reclassifications by the Medicare Geographic Classification Review Board (MGCRB). The effects demonstrate the FY 2008 payment impact of going from no reclassifications to the reclassifications scheduled to be in effect for FY 2008. Reclassification for prior years has no bearing on the payment impacts shown here. This column reflects the geographic budget neutrality factor of 0.991695.

[7] This column displays the effects of the changes in the rural floor budget neutrality adjustment applied on the wage index instead of on the standardized amount. The column reflects a rural floor budget neutrality factor of 0.996660.

[8] This column displays the payment impact of the application of the imputed rural floor applied to the wage index for providers located in states without rural areas.

[9] This column displays the payment impact of the expiration of section 508 of Pub. L. 108–17, which had allowed qualifying hospitals to reclassify to receive the wage index of another area in their state.

[10] This column displays the impact of section 505 of Pub. L. 108–173, which provides for an increase in a hospitals wage index if the hospital qualifies by meeting a threshold percentage of residents of the county where the hospital is located who commute to work at hospitals in counties with higher wage indexes.

[11] This column shows changes in payments from FY 2007 to FY 2008 including a 0.988 case mix index adjustment for coding and documentation improvements that are anticipated with the adoption of the MS-DRGs prior to the estimated growth occurring. It incorporates all of the changes displayed in Columns 4,5 ,6 ,7 ,8, 9,10 and (the changes displayed in Columns 2 and 3 are included in Column 4).

[12] This column shows changes in payments from FY 2007 to FY 2008 with a case-mix index adjustment and the estimated growth for improvements in documentation and coding. It incorporates all of the changes displayed in Columns 4,5 ,6 ,7 ,8, 9,10 and (the changes displayed in Columns 2 and 3 are included in Column 4). It also reflects the impact of the FY 2008 update, and changes in hospitals' reclassification status in FY 2008 compared to FY 2007. The sum of these impacts may be different from the percentage changes shown here due to rounding and interactive effects.

C. Effects of the Changes to the DRG Reclassifications and Relative Cost-Based Weights (Column 2)

In Column 2 of Table I, we present the combined effects of the DRG reclassifications and recalibration, as discussed in section II. of the preamble to this final rule with comment period. Section 1886(d)(4)(C)(i) of the Act requires us annually to make appropriate classification changes in order to reflect changes in treatment patterns, technology, and any other factors that may change the relative use of hospital resources.

As discussed in the preamble of this final rule with comment period, we are continuing the 3-year transition from charge-based to cost-based relative weights. In addition, we are implementing the MS–DRGs in a two year transition that will increase the number of DRGs from 538 to 745. For FY 2008, the first year of the transition, 50 percent of the relative weight for a DRG is based on the two-thirds cost weight/one-third charge weight calculated using FY 2006 MedPAR data grouped to the Version 24.0 (FY 2007) DRGs. The remaining 50 percent of the FY 2008 relative weight for a DRG is based on the two-thirds cost weight/one-third charge weight calculated using FY 2006 MedPAR grouped to the Version 25.0 MS–DRGs. Furthermore, the relative weights have been calculated using 15 cost centers as described in Section H of the preamble whereas the relative weights in FY 2007 were calculated using 13 cost centers. In column 2, we compare aggregate payments using the blended FY 2008 relative weights (⅔ cost, ⅓ charge, 50 percent MS–DRGs and 50 percent CMS DRGs) for the MS–DRGs to the FY 2007 blended relative weights (⅓ cost, ⅔ charge) for the CMS DRGs. The methods of calculating the relative weights and the reclassification changes to the GROUPER are described in more detail in section II.H. of the preamble to this final rule with comment period. We note that, consistent with section 1886(d)(4)(C)(iii) of the Act, we are applying a budget neutrality factor to ensure that the overall payment impact of the DRG changes (combined with the wage index changes) is budget neutral. This budget neutrality factor of 0.996563 is applied to payments in Column 4 and not Column 2 because it is a combined DRG reclassification and recalibration and wage index budget neutrality factor.

The changes to the relative weights and DRGs shown in column 2 are prior to any offset for budget neutrality. The ''All Hospitals'' line indicates that changes in this column will increase payments by 0.4 percent. However, as stated earlier, the changes shown in this column are combined with revisions to the wage index and a single budget neutrality adjustment is made for these changes and shown in column 4. Thus, the impact after accounting only for budget neutrality for changes to the DRG relative weights and classification is somewhat lower than the figures shown in this column (approximately 0.4 percent). We estimate that changes to the relative weights and DRGs will increase payments to hospitals located in large urban areas (populations over 1 million) by approximately 0.9 percent before applying an adjustment for budget neutrality. These changes generally increase payments to hospitals in all urban areas (0.5 percent) and large teaching hospitals (0.9 percent) before applying an adjustment for budget neutrality. Rural hospitals will generally experience a decrease in payments from these changes (−0.9 percent) before applying an adjustment for budget neutrality. Cardiac specialty hospitals would experience the greatest decline in payments (−2.5 percent) before applying an adjustment for budget neutrality from the changes to blended MS–DRGs and the blended relative cost weights.

D. Effects of Wage Index Changes (Column 3)

Section 1886(d)(3)(E) of the Act requires that, beginning October 1, 1993, we annually update the wage data used to calculate the wage index. In accordance with this requirement, the wage index for FY 2008 is based on data submitted for hospital cost reporting periods beginning on or after October 1, 2003 and before October 1, 2004.

The estimated impact of the wage data on hospital payments is isolated in Column 3 by holding the other payment parameters constant in this simulation. That is, Column 3 shows the percentage changes in payments when going from a model using the FY 2007 wage index, based on FY 2003 wage data and having a 100-percent occupational mix adjustment applied, to a model using the FY 2008 pre-reclassification wage index, also having a 100-percent occupational mix adjustment applied, based on FY 2004 wage data. The wage data collected on the FY 2004 cost report include overhead costs for contract labor that were not collected on FY 2003 and earlier cost reports. The impacts below incorporate the effects of the FY 2004 wage data collected on hospital cost reports, including additional overhead costs for contract labor compared to the wage data from FY 2003 cost reports that were used to calculate the FY 2007 wage index.

Column 3 shows the impacts of updating the wage data using FY 2004 cost reports. Overall, the new wage data will lead to a −0.1 percent change for all hospitals before application of the wage and DRG recalibration budget neutrality adjustment shown in column 4. Thus, the figures in this column are approximately 0.1 below what they otherwise would be if they also illustrated a budget neutrality adjustment solely for changes to the wage index. Among the regions, the largest increase is in the rural Pacific region, which experiences a 0.8 percent increase before applying an adjustment for budget neutrality. The largest decline from updating the wage data is seen in rural New England region (a 1.2 percent decrease) before applying an adjustment for budget neutrality. The decrease in the pre-reclassified wage index for rural New England is due to a change in our policy regarding how the wage data for New England deemed county hospitals are treated in the wage index calculation, as discussed in section III.I.10. of the preamble of this final rule with comment period. Also discussed in that section, the policy change does not affect the post-reclassified wage data that are used in setting the IPPS rates and reflected in Tables 4A, 4B, and 4C of the Addendum to this final rule with comment period. Thus, even though the pre-reclassified wage index will decline because of the change we made to our policy with respect to New England deemed counties, it will have no effect under the IPPS because we use the post-reclassified wage indices for payment. However, non-PPS payment systems (SNF, IRF, and HHA, among others) that use the pre-reclassified wage index may be affected by this policy change. However, we are limiting this policy change for New England deemed counties only to IPPS hospitals because it was only addressed in the FY 2008 IPPS proposed rule. Any change to non-PPS provider wage indices will be addressed in the respective payment rules for these payment systems.

In looking at the wage data itself, the national average hourly wage increased 4.3 percent compared to FY 2007. Therefore, the only manner in which to maintain or exceed the previous year's wage index was to match or exceed the national 4.3 percent increase in average hourly wage. Of the 3,475 hospitals with wage data for both FYs 2007 and 2008, 1,712, or 49.3 percent, experienced an average hourly wage increase of 4.3 percent or more.

The following chart compares the shifts in wage index values for hospitals for FY 2008 relative to FY 2007. Among urban hospitals, 40 will experience an increase of more than 5 percent and less than 10 percent and 4 will experience an increase of more than 10 percent. Among rural hospitals, 37 will experience an increase of more than 5 percent and less than 10 percent, and 3 will experience an increase of more than 10 percent. However, 940 rural hospitals will experience increases or decreases of less than 5 percent, while 2,384 urban hospitals will experience increases or decreases of less than 5 percent. Fifty urban hospitals will experience decreases in their wage index values of more than 5 percent and less than 10 percent. Fifteen urban hospitals will experience decreases in their wage index values of greater than 10 percent. Two rural hospitals will experience decreases of more than 5 percent, but less than 10 percent. No rural hospitals will experience decreases of more than 10 percent. These figures are changes in the wage index only which adjusts only 69.7 or 62 percent of a hospital's total payment depending upon whether the wage index is greater or less than 1.0. Therefore, these figures are illustrating a somewhat larger change in the wage index than would occur to the hospital's total payment.

