



# Federal Register

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**Friday,  
March 22, 2002**

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**Part II**

## **Department of Health and Human Services**

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**Centers for Medicare & Medicaid Services**

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**42 CFR Part 412 et al.**

**Medicare Program; Prospective Payment  
System for Long-Term Care Hospitals:  
Proposed Implementation and FY 2003  
Rates; Proposed Rule**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**
**Centers for Medicare & Medicaid Services**
**42 CFR Parts 412, 413, and 476**
**[CMS-1177-P]**
**RIN 0938-AK69**
**Medicare Program; Prospective Payment System for Long-Term Care Hospitals: Proposed Implementation and FY 2003 Rates**
**AGENCY:** Centers for Medicare & Medicaid Services (CMS), HHS.

**ACTION:** Proposed rule.

**SUMMARY:** This proposed rule would establish a prospective payment system for Medicare payment of inpatient hospital services furnished by long-term care hospitals (LTCHs) described in section 1886(d)(1)(B)(iv) of the Social Security Act (the Act). This proposed rule would implement section 123 of the Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Balanced Budget Refinement Act (BBRA) of 1999 and section 307(b) of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA) of 2000. Section 123 of the BBRA directs the Secretary to develop and implement a prospective payment system for LTCHs. The prospective payment system described in this proposed rule would replace the reasonable cost-based payment system under which the LTCHs are currently paid.

**DATES:** Comments will be considered if received at the appropriate address, as provided below, no later than 5 p.m. on May 21, 2002.

**ADDRESSES:** Mail written comments (an original and three copies) to the following address only: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS-1177-P, P.O. Box 8013, Baltimore, MD 21244-8013.

To ensure that mailed comments are received in time for us to consider them, please allow for possible delays in delivering them. If you prefer, you may deliver (by hand or courier) your written comments (an original and three copies) to one of the following addresses: Room 443-G, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201, or Room C5-16-03, Central Building, 7500 Security Boulevard, Baltimore, MD 21244-1850. (Because access to the interior 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 commenters 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 appropriate for hand or courier delivery may be delayed and could be considered late.

Because of staff and resource limitations, we cannot accept comments by facsimile (FAX) transmission. In commenting, please refer to file code CMS-1177-P. For information on viewing public comments, see the beginning of the **SUPPLEMENTARY INFORMATION** section.

**FOR FURTHER INFORMATION CONTACT:**

Tzvi Hefter, (410) 786-4487, or Judy Richter, (410) 786-2590 (General information, transition payments, payment adjustments)

Michele Hudson, (410) 786-5490 (Calculation of the payment rates, relative weights/case-mix index, update factors, payment adjustments)

Ann Fagan, (410) 786-5662 (Patient classification system)

**SUPPLEMENTARY INFORMATION:**
**Inspection of Public Comment**

Comments received timely will be available for public inspection as they are received, generally beginning approximately 3 weeks after publication of a document, at 7500 Security Boulevard, Baltimore, MD 21244, Monday through Friday of each week from 8:30 to 5 p.m. Please call (phone: (410) 786-7197) to make an appointment to view the public comments.

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### Acronyms

Because of the many terms to which we refer by acronym in this proposed rule, we are listing the acronyms used and their corresponding terms in alphabetical order below:

- APR-DRGs All patient-defined, diagnosis-related groups.
- BBA Balanced Budget Act of 1997, Public Law 105-33.
- BBRA Medicare, Medicaid and SCHIP [State Children's Health Insurance Program] Balanced Budget Refinement Act of 1999, Public Law 106-113.
- BIPA Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Benefits Improvement and Protection Act of 2000, Public Law 106-554.
- CMGs Case-mix groups.
- CMI Case-mix index.
- CMS Centers for Medicare & Medicaid Services.
- DRGs Diagnosis-related groups.
- FY Federal fiscal year.
- HCRIS Hospital Cost Report Information System.
- HHA Home health agency.
- HIPAA Health Insurance Portability and Accountability Act, Public Law 104-191.
- IRF Inpatient rehabilitation facility.
- LTC-DRG Long-term care diagnosis-related group.
- LTCH Long-term care hospital.
- MDCN Medicare Data Collection Network.
- MedPAC Medicare Payment Advisory Commission.
- MedPAR Medicare provider analysis and review file.
- ProPAC Prospective Payment Assessment Commission.
- SNF Skilled nursing facility.
- TEFRA Tax Equity and Fiscal Responsibility Act of 1982, Public Law 97-248.