The following chart shows the projected impact for urban and rural hospitals.

Percentage change in area wage index values	Number of hospitals	
	Urban	Rural
Increase more than 10 percent	4	3
Increase more than 5 percent and less than 10 percent	40	37
Increase or decrease less than 5 percent	2,384	940
Decrease more than 5 percent and less than 10 percent	50	2
Decrease more than 10 percent	15	0

E. Combined Effects of DRG and Wage Index Changes (Column 4)

Section 1886(d)(4)(C)(iii) of the Act requires that changes to DRG reclassifications and the relative weights cannot increase or decrease aggregate payments. In addition, section 1886(d)(3)(E) of the Act specifies that any updates or adjustments to the wage index are to be budget neutral. As noted in the Addendum to this final rule with comment period, in determining the budget neutrality factor, we equated simulated aggregate payments for FY 2007 and FY 2008 using the FY 2006 Medicare utilization data after applying the changes to the DRG relative weights and the wage index.

We computed a wage and DRG recalibration budget neutrality factor of 0.996563. The 0.0 percent impact for all hospitals demonstrates that these changes, in combination with the budget neutrality factor, are budget neutral. In Table I, the combined overall impacts of the effects of both the DRG reclassifications and the updated wage index are shown in Column 4. The estimated changes shown in this column reflect the combined effects of the changes in Columns 2 and 3 and the budget neutrality factor for the revised FY 2008 wage index. Due to the changes to the application of the rural floor budget neutrality, this column does not include the wage index floor for urban areas as required by section 4410 of Pub. L. 105–33. The effects of that provision are included in Column 7. There also may be some variation of plus or minus 0.1 percentage point due to rounding.

F. Effects of the Expiration of the 3-Year Provision Allowing Urban Hospitals That Were Converted to Rural as a Result of the FY 2005 Labor Market Area Changes to Maintain the Wage Index of the Urban Labor Market Area in Which They Were Formerly Located (Column 5)

The policy adopted in FY 2005 for urban hospitals that became rural under the new labor market area definitions is to expire in FY 2008. In FY 2005, we adopted a policy that allowed urban hospitals that became rural under the new labor market area regions to maintain the wage index assignment of the MSA where they were located for the 3-year period FY 2005, FY 2006, and FY 2007. Beginning in FY 2008, these hospitals will receive their statewide rural wage index or their FY 2008 MGCRB reclassified wage index. Column 5 shows the impact of the expiration of the labor market area transition for those hospitals that were urban under the old labor market area designations and are now considered rural hospitals. The rural hospital row shows a 0.2 percent decrease from the end of the provision as these hold harmless hospitals are now considered geographically rural and are now receiving the wage index of the MSA where they are currently located.

G. Effects of MGCRB Reclassifications (Column 6)

Our impact analysis to this point has assumed hospitals are paid on the basis of their actual geographic location (with the exception of ongoing policies that provide that certain hospitals receive payments on other bases than where they are geographically located). The changes in Column 6 reflect the per case payment impact of moving from this baseline to a simulation incorporating the MGCRB decisions for FY 2008 which affect hospitals' wage index area assignments.

By February 28 of each year, the MGCRB makes reclassification determinations that will be effective for the next fiscal year, which begins on October 1. The MGCRB may approve a hospital's reclassification request for the purpose of using another area's wage index value. Hospitals may appeal denials of MGCRB decisions to the CMS Administrator. Further, hospitals have 45 days from publication of the IPPS rule in the **Federal Register** to decide whether to withdraw or terminate an approved geographic reclassification for the following year. This column reflects all MGCRB decisions, Administrator appeals and decisions of hospitals for FY 2008 geographic reclassifications.

The overall effect of geographic reclassification is required by section 1886(d)(8)(D) of the Act to be budget neutral. Therefore, we are applying an adjustment of 0.991695 to ensure that the effects of the section 1886(d)(10) reclassifications are budget neutral. (See section II.A. of the Addendum to this final rule with comment period.) Geographic reclassification generally benefits hospitals in rural areas. We estimate that geographic reclassification will increase payments to rural hospitals by an average of 1.8 percent.

H. Effects of the Adjustment to the Application of the Rural Floor (Column 7)

As discussed in section III.G. of the preamble of this final rule with comment period, section 4410 of Pub. L. 105–33 established the rural floor by requiring that the wage index for a hospital in any urban area cannot be less than the area wage index determined for the state's rural area. Since FY 1998, we have implemented this provision by adjusting the standardized amounts. In this final rule with comment period, we are changing how we apply budget neutrality to the rural floor beginning in FY 2008. Rather than applying a budget neutrality adjustment to the standardized amount, a uniform budget neutrality adjustment is applied to the wage index. Therefore, we are applying an adjustment to the wage index of 0.996660 (−0.33 percent) to ensure that the rural floor adjustments are budget neutral as indicated by the zero effect on payments to hospitals overall.

Column 7 shows the projected impact of change in the application of the rural floor. The column compares the post-reclassification FY 2008 wage index of providers before the rural floor adjustment and the post-reclassification FY 2008 wage index of providers with the rural floor adjustment. Only urban hospitals can benefit from the rural floor provision. Because the provision is budget neutral, all other hospitals (that is, all rural hospitals and those urban hospitals to which the adjustment is not made) will experience a decrease in payments due to the budget neutrality adjustment. We project rural hospitals will experience a 0.1 percent decrease in payments. We project hospitals located in other urban areas (populations of 1 million or fewer) will experience a 0.1 percent increase in payments. The rural floor will benefit 69 percent of the hospitals in New Hampshire (9) and 39 percent of the hospitals in Connecticut (13), explaining the average increase of 0.9 percent shown in the table for hospitals located in New England. The average increase among hospitals in the Pacific region is estimated at 0.6 percent and is explained by application of the rural floor to 62 percent of the hospitals in California (207) and 18 percent of the hospitals in Washington (9).

I. Effects of Application of the Imputed Rural Floor (Column 8)

The FY 2005 IPPS final rule (69 FR 49109) established a temporary imputed rural floor for all urban States from FY 2005 to FY 2007. The rural floor requires that an urban wage index cannot be lower than the wage index for any rural hospital in that State. Therefore, an imputed rural floor was established for States that do not have rural areas or rural IPPS hospitals. In this final rule, we are extending the imputed rural floor for one additional year through FY 2008.

Column 8 shows the effects of application the imputed rural floor. Only hospitals located in New Jersey had been affected by the provision. Therefore only urban providers in the Mid-Atlantic region (NJ) will experience an increase by 0.3 percent, from the imputed rural floor being applied in that State.

J. Effects of the Expiration of Section 508 of Pub. L. 108–173 (Column 9)

Section 508 of Pub. L. 108–173 will expire on September 30, 2007. As stated in the FY 2007 IPPS final rule (71 FR 48333), we established procedural rules under section 1886(d)(10)(D)(v) of the Act to address specific circumstances where individual and group reclassifications involve a section 508 hospital. In the final rule, the rules were designed to recognize the special circumstances of section 508 hospital reclassifications ending mid-year during FY 2007 and were intended to allow previously approved reclassifications to continue through March 31, 2007, and new section 1886(d)(10) reclassifications to begin April 1, 2007, upon the conclusion of the section 508 reclassifications. Under these procedural rules, some section 1886(d)(10) hospital reclassifications are only in effect for the second half of the fiscal year. However, Division B, Title I, section 106(a) of the MIEA–TRHCA (Pub. L. 109–432) extended any geographic reclassifications of hospitals that would expire on March 31, 2007, by 6 months until September 30, 2007. For FY 2008, the providers that had been reclassified under section 508 in FY 2007 will receive payment using the wage index for the area where they are currently located. The impact of the expiration of the policy is modeled in Column 8 of Table I. Section 508 of Pub. L. 108–173 was not a budget neutral provision of the statute. Its enactment increased total payments for Medicare inpatient hospital services. Therefore, relative to FY 2007, the expiration of section 508 of Pub. L. 108–173 will reduce Medicare inpatient hospital payments by an estimated 0.1 percent.

K. Effects of the Wage Index Adjustment for Out-Migration (Column 10)

Section 1886(d)(13) of the Act, as added by section 505 of Pub. L. 108–173, provides for an increase in the wage index for hospitals located in certain counties that have a relatively high percentage of hospital employees who reside in the county, but work in a different area with a higher wage index. Hospitals located in counties that qualify for the payment adjustment are to receive an increase in the wage index that is equal to a weighted average of the difference between the wage index of the resident county, post-reclassification and the higher wage index work area(s), weighted by the overall percentage of workers who are employed in an area with a higher wage index. With the out-migration adjustment, rural providers will experience a 0.1 percent increase in payments in FY 2008 relative to no adjustment at all. We included these additional payments to providers in the impact table shown above, and we estimate the impact of these providers receiving the out-migration increase to be approximately $26 million.

L. Effects of All Changes With CMI Adjustment Prior to Estimated Growth (Column 11)

Column 11 compares our estimate of payments per case between FY 2007 and FY 2008 with all changes reflected in this final rule with comment period for FY 2008, including a 0.988 adjustment to the payment rates to account for anticipated improvements in documentation and coding that is expected to increase case-mix. We generally apply an adjustment to the DRGs to ensure budget neutrality assuming constant utilization. However, with the 2-year transition to the MS–DRGs, the number of DRGs expands from 538 to 745. Therefore, the Office of the Actuary estimates an increase in the CMI due to improved coding and we have applied an additional adjustment to achieve budget neutrality. However, because we modeled the impact, including the adjustment for anticipated case-mix increase but not the actual case-mix increase itself in column 11, this column illustrates a total payment change that is less than what is anticipated to occur.

M. Effects of All Changes With CMI Adjustment and Estimated Growth (Column 12)

Column 12 compares our estimate of payments per case between FY 2007 and FY 2008, incorporating all changes reflected in this final rule with comment period for FY 2008 (including statutory changes). This column includes all of the policy changes and assumes the 1.2 percent increase in case-mix from improved documentation and coding will occur equally across all hospitals.

Column 12 reflects the impact of all FY 2008 changes relative to FY 2007, including those shown in Columns 2 through 10. The average increase for all hospitals is approximately 3.5 percent. This increase includes the effects of the 3.3 percent market basket update. It also reflects the 0.5 percentage point difference between the projected outlier payments in FY 2008 (5.1 percent of total DRG payments) and the current estimate of the percentage of actual outlier payments in FY 2007 (4.6 percent), as described in the introduction to this Appendix and the Addendum to this final rule with comment period. As a result, payments are projected to be 0.5 percentage points lower in FY 2007 than originally estimated, resulting in a 0.5 percentage point greater increase for FY 2008 than would otherwise occur. In addition, the impact of expiration of section 508 of Pub. L. 108–173 reclassification accounts for a 0.1 percent decrease in estimated payments. As stated earlier, section 1886(d)(13) of the Act provides for an increase in the wage index for hospitals located in certain counties that have a relatively high percentage of hospital employees who reside in the county, but work in a different area with a higher wage index. This provision of the statute is not budget neutral. Although the out-migration adjustment will increase payments to some hospitals in FY 2008 relative to not having an adjustment at all, the total number of hospitals receiving the adjustment will be less in FY 2008 than FY 2007, resulting in a 0.1 percent reduction in total IPPS payments. There might also be interactive effects among the various factors comprising the payment system that we are not able to isolate. For these reasons, the values in Column 12 may not equal the product of the percentage changes described above.

The overall change in payments per case for hospitals in FY 2008 is estimated to increase by 3.5 percent. Hospitals in urban areas will experience an estimated 3.8 percent increase in payments per case compared to FY 2007. Hospitals in large urban areas will experience an estimated 4.3 percent increase and hospitals in other urban areas will experience an estimated 3.2 percent increase in payments per case in FY 2008. Hospital payments per case in rural areas are estimated to increase 1.2 percent. The increases that are larger than the national average for larger urban areas and smaller than the national average for other urban and rural areas are largely attributed to the differential impact of adopting MS–DRGs.

Among urban census divisions, the largest estimated payment increases will be 5.2 percent in the Pacific region (generally attributed to MS–DRGs, wage data and application of the rural floor) and 4.2 percent in Puerto Rico (mostly due to MS–DRGs). The smallest urban increase is estimated at 3.3 percent in the East South Central region (because of MS–DRGs, new wage data, MGCRB reclassification and application of the rural floor).

Among rural regions in Column 12, the providers in the West South Central region experience an estimated decrease in payments by 0.1 percent (mostly due to MS–DRGs). The Pacific and South Atlantic regions will have the highest increases among rural regions with 2.5 and 2.0 percent estimated increases, respectively. Again, increases in rural areas are generally less than the national average due to the adoption of MS–DRGs.

Among special categories of rural hospitals in Column 12, the SCH providers will receive an estimated increase in payments of 0.2 percent, and the RRCs will experience an estimated increase in payments by 2.7 percent.

Urban hospitals reclassified for FY 2008 are anticipated to receive an increase of 3.6 percent, while urban hospitals that are not reclassified for FY 2008 are expected to receive an increase of 3.9 percent. Rural hospitals reclassifying for FY 2008 are anticipated to receive a 1.8 percent payment increase.

N. Effects of Policy on Payment Adjustments for Low-Volume Hospitals

For FY 2008, we are continuing to apply the volume adjustment criteria we specified in the FY 2005 IPPS final rule (69 FR 49099). We expect that two providers will receive the low-volume adjustment for FY 2008. We estimate the impact of these providers receiving the additional 25-percent payment increase to be approximately $36,000.

O. Impact Analysis of Table II

Table II presents the projected impact of the changes for FY 2008 for urban and rural hospitals and for the different categories of hospitals shown in Table I. It compares the estimated payments per case for FY 2007 with the average estimated payments per case for FY 2008, as calculated under our models. Thus, this table presents, in terms of the average dollar amounts paid per discharge, the combined effects of the changes presented in Table I. The percentage changes shown in the last column of Table II equal

the percentage changes in average payments from Column 12 of Table I.

TABLE II.—IMPACT ANALYSIS OF CHANGES FOR FY 2008 OPERATING PROSPECTIVE PAYMENT SYSTEM

[Payments per case]

	Number of Hospitals	Average FY 200 Payment Per Case [1]	Average FY 2008 Payment Per Case [1]	All FY 2008 Changes
	(1)	(2)	(3)	(4)
All hospitals	3534	$8,960	$9,278	3.5
By Geographic Location:				
Urban hospitals	2539	$9,304	$9,663	3.9
Large urban areas (populations over 1 million)	1406	$9,702	$10,122	4.3
Other urban areas (populations of 1 million or fewer)	1133	$8,826	$9,110	3.2
Rural hospitals	995	$6,993	$7,081	1.2
Bed Size (Urban):				
0–99 beds	630	$7,148	$7,297	2.1
100–199 beds	851	$7,882	$8,162	3.6
200–299 beds	480	$8,777	$9,100	3.7
300–499 beds	411	$9,722	$10,132	4.2
500 or more beds	167	$11,695	$12,179	4.1
Bed Size (Rural):				
0–49 beds	337	$6,049	$6,026	−0.4
50–99 beds	372	$6,480	$6,539	0.9
100–149 beds	173	$6,816	$6,925	1.6
150–199 beds	68	$7,598	$7,715	1.5
200 or more beds	45	$8,686	$8,869	2.1
Urban by Region:				
New England	122	$9,748	$10,098	3.6
Middle Atlantic	350	$10,177	$10,533	3.5
South Atlantic	390	$8,796	$9,144	4
East North Central	395	$8,868	$9,193	3.7
East South Central	166	$8,428	$8,706	3.3
West North Central	157	$9,016	$9,329	3.5
West South Central	355	$8,791	$9,128	3.8
Mountain	153	$9,393	$9,728	3.6
Pacific	398	$11,082	$11,657	5.2
Puerto Rico	53	$4,364	$4,546	4.2
Rural by Region:				
New England	23	$9,613	$9,727	1.2
Middle Atlantic	72	$7,367	$7,437	1
South Atlantic	173	$6,557	$6,688	2
East North Central	122	$7,418	$7,499	1.1
East South Central	177	$6,355	$6,463	1.7
West North Central	115	$7,578	$7,652	1
West South Central	199	$6,318	$6,313	−0.1
Mountain	77	$7,536	$7,605	0.9
Pacific	37	$8,552	$8,764	2.5
By Payment Classification:				
Urban hospitals	2578	$9,284	$9,641	3.8
Large urban areas (populations over 1 million)	1425	$9,688	$10,107	4.3
Other urban areas (populations of 1 million or fewer)	1153	$8,798	$9,081	3.2
Rural areas	956	$7,053	$7,141	1.2
Teaching Status:				
Non-teaching	2480	$7,607	$7,835	3
Fewer than 100 Residents	815	$9,036	$9,369	3.7
100 or more Residents	239	$12,934	$13,499	4.4
Urban DSH:				
Non-DSH	859	$8,109	$8,335	2.8
100 or more beds	1512	$9,778	$10,179	4.1
Less than 100 beds	355	$6,616	$6,813	3
Rural DSH:				
SCH	384	$6,906	$6,932	0.4
RRC	203	$7,574	$7,712	1.8
100 or more beds	46	$6,013	$6,164	2.5
Less than 100 beds	175	$5,344	$5,423	1.5
Urban teaching and DSH:				
Both teaching and DSH	807	$10,700	$11,150	4.2
Teaching and no DSH	186	$8,821	$9,097	3.1
No teaching and DSH	1060	$8,006	$8,309	3.8
No teaching and no DSH	525	$7,646	$7,867	2.9
Rural Hospital Types:				

TABLE II.—IMPACT ANALYSIS OF CHANGES FOR FY 2008 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Payments per case]

	Number of Hospitals	Average FY 200 Payment Per Case [1]	Average FY 2008 Payment Per Case [1]	All FY 2008 Changes
	(1)	(2)	(3)	(4)
RRC	194	$7,606	$7,813	2.7
SCH	367	$7,437	$7,455	0.2
MDH	150	$6,489	$6,529	0.6
SCH and RRC	99	$8,713	$8,780	0.8
MDH and RRC	8	$8,373	$8,383	0.1
Type of Ownership:				
Voluntary	2064	$9,094	$9,409	3.5
Proprietary	823	$8,144	$8,458	3.9
Government	597	$9,211	$9,542	3.6
Medicare Utilization as a Percent of Inpatient Days:				
0–25	230	$12,615	$13,304	5.5
25–50	1289	$10,114	$10,545	4.3
50–65	1451	$7,880	$8,105	2.9
Over 65	440	$7,186	$7,312	1.8
Hospitals Reclassified by the Medicare Geographic Classification Reviewboard:				
FY 2008 Reclassifications:				
All Reclassified Hospitals FY 2008	757	$8,650	$8,915	3.1
All Non-Reclassified Hospitals FY 2008	2777	$9,055	$9,389	3.7
Urban Reclassified Hospitals FY 2008:	393	$9,286	$9,623	3.6
Urban Non-reclassified Hospitals FY 2008:	2145	$9,308	$9,671	3.9
Rural Reclassified Hospitals FY 2008:	364	$7,491	$7,624	1.8
Rural Nonreclassified Hospitals FY 2008:	569	$6,327	$6,340	0.2
All Section 401 Reclassified Hospitals:	29	$8,245	$8,270	0.3
Other Reclassified Hospitals (Section 1886(d)(8)(B))	63	$6,683	$6,809	1.9
Former Section 508 Hospitals	107	$9,745	$9,795	0.5
Specialty Hospitals:				
Cardiac Specialty Hospitals	22	$10,707	$10,799	0.9

[1] These payment amounts per case do not reflect any estimates of annual case-mix increase.

VII. Effects of Other Policy Changes

In addition to those policy changes discussed above that we are able to model using our IPPS payment simulation model, we are making various other changes in this final rule with comment period. Generally, we have limited or no specific data available with which to estimate the impacts of these changes. Our estimates of the likely impacts associated with these other changes are discussed below.

A. Effects of Policy on Hospital-Acquired Conditions, Including Infections

In section II.F. of the preamble of this final rule with comment period, we discuss our implementation of section 5001(c) of Pub. L. 109–171, which requires the Secretary to identify, by October 1, 2007, at least two conditions that are (a) high cost or high volume or both, (2) result in the assignment of a case to a DRG that has a higher payment when present as a secondary diagnosis, and (c) could reasonably have been prevented through application of evidence-based guidelines. For discharges occurring on or after October 1, 2008, hospitals will not receive additional payment for cases in which one of the selected conditions was not present on admission. That is, the case will be paid as though the secondary diagnosis was not present. However, the statute also requires the Secretary to continue counting the condition as a secondary diagnosis that results in a higher IPPS payment when doing the budget neutrality calculations for DRG reclassifications and recalibration. Therefore, we do our budget neutrality calculations as though the payment provision did not apply but Medicare will make a lower payment to the hospital for the specific case that includes the secondary diagnosis. Thus, the provision will result in cost savings to the Medicare program.

We note that the provision will only apply when the selected conditions are the only secondary diagnosis present on the claim that will lead to higher payment. Therefore, if a nonselected secondary diagnosis that leads to the same higher payment is on the claim, the case will continue to be assigned to the higher paying DRG and there will be no savings to Medicare from the case. Patients will generally have multiple secondary diagnoses during a hospital stay. Patients having one MCC or CC will frequently have additional conditions that also lead to higher payment. Therefore, in only a small percentage of the cases will the patient have only one secondary diagnosis that would lead to higher payment. The statute does not allow the payment provision to go into effect until October 1, 2008. For this reason, there will be no saving for FY 2008. Any savings associated with this provision will not be realized until FY 2009. We estimate this provision will save $20 million per year beginning October 1, 2008. Our savings estimates for the next 5 fiscal years are shown below:

Year	Savings
FY 2008	$0
FY 2009	20
FY 2010	20
FY 2011	20
FY 2012	20

B. Effects of MS–LTC–DRG Reclassifications and Relative Weights for LTCHs

In section II.I. of the preamble to this final rule with comment period, we discuss the adoption of the MS–LTC—DRGs (Version 25. of the CMS GROUPER). We also discuss that we are implementing a 2-year transition to MS–LTC–DRGs, in which we determined transition blended MS–LTC–DRG relative weights for FY 2008. We established in the RY 2008 LTCH PPS final rule (72 FR 26880 through 26884), beginning with the update for FY 2008, that the annual update to the classification and relative weights under the LTCH PPS will be done in a budget neutral manner, such that estimated aggregate LTCH PPS payments will be unaffected; that is, they will be neither greater than nor less than the estimated aggregate LTCH PPS payments that would have been made without the MS–LTC–DRG classification and relative weight changes. However, if the budget neutrality policy had not been adopted, we would not have multiplied each MS–LTC–DRG transition blended relative weight by 1.020905 in the first step of the budget

neutrality process (normalization), and we would not have applied a budget neutrality factor of 0.996467 to the transition blended relative weights after normalization based on the most recent available claims data (FY 2006 MedPAR files) for the 376 LTCHs in our database. With the adoption of this budget neutrality policy, we estimate that with the changes to the MS–LTC–DRG classifications and relative weights for FY 2008, there will be no change in aggregate LTCH PPS payments. In applying the budget neutrality adjustment described above, we assumed constant utilization.

C. Effects of New Technology Add-On Payments

In section II.J. of the preamble to this final rule, we discuss add-on payments for new medical services and technologies. As explained in that section, add-on payments for new technology under section 1886(d)(5)(K) of the Act are not required to be budget neutral. As discussed earlier in this final rule with comment period, we are not approving Wingspan® for new technology add-on payments for FY 2008. Thus, we will not make any IPPS add-on payments for this technology in FY 2008. In addition, for FY 2008, we have discontinued new technology add-on payments for GORE TAG, Restore®, and X STOP. In the FY 2007 IPPS final rule (71 FR 48344), we estimated that FY 2007 IPPS new technology add-on payments would be $16.61 million, $6.01 million, and $9.35 million, respectively, for these technologies. We have no additional information to further refine these estimates. Therefore, we estimate that Medicare's new technology add-on payments will decline by approximately $32 million (the sum of our estimates for FY 2007) in FY 2008 compared to FY 2007.

D. Effects of Requirements for Hospital Reporting of Quality Data for Annual Hospital Payment Update

In section IV.A. of the preamble of this final rule with comment period, we discuss the requirements for hospitals to report quality data in order for hospitals to receive the full annual hospital payment update for FY 2008 and FY 2009. We also note that, for the FY 2008 payment update, hospitals must pass our validation requirement of a minimum of 80 percent reliability, based upon our chart-audit validation process, for the first three quarters of data from CY 2006. These data were due to the QIO Clinical Warehouse by August 15, 2006 (first quarter CY 2006 discharges), November 15, 2006 (second quarter CY 2006 discharges), and February 15, 2007 (third quarter CY 2006 discharges). We have continued our efforts to ensure that QIOs provide assistance to all hospitals that wish to submit data. In the preamble of this final rule with comment period, we are finalizing additional validation criteria to ensure that the quality data being sent to CMS are accurate. The requirement of 5 charts per hospital will result in approximately 21,500 charts per quarter total submitted to the agency. We reimburse hospitals for the cost of sending charts to the Clinical Data Abstraction Center (CDAC) at the rate of 12 cents per page for copying and approximately $4.00 per chart for postage. Our experience shows that the average chart received at the CDAC is approximately 150 pages. Thus, the agency will have expenditures of approximately $473,200 per quarter to collect the charts. Given that we reimburse for the data collection effort, we believe that a requirement for five charts per hospital per quarter represents a minimal burden to the participating hospital.

E. Effects of Policy on Cancellation of Classification of Acquired Rural Status and Rural Referral Centers

In section IV.C.2. of the preamble of this final rule with comment period, we are revising our regulations to change the effective date of cancellation of acquired rural status for hospitals classified as rural referral centers based on acquired rural status. The current effective date is the hospital's next full cost reporting period following the date of its request for cancellation. The new effective date will be the beginning of the Federal fiscal year following both the date of the hospital's request for cancellation and at least one 12-month cost reporting period in which it has been in acquired rural status. Currently, there are about 100 IPPS hospitals that have acquired rural status and about 7 hospitals that became rural referral centers based on acquired rural status. During this fiscal year (FY 2007), we have only received requests for cancellations from about five hospitals, all of which became rural referral centers after acquiring rural status. However, this number may increase if the current policy is not changed. We anticipate that the policy change will not have a significant impact on IPPS hospitals.

F. Effects of Policy on Payment for IME and Direct GME

In section IV.D.3. of the preamble of this final rule with comment period, we discuss our policy related to whether vacation and sick leave as well as orientation should be included in the FTE count for IME and direct GME payment purposes. We had proposed that, for cost reporting periods beginning on or after October, 1, 2007, for direct GME and IME, time spent by residents on vacation or sick leave be removed from the total time considered to constitute an FTE resident. In addition, we proposed to continue our existing policy to count time spent by residents in orientation activities for both IME and direct GME payment purposes and proposed to change our policy to begin counting time spent by residents in orientation activities in nonhospital settings for purposes of both IME and direct GME payments (where the hospital otherwise met the regulatory requirements to count time spent by residents in the nonhospital setting). However, as explained in section IV.D.3. of the preamble of this final rule with comment period, because of concerns related to implementation issues raised by the commenters, at this time we are not finalizing our proposal to remove vacation and sick leave from the total time considered to constitute an FTE resident. Therefore, there is no impact for this provision. In addition, there is no impact from the clarification of the policy for orientation time because it is not a change in policy. We anticipate the additional time counted by hospitals for orientation activities in nonhospital settings under the revised policy will be negligible and will have minimal impact.

G. Effects of Policy Changes Relating to Emergency Services Under EMTALA During an Emergency Period

In section IV.F. of the preamble of this final rule with comment period, we are amending the EMTALA regulations regarding EMTALA implementation in emergency areas during an emergency period. Section 1135 of the Act authorizes the Secretary to temporarily waive or modify the application of several requirements and their implementing regulations as they relate to actions taken in an emergency area during an emergency period. The EMTALA regulations (§ 489.24(a)(2)) now specify that sanctions for inappropriate transfer during a national emergency do not apply to a hospital with a dedicated emergency department located in an emergency area.

To make our regulations better reflect the scope of the authority under section 1135 of the Act, we are revising them to clarify that such waivers also may apply to sanctions for the redirection or relocation of an individual to an alternate location to receive a medical screening examination where that direction or relocation occurs pursuant to a State emergency preparedness plan. We also are revising the regulations to incorporate changes made by the Pandemic and All-Hazards Preparedness Act. That legislation amended section 1135 of the Act to state that, in the case of a public health emergency that involves a pandemic infectious disease, sanctions for the direction or relocation of an individual to an alternative location for screening may be waived based on either a State emergency preparedness plan or a State pandemic preparedness plan, whichever applies in the State. In addition, section 1135 of the Act was amended to create an exception to the otherwise applicable 72-hour limitation on the duration of waivers or modifications of sanctions for EMTALA violations in cases where a public health emergency involves a pandemic infectious disease (such as pandemic influenza).

As described more fully earlier in this preamble, these changes are not discretionary and do not impose any substantive new requirements. On the contrary, they merely update our regulations to make them consistent with current statutory requirements. Because of this, we are estimating no impact on Medicare expenditures and no significant impact on hospitals with emergency departments.

H. Effects of Policy on Disclosure of Physician Ownership in Hospitals and Patient Safety Measures

In section IV.G. of the preamble of this final rule with comment period, we discuss our adoption of a requirement relating to disclosure of physician ownership in hospitals and to increase patient safety measures. In the strategic and implementing

plan included in our ''Final Report to the Congress and Strategic and Implementing Plan'' required under section 5006 of the Deficit Reduction Act of 2005, we stated that we would adopt a disclosure requirement that would require hospitals to disclose to patients whether they are physician-owned and, if so, the names of the physician-owners. In addition, we recognize that patients should be made aware of whether or not a physician is present in the hospital at all times, and the hospital's plans to address patients' emergency medical conditions when a physician is not present.

In section IX.B. of the preamble of this final rule with comment period, we have revised our proposed estimate of the cost to affected hospitals of these disclosures to more accurately reflect the volume of disclosures anticipated. Despite these changes, we continue to believe this final rule with comment period change will impose only minimal additional costs on hospitals. We believe the cost of implementing these provisions borne by hospitals will be limited to the ongoing cost of providing written notices to patients. In addition, the changes concerning disclosure of physician ownership in hospitals are consistent with current practices of members of the physician-owned specialty hospital associations. Therefore, we do not believe that these changes will have any significant economic impact on hospitals.

I. Effects of Implementation of Rural Community Hospital Demonstration Program

In section IV.H. of the preamble to this final rule with comment period, we discuss our implementation of section 410A of Pub. L. 108–173 that required the Secretary to establish a demonstration that will modify reimbursement for inpatient services for up to 15 small rural hospitals. Section 410A(c)(2) requires that ''in conducting the demonstration program under this section, the Secretary shall ensure that the aggregate payments made by the Secretary do not exceed the amount which the Secretary would have paid if the demonstration program under this section was not implemented.'' As discussed in section IV.H. of the preamble to this final rule with comment period, we are satisfying this requirement by adjusting national IPPS rates by a factor that is sufficient to account for the added costs of this demonstration. We estimate that the average additional annual payment for FY 2008 that will be made to each participating hospital under the demonstration will be approximately $1,075,765. We based this estimate on the recent historical experience of the difference between inpatient cost and payment for hospitals that are participating in the demonstration. For the 9 participating hospitals, the total annual impact of the demonstration program is estimated to be $9,681,893. The adjustment factor to the Federal rate used in calculating Medicare inpatient prospective payments as a result of the demonstration is 0.999903.

J. Effects of Policy on Services Furnished to Beneficiaries in Custody of Penal Authorities

In section VII. of the preamble of this final rule with comment period, we discuss our revision of our regulations relating to the special conditions under which Medicare payment may be made for services furnished to individuals in custody of penal authorities. We are indicating that, for purposes of Medicare payment, individuals who are in custody include, but are not limited to, individuals who are under arrest, incarcerated, imprisoned, escaped from confinement, under supervised release, on medical furlough, required to reside in mental health facilities, required to reside in halfway houses, required to live under home detention, or confined completely or partially in any way under a penal statute or rule. This definition is in accordance with how custody has been defined by Federal courts for purposes of the habeas corpus protections of the Constitution and is consistent with current CMS policy. We anticipate that this change will have no measurable impact on Medicare expenditures.

VIII. Impact of Changes in the Capital IPPS

A. General Considerations

Fiscal year (FY) 2001 was the last year of the 10-year transition period established to phase in the PPS for hospital capital-related costs. During the transition period, hospitals were paid under one of two payment methodologies: fully prospective or hold harmless. Under the fully prospective methodology, hospitals were paid a blend of the capital Federal rate and their hospital-specific rate (see § 412.340). Under the hold-harmless methodology, unless a hospital elected payment based on 100 percent of the capital Federal rate, hospitals were paid 85 percent of reasonable costs for old capital costs (100 percent for SCHs) plus an amount for new capital costs based on a proportion of the capital Federal rate (see § 412.344). As we state in section V. of the preamble of this final rule with comment period, with the 10-year transition period ending with hospital cost reporting periods beginning on or after October 1, 2001 (FY 2002), beginning in FY 2002 capital prospective payment system payments for most hospitals are based solely on the capital Federal rate. Therefore, we no longer include information on obligated capital costs or projections of old capital costs and new capital costs, which were factors needed to calculate payments during the transition period, for our impact analysis.

In accordance with § 412.312, the basic methodology for determining a capital PPS payment includes a large urban add-on adjustment. However, as discussed above and in section V. of the preamble of this final rule with comment period, we are eliminating the large urban add-on adjustment to capital IPPS payments in FY 2008. The basic methodology for calculating capital IPPS payments in FY 2008 is as follows: (Standard Federal Rate) × (DRG weight) × (GAF) × (COLA for hospitals located in Alaska and Hawaii) × (1 + Disproportionate Share Adjustment Factor + IME Adjustment Factor, if applicable).

In addition, hospitals may also receive outlier payments for those cases that qualify under the threshold established for each fiscal year.

The data used in developing the impact analysis presented below are taken from the March 2007 update of the FY 2006 MedPAR file and the March 2007 update of the Provider-Specific File that is used for payment purposes. Although the analyses of the changes to the capital prospective payment system do not incorporate cost data, we used the March 2007 update of the most recently available hospital cost report data (FYs 2004 and 2005) to categorize hospitals. Our analysis has several qualifications. We use the best data available and make assumptions about case-mix and beneficiary enrollment as described below. In addition, as discussed in section III. of the Addendum to this final rule with comment period, we are adjusting the capital rates to account for improvements in documentation and coding under the MS–DRGs in FY 2008. Furthermore, due to the interdependent nature of the IPPS, it is very difficult to precisely quantify the impact associated with each change. In addition, we draw upon various sources for the data used to categorize hospitals in the tables. In some cases (for instance, the number of beds), there is a fair degree of variation in the data from different sources. We have attempted to construct these variables with the best available sources overall. However, for individual hospitals, some miscategorizations are possible.

Using cases from the March 2007 update of the FY 2006 MedPAR file, we simulated payments under the capital PPS for FY 2007 and FY 2008 for a comparison of total payments per case. Any short-term, acute care hospitals not paid under the general IPPS (Indian Health Service hospitals and hospitals in Maryland) are excluded from the simulations.

As we explain in section III.A. of the Addendum to this final rule with comment period, payments are no longer made under the regular exceptions provision under §§ 412.348(b) through (e). Therefore, we no longer use the actuarial capital cost model (described in Appendix B of the August 1, 2001 proposed rule (66 FR 40099)). We modeled payments for each hospital by multiplying the capital Federal rate by the GAF and the hospital's case mix. We then added estimated payments for indirect medical education, disproportionate share, large urban add-on, and outliers, if applicable. (We note that, consistent with the elimination of the large urban add-on beginning in FY 2008, discussed in section V.B. of the preamble of this final rule with comment period, such estimated payments under this policy are only reflected in the payments we modeled for FY 2007 and were not included in the payments we modeled for FY 2008.) For purposes of this impact analysis, the model includes the following assumptions:

- We estimate that the Medicare case mix index will increase by 1.0 percent in both FYs 2007 and 2008. (We note that this does not reflect the adjustment to the capital rates to account for assumed growth in case mix due to improvement in documentation and coding under the MS–DRGs, as discussed in section III. of the Addendum of this final rule with comment period.)
- We estimate that the Medicare discharges will be 13.1 million in FY 2007

and 13.4 million in FY 2008 for an estimated 2.3 percent increase from FY 2007 to FY 2008.

- The capital Federal rate was updated beginning in FY 1996 by an analytical framework that considers changes in the prices associated with capital-related costs and adjustments to account for forecast error, changes in the case-mix index, allowable changes in intensity, and other factors. As discussed in section V. of the preamble and section III.A. of the Addendum to this final rule with comment period, the FY 2008 update for all hospitals is 0.9 percent.
- In addition to the FY 2008 update factors, the FY 2008 capital Federal rate for both urban and rural hospitals was calculated based on a GAF/DRG budget neutrality factor of 0.9997, an outlier adjustment factor of 0.9517, and an exceptions adjustment factor of 0.9997.
- For FY 2008, as discussed in section V. of the preamble and section III.A. of the Addendum to this final rule with comment period, the FY 2008 capital rates for all hospitals was further adjusted by a factor of 0.988 (or 1.2 percent) to maintain budget neutrality for the implementation of the MS–DRGs by eliminating the effect of changes in coding or classification of discharges that do not reflect real case-mix changes.

B. Results

We used the actuarial model described above to estimate the potential impact of our changes for FY 2008 on total capital payments per case, using a universe of 3,534 hospitals. As described above, the individual hospital payment parameters are taken from the best available data, including the March 2007 update of the FY 2006 MedPAR file, the March 2007 update to the PSF, and the most recent cost report data from the March 2007 update of HCRIS. In Table III, we present a comparison of total payments per case for FY 2007 compared to FY 2008 based on the FY 2008 payment policies. Column 2 shows estimates of payments per case under our model for FY 2007. Column 3 shows estimates of payments per case under our model for FY 2008. Column 4 shows the total percentage change in payments from FY 2007 to FY 2008. The change represented in Column 4 includes the 0.9 percent update to the capital Federal rate for all hospitals, a 1.0 percent increase in case mix, changes in the adjustments to the capital Federal rate (for example, the effect of the hospital wage index on the GAF), reclassifications by the MGCRB, and the additional 1.2 percent reduction to all of the rates to account for improvements in documentation and coding or other changes in coding that do not reflect real changes in case mix for implementation of the MS–DRGs. The comparisons are provided by: (1) Geographic location; (2) region; and (3) payment classification.

The simulation results show that, on average, capital payments per case can be expected to increase 0.6 percent in FY 2008. In addition to the 0.9 percent update to the capital Federal rate, this projected increase in capital payments per case can be attributed to the implementation of the MS–DRGs, including the transition relative weights, as discussed in sections II.B. through E. of the preamble of this final rule with comment period.

The results of our comparisons by geographic location and by region are consistent with the results we expected after eliminating the large urban add-on adjustment. The geographic comparison shows that all urban hospitals are expected to experience a 0.6 percent increase in capital IPPS payments per case, while large urban areas are expected to experience no change in capital IPPS payments per case. Capital IPPS payments per case for rural hospitals are expected to increase 0.3 percent. The difference is mostly due to the MS–DRGs. Specifically, based on existing hospital claims data, under the MS–DRGs, the better recognition of severity of illness is expected to increase payments to urban hospitals that treat a more acutely ill mix of patients. Similarly, however, the improved recognition of severity of illness will decrease payments to rural hospitals because they are treating less severely ill patients. Therefore, we project a lower increase in estimated payments for rural hospitals due to the DRG changes as compared to urban hospitals. In addition to the effect of the DRG changes, the capital impact is also somewhat affected by the wage-index changes because the GAF values are derived from the wage index. Furthermore, the outlier threshold also affects payments. Because the FY 2008 outlier threshold is lower than the FY 2007 outlier threshold, payments will increase, further explaining why, after eliminating the large urban add-on adjustment of 3.0 percent, we estimate no change in payments from FY 2007 to FY 2008 for large urban hospitals. For rural hospitals, another factor contributing to the smaller increase in payments for rural hospitals is the expiration of the 3-year hold harmless provision for urban hospitals that were converted to rural under the CBSAs in FY 2005. The policy allowed urban hospitals under the old labor market area designations that became rural under the CBSAs to receive payment using the wage index of the MSA where they were previously classified as urban for 3 years: FY 2005 through FY 2007. Beginning in FY 2008, these rural hospitals will receive the wage index for the area that they are currently located in. As a result, rural hospitals will experience a smaller increase in payments than urban hospitals because of the addition of these formerly urban hospitals.

More than half of all regions are estimated to experience an increase in total capital payments per case from FY 2007 to FY 2008. These increases vary by region and range from a 2.4 percent increase in the Pacific rural region to a 0.3 percent increase in the East North Central urban region, the Middle Atlantic rural region, and Puerto Rico. Two urban regions are projected to experience a decrease in capital payments with the difference mostly due to changes in the GAF and the elimination of the large urban add on adjustment: −0.6 percent in the Middle Atlantic urban region and −0.2 percent in the New England urban region. In the rural regions experiencing a decrease in total capital payments per case, the range is from a 0.8 percent decrease in the West South Central rural region to a 0.1 percent decrease in the East North Central rural region. For most of the rural regions projected to experience a decrease in capital payments, it is mostly due to changes in the GAF, as well as changes due to the adoption of the MS–DRGs. The change in payments per case for all hospitals is 0.6 percent.

By type of ownership, voluntary hospitals are estimated to experience an increase of 0.3 percent in capital payments per case, while both proprietary and government hospitals are estimated to experience a 1.2 percent increases in payments. Voluntary hospitals are projected to have a slightly smaller increase in capital payments than government and proprietary hospitals, mostly due to the elimination of the large urban add-on adjustment and changes in the GAF.

Section 1886(d)(10) of the Act established the MGCRB. Before FY 2005, hospitals could apply to the MGCRB for reclassification for purposes of the standardized amount, wage index, or both. Section 401(c) of Pub. L. 108–173 equalized the standardized amounts under the operating IPPS. Therefore, beginning in FY 2005, there is no longer reclassification for the purposes of the standardized amounts; however, hospitals still may apply for reclassification for purposes of the wage index for FY 2008. Reclassification for wage index purposes also affects the GAF because that factor is constructed from the hospital wage index.

To present the effects of the hospitals being reclassified for FY 2008, we show the average payments per case for reclassified hospitals for FY 2007. Rural nonreclassified hospitals are expected to have the largest decrease in payments of 0.4 percent, as compared to the 0.1 percent decrease for the other reclassified hospitals for FY 2008. This difference is mostly due to changes in the GAF. All urban nonreclassified hospitals and all rural reclassified hospitals are expected to experience an increase in payments of 0.7 percent, while all urban reclassified hospitals are expected to experience a 0.5 percent increase in capital payments per case. This difference is mostly due to the elimination of the large urban add-on as well as changes in the GAF.

TABLE III.—COMPARISON OF TOTAL PAYMENTS PER CASE

[FY 2007 Payments Compared To FY 2008 Payments]

	Number of hospitals	Average FY 2007 payments/case	Average FY 2008 payments/case	Change
By Geographic Location:				
All hospitals	3,534	748	752	0.6
Large urban areas (populations over 1 million)	1,406	830	829	0.0
Other urban areas (populations of 1 million of fewer)	1,133	737	748	1.5
Rural areas	995	520	521	0.3
Urban hospitals	2,539	788	793	0.6
0–99 beds	630	619	621	0.4
100–199 beds	851	674	678	0.6
200–299 beds	480	744	748	0.5
300–499 beds	411	818	824	0.8
500 or more beds	167	983	990	0.6
Rural hospitals	995	520	521	0.3
0–49 beds	337	425	423	−0.5
50–99 beds	372	477	478	0.1
100–149 beds	173	517	519	0.5
150–199 beds	68	575	575	0.1
200 or more beds	45	649	654	0.7
By Region:				
Urban by Region	2,539	788	793	0.6
New England	122	838	837	−0.2
Middle Atlantic	350	862	857	−0.6
South Atlantic	390	747	755	1.1
East North Central	395	773	775	0.3
East South Central	166	711	714	0.4
West North Central	157	771	774	0.5
West South Central	355	737	744	1.0
Mountain	153	788	800	1.5
Pacific	398	899	916	1.9
Puerto Rico	53	345	346	0.3
Rural by Region	995	520	521	0.3
New England	23	711	709	−0.3
Middle Atlantic	72	529	531	0.3
South Atlantic	173	502	507	0.9
East North Central	122	550	549	−0.1
East South Central	177	481	480	−0.2
West North Central	115	549	552	0.5
West South Central	199	473	469	−0.8
Mountain	77	520	528	1.6
Pacific	37	627	642	2.4
By Payment Classification:				
All hospitals	3,534	748	752	0.6
Large urban areas (populations over 1 million)	1,425	828	828	0.0
Other urban areas (populations of 1 million of fewer)	1,153	736	747	1.5
Rural areas	956	520	522	0.2
Teaching Status:				
Non-teaching	2,480	632	636	0.7
Fewer than 100 Residents	815	761	764	0.4
100 or more Residents	239	1,076	1,083	0.6
Urban DSH:				
100 or more beds	1,512	812	820	0.9
Less than 100 beds	355	552	554	0.4
Rural DSH:				
Sole Community (SCH/EACH)	384	465	467	0.3
Referral Center (RRC/EACH)	203	573	576	0.5
Other Rural:				
100 or more beds	46	485	487	0.4
Less than 100 beds	175	431	430	−0.4
Urban teaching and DSH:				
Both teaching and DSH	807	888	895	0.7
Teaching and no DSH	186	798	792	−0.7
No teaching and DSH	1,060	667	675	1.1
No teaching and no DSH	525	697	699	0.3
Rural Hospital Types:				
Non special status hospitals	2,452	791	796	0.6
RRC/EACH	53	698	707	1.3
SCH/EACH	42	641	643	0.3
Medicare-dependent hospitals (MDH)	16	446	440	−1.3
SCH, RRC and EACH	15	746	764	2.3
Hospitals Reclassified by the Medicare Geographic Classification Review Board:				

TABLE III.—COMPARISON OF TOTAL PAYMENTS PER CASE—Continued

[FY 2007 Payments Compared To FY 2008 Payments]

	Number of hospitals	Average FY 2007 payments/case	Average FY 2008 payments/case	Change
FY 2008 Reclassifications:				
All Urban Reclassified	393	786	790	0.5
All Urban Non-Reclassified	2,145	788	793	0.7
All Rural Reclassified	364	564	568	0.7
All Rural Non-Reclassified	569	455	453	−0.4
Other Reclassified Hospitals (Section 1886(d)(8)(B))	63	516	515	−0.1
Type of Ownership:				
Voluntary	2,064	765	768	0.3
Proprietary	823	681	689	1.2
Government	597	732	741	1.2
Medicare Utilization as a Percent of Inpatient Days:				
0–25	230	979	991	1.3
25–50	1,289	845	851	0.8
50–65	1,451	664	667	0.4
Over 65	440	597	595	−0.3

IX. Alternatives Considered

This final rule with comment period contains a range of policies. The preamble of this final rule with comment period provides descriptions of the statutory provisions that are addressed, identifies those policies when discretion has been exercised, presents rationale for our decisions and, where relevant, alternatives that were considered.

X. Overall Conclusion

The changes we are making in this final rule with comment period will affect all classes of hospitals. Some hospitals are expected to experience significant gains and others less significant gains, but overall hospitals are projected to experience positive updates in IPPS payments in FY 2008. Table I of section VI. of this Appendix demonstrates the estimated distributional impact of the IPPS budget neutrality requirements for DRG and wage index changes, and for the wage index reclassifications under the MGCRB. Table I also shows an overall increase of 3.5 percent in operating payments, an estimated increase of $3.56 billion, which includes hospital reporting of quality data program costs ($1.89 million) and all operating payment policies as described in section VI. of this Appendix. Capital payments are estimated to increase by 0.6 percent per case, as shown in Table III of section VIII. of this Appendix. Therefore, we project that capital payments will increase by $282 million in FY 2008 compared to FY 2007. The operating and capital payments should result in a net increase of $3.837 billion to IPPS providers. The discussions presented in the previous pages, in combination with the rest of this final rule with comment period, constitute a regulatory impact analysis.

XI. Accounting Statement

As required by OMB Circular A–4 (available at *http://www.whitehousegov/omb/circulars/a004/a-4.pdf),* in Table IV below, we have prepared an accounting statement showing the classification of the expenditures associated with the provisions of this final rule with comment period. This table provides our best estimate of the increase in Medicare payments to providers as a result of the changes to the IPPS presented in this final rule with comment period. All expenditures are classified as transfers to Medicare providers.

TABLE IV.—ACCOUNTING STATEMENT: CLASSIFICATION OF ESTIMATED EXPENDITURES FROM FY 2007 TO FY 2008

Category	Transfers
Annualized Monetized Transfers.	$3.837 Billion.
From Whom to Whom	Federal Government to IPPS Medicare Providers.
Total	$3.837 Billion.

XII. Executive Order 12866

In accordance with the provisions of Executive Order 12866, the Office of Management and Budget reviewed this final rule with comment period.

Appendix B: Recommendation of Update Factors for Operating Cost Rates of Payment for Inpatient Hospital Services

I. Background

Section 1886(e)(4)(A) of the Act requires that the Secretary, taking into consideration the recommendations of the MedPAC, recommend update factors for inpatient hospital services for each fiscal year that take into account the amounts necessary for the efficient and effective delivery of medically appropriate and necessary care of high quality. Under section 1886(e)(5)(B) of the Act, we are required to publish update factors recommended by the Secretary in the proposed and final IPPS rules, respectively. Accordingly, we are publishing our final recommendations for the update factors for the IPPS standardized amount, the hospital-specific rates for SCHs and MDHs, and the rate-of-increase limits for hospitals and hospital units excluded from the IPPS, as well as LTCHS, IPFs, and IRFs. We also discuss our response to MedPAC's recommended update factors for inpatient hospital services.

II. Inpatient Hospital Update for FY 2008

Section 1886(b)(3)(B)(i)(XX) of the Act, as amended by section 5001(a) of Pub. L. 109–171, sets the FY 2008 percentage increase in the operating cost standardized amount equal to the rate-of-increase in the hospital market basket for IPPS hospitals in all areas, subject to the hospital submitting quality information under rules established by the Secretary in accordance with 1886(b)(3)(B)(viii) of the Act. For hospitals that do not provide these data, the update is equal to the market basket percentage increase less 2.0 percentage points. Consistent with current law, based on Global Insight, Inc.'s second quarter 2007 forecast of the FY 2008 market basket increase, the FY 2008 update to the standardized amount will be 3.3 percent (that is, the current estimate of the market basket rate-of-increase) for hospitals in all areas, provided the hospital submits quality data in accordance with our rules. For hospitals that do not submit quality data, the update to the standardized amount will be 1.3 percent (that is, the current estimate of the market basket rate-of-increase minus 2.0 percentage points).

Section 1886(b)(3)(B)(iv) of the Act sets the FY 2008 percentage increase in the hospital-specific rates applicable to SCHs and MDHs equal to the rate set forth in section 1886(b)(3)(B)(i) of the Act (that is, the same update factor as for all other hospitals subject to the IPPS). Therefore, the update to the hospital-specific rates applicable to SCHs and MDHs will be 3.3 or 1.3 percent depending upon whether the hospital submits quality data.

Section 1886(b)(3)(B)(ii) of the Act is used for purposes of determining the percentage increase in the rate-of-increase limits for children's and cancer hospitals. Section 1886(b)(3)(B)(ii) of the Act sets the percentage increase in the rate-of-increase limits equal to the market basket percentage

increase. In accordance with § 403.752(a) of the regulations, RNHCIs are paid under § 413.40, which also uses section 1886(b)(3)(B)(ii) of the Act to update the percentage increase in the rate-of-increase limits. Section 1886(j)(3)(C) of the Act addresses the increase factor for the Federal prospective payment rate of IRFs. Section 123 of Pub. L. 106–113, as amended by section 307(b) of Pub. L. 106–554, provides the statutory authority for updating payment rates under the LTCH PPS. As discussed below, for cost reporting periods beginning on or after October 1, 2006, LTCHs that are not defined as new under § 412.23(e)(4), and that had not elected to be paid under 100 percent of the Federal rate are paid 100 percent of the adjusted Federal PPS rate. Therefore, because no portion of LTCHs' prospective payments will be based on reasonable cost concepts for cost reporting periods beginning on or after October 1, 2006, we are not establishing a rate-of-increase percentage for FY 2008 for LTCHs to be used under § 413.40. In addition, section 124 of Pub. L. 106–113 provides the statutory authority for updating all aspects of the payment rates for IPFs. Under this broad authority, IPFs that are not defined as new under § 412.426(c) will be paid under a blend methodology for cost reporting periods beginning on or after January 1, 2005, and before January 1, 2008. The methodology blends the estimated Federal per diem payment amount and a facility-specific payment amount. The portion of the IPF PPS payment that is based on reasonable cost principles is updated in accordance with 42 CFR Part 413, which uses section 1886(b)(3)(B)(ii) of the Act to determine the percentage increase in the rate-of-increase limits. For the reasonable cost-based portion of an IPF's PPS blended payments, we are providing our current estimate of the excluded hospital market basket increase (3.3 percent) to update the target amounts. New IPFs are paid based on 100 percent of the Federal per diem payment amount.

Currently, children's hospitals, cancer hospitals, and RNHCIs are the remaining three types of hospitals still reimbursed under the reasonable cost methodology. We are providing our current estimate of the FY 2008 IPPS operating market basket percentage increase (3.3 percent) to update the target limits for children's hospitals, cancer hospitals, and RNHCIs.

Effective for cost reporting periods beginning on or after October 1, 2002, LTCHs have been paid under the LTCH PPS, which was implemented with a 5-year transition period for LTCHs not defined as new under § 412.23(e)(4) (hereafter referred to as ''existing''). (See 67 FR 55954.) An existing LTCH could have elected to be paid at 100 percent of the adjusted Federal prospective rate at the start of any of its cost reporting periods during the transition period. During this transition period, if an existing LTCH did not elect to be paid at 100 percent of the adjusted Federal prospective payment rate, it received a PPS payment that consisted of a blend of its reasonable cost-based payment and the Federal prospective payment rate. For cost reporting periods beginning on or after October 1, 2006, no portion of a LTCH's PPS payments can be based on reasonable cost concepts. Consequently, there is no need to update the target limit under § 413.40 effective October 1, 2007, for LTCHs.

In the RY 2008 LTCH PPS final rule (72 FR 26887 through 26890), we finalized an update of 0.71 percent (that is, the latest estimate of the market basket rate-of-increase of 3.2 percent minus an adjustment factor of 2.49 percentage points for case-mix growth due to improved coding) to the LTCH PPS Federal rate for RY 2008.

Effective for cost reporting periods beginning on or after January 1, 2005, IPFs are paid under the IPF PPS. IPF PPS payments are based on a Federal per diem rate that is derived from the sum of the average routine operating, ancillary, and capital costs for each patient day of psychiatric care in an IPF, adjusted for budget neutrality. For cost reporting periods beginning on or after January 1, 2005, and before January 1, 2008, existing IPFs (those not defined as ''new'' under § 412.426(c)) are paid based on a blend of the reasonable cost based PPS payments and the Federal per diem base rate. For cost reporting periods beginning on or after January 1, 2008, existing IPFs will be paid based on 100 percent of the Federal per diem rate. For purposes of the update factor for FY 2008, the portion of the IPF PPS transitional blend payment based on reasonable costs will be determined by updating the IPF's TEFRA limit by the current estimate of the excluded hospital market basket, which is estimated to be 3.3 percent. The update factor of 3.2 percent to the Federal per diem rate for July 1, 2007 through June 30, 2008, based on Global Insight, Inc.'s first quarter 2007 forecast of the RPL market basket increase, was provided in the rate year (RY) 2008 IPF PPS update notice (72 FR 25608).

IRFs are paid under the IRF PPS for cost reporting periods beginning on or after January 1, 2002. For cost reporting periods beginning on or after October 1, 2002 (FY 2003), and thereafter, the Federal prospective payments to IRFs are based on 100 percent of the adjusted Federal IRF prospective payment amount, updated annually (69 FR 45721). Under section 1886(j)(3)(C) of the Act, the FY 2008 IRF PPS update will equal 3.2 percent based on Global Insight, Inc.'s second quarter 2007 forecast of the RPL market basket increase with historical data through the first quarter of 2007.

III. Secretary's Final Recommendation

MedPAC is recommending an inpatient hospital update equal to the market basket rate of increase for FY 2008. MedPAC's rationale for this update recommendation is described in more detail below. Using the 2007 second quarter forecast from Global Insight, Inc. of the FY 2008 market basket increase and an adjustment factor based on the FY 2008 President's Budget, we are recommending an update to the standardized amount of 2.65 percent (that is, the market basket rate-of-increase of 3.3 percent minus an adjustment factor of 0.65 percentage points). We are recommending that this same update factor apply to SCHs and MDHs.Our rationale for this recommended update is described below.

In addition to making a recommendation for IPPS hospitals, in accordance with section 1886(e)(4)(A) of the Act, we are also recommending update factors for all other types of hospitals. Consistent with the President's Budget, we are recommending an update based on the IPPS market basket increase for children's hospitals, cancer hospitals, and RNHCIs of 3.3 percent, based on Global Insight, Inc.'s 2007 second quarter forecast of the IPPS operating market basket increase. For IPFs that are currently paid on a PPS blended payment basis, a portion of which is based on reasonable cost-principles and Federal prospective payment amounts, we are recommending an update factor of 3.3 percent for the portion of the payment that is based on reasonable costs. Consistent with the President's Budget, based on Global Insight, Inc.'s first quarter 2007 forecast of the RPL market basket increase, we are recommending an update equal to the market basket increase of 3.2 percent for the Federal per diem payment amount.

In the RY 2008 LTCH PPS final rule (72 FR 26887 through 26890), we implemented, and in this final rule with comment period recommend, an update of 0.71 percent (that is, the most recent estimate of the market basket rate-of-increase of 3.2 percent minus an adjustment factor of 2.49 percentage points for case-mix growth due to improved coding) to the Federal rate for RY 2008. Finally, consistent with the President's FY 2008 Budget, we are recommending that the Federal rate to the IRF PPS remain unchanged for FY 2008.

For fiscal years prior to FY 2008, section 1886(e)(3) of the Act directed the Secretary to report to the Congress an initial estimate of his recommendation of an appropriate payment inflation update for inpatient hospital services for the upcoming fiscal year not later than March 1. Section 1886(d)(4)(C) of the Act further required the Secretary to include recommendations with respect to adjustments to the DRG weighting factors in the March 1 Report to Congress. In addition, sections 1886(e)(4)(A) and (e)(5)(B) of the Act require that the Secretary recommend update factors in each of the IPPS proposed and final rules, taking into account MedPAC's recommendation. Thus, the statute required the Secretary to make update recommendations in both a March 1 Report to Congress, and later in the IPPS proposed and final rules. Historically, the only difference between the recommendation we provided in the March 1 Report to Congress and the IPPS proposed rule was the use of a later estimate of the market basket increase for the proposed rule. Section 106(c) of MIEA–TRHCA eliminated the requirement to make the Report to Congress recommending an update and adjustments to DRG weighting factors by March 1. In accordance with section 106(c) of MIEA–TRHCA, we are making the Secretary's only recommendation for an update factor in the IPPS rules.

IV. MedPAC Recommendation for Assessing Payment Adequacy and Updating Payments in Traditional Medicare

In its March 2007 Report to Congress, MedPAC assessed the adequacy of current payments and costs, and the relationship

between payments and an appropriate cost base, utilizing an established methodology used by MedPAC in the past several years.

MedPAC recommended an update to the hospital inpatient rates equal to the increase in the hospital market basket in FY 2008, concurrent with implementation of a quality incentive payment program. MedPAC also recommended that CMS put pressure on hospitals to control their costs rather than accommodate the current rate of cost growth.

MedPAC noted that, notwithstanding negative overall Medicare margins, most of the indicators of Medicare payment adequacy to hospitals are positive, including beneficiaries' access to care, increased access to capital, and service volume increases. MedPAC also noted that this recommendation ''should have no impact on beneficiary access to care and is not expected to affect providers' willingness and ability to provide care to Medicare beneficiaries.''

Response: We agree with MedPAC that hospitals should control costs rather than accommodate the current rate of growth. An update equal to less than the market basket will pressure hospitals to control their costs, consistent with MedPAC's recommendation. As MedPAC noted, rising hospital costs are resulting in margins for some hospitals that are below zero. As discussed in section II. of the preamble of this final rule with comment period, CMS is refining the DRGs to better account for severity illness and is basing the DRG weights on cost rather than charges. We believe that these refinements will better match Medicare payments to the cost of care and provide incentives for hospitals to be more efficient in controlling costs. For these reasons, we are recommending an inpatient hospital update equal to the market basket increase minus an adjustment factor of 0.65 percentage points for hospitals paid under the IPPS for FY 2008.

We note that, because the operating and capital prospective payment systems remain separate, we are continuing to use separate updates for operating and capital payments. The update to the capital payment rate is discussed in section III. of the Addendum to this final rule with comment period.

[FR Doc. 07–3820 Filed 8–1–07; 4:00 pm]

BILLING CODE 4120–01–P