### I. Background

When the Medicare statute was originally enacted in 1965, Medicare payment for hospital inpatient services was based on the reasonable costs

incurred in furnishing services to Medicare beneficiaries. Section 223 of the Social Security Act Amendments of 1972 (Pub. L. 92-603) amended section 1861(v)(1) of the Social Security Act (the Act) to set forth limits on reasonable costs for hospital inpatient services. Section 101(a) of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) (Pub. L. 97-248) amended the Medicare statute to limit payment by placing a cap on allowable costs per discharge. Section 601 of the Social Security Amendments of 1983 (Pub. L. 98-21) added section 1886(d) to the Act that replaced the reasonable cost-based payment system for most hospital inpatient services. Section 1886(d) of the Act provides for a prospective payment system for the operating costs of acute care hospital inpatient stays, effective with hospital cost reporting periods beginning on or after October 1, 1983.

Although most hospital inpatient services became subject to the prospective payment system, certain specialty hospitals are excluded from that system and continue to be paid their reasonable costs subject to the cap established under TEFRA. These hospitals included long-term care hospitals (LTCHs), rehabilitation and psychiatric hospitals, rehabilitation and psychiatric units of acute care hospitals, and children's hospitals. Cancer hospitals were added to the list of excluded hospitals by section 6004(a) of the Omnibus Budget Reconciliation Act of 1989 (Pub. L. 101-239).

Subsequent to the implementation of the acute care hospital inpatient prospective payment system, both the number of excluded hospitals and Medicare payments to these hospitals grew rapidly.

Congress enacted various provisions in the Balanced Budget Act (BBA) (Pub. L. 105-33), the Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Balanced Budget Refinement Act (BBRA) (Pub. L. 106-113), and the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA) (Pub. L. 106-554) to provide for the development and implementation of a prospective payment system for the following excluded hospitals:

- Rehabilitation hospitals (including units in acute care hospitals).
- Psychiatric hospitals (including units in acute care hospitals).
- LTCHs.

Section 4422 of the BBA mandated that the Secretary develop a legislative proposal, for presentation to Congress by October 1, 1999, for a case-mix adjusted LTCH prospective payment

system under the Medicare program. This system was to include an adequate patient classification system that reflects the differences in patient resource use and costs among LTCHs. Furthermore, in developing the legislative proposal for the prospective payment system, the Secretary was to consider several payment methodologies, including the feasibility of an expansion of the acute care inpatient hospital prospective payment system (diagnosis-related group (DRG) based system) established under section 1886(d) of the Act.

In the interim, section 4414 of the BBA imposed national limits (or caps) on hospital-specific target amounts (that is, annual per discharge limit) for these hospitals until cost reporting periods beginning on or after October 1, 2002. At the same time that Congress modified the payment system based on limits on target amounts, it also included in the BBA a provision to require the Secretary to develop a legislative proposal for establishing a prospective payment system for LTCHs.

With the passage of the BBRA in November 1999, in section 122, Congress refined some policies of the BBA prior to the implementation of prospective payment systems for LTCHs and psychiatric hospitals and units. Section 123 of the BBRA further requires that the Secretary develop a per discharge, DRG-based system for LTCHs and requires that this system be described in a report to the Congress by October 1, 2001, and be in place by October 1, 2002. Section 307(b)(1) of BIPA modified the BBRA's requirements for the prospective payment system for LTCHs by mandating that the Secretary " \* \* \* shall examine the feasibility and the impact of basing payment under such a system 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." Furthermore, section 307(b)(1) of BIPA provided that the Secretary " \* \* \* shall examine and may provide for appropriate adjustments to the long-term hospital prospective payment system, including adjustments to DRG weights, area wage adjustments, geographic reclassification, outliers, updates, and a disproportionate share adjustment \* \* \*." In the event that the Secretary is unable to implement the LTCH prospective payment system by October 1, 2002, section 307(b)(2) of BIPA requires the Secretary to implement a prospective payment system using the existing hospital DRGs, modified where feasible to account for resource use by LTCHs.

In this proposed rule, we set forth the proposed Medicare prospective payment system for LTCHs as authorized under the BBRA and BIPA. Below, we discuss the development, proposed policies, and proposed implementation of the proposed LTCH prospective payment system. These discussions include the following:

- An overview of the current payment system for LTCHs.
- A discussion of the statutory requirements for developing and implementing a LTCH prospective payment system.
- A discussion of research findings on LTCHs.
- A detailed discussion of the proposed LTCH prospective payment system, including the patient classification system, relative weights, payment rates, additional payments, and the budget neutrality requirements mandated by section 123 of Public Law 106-113.
- An analysis of the estimated impact of the proposed LTCH prospective payment system on the Federal budget and LTCHs.
- Proposed changes to existing regulations and the establishment of proposed regulations in 42 CFR Chapter IV to implement the proposed LTCH prospective payment system.

#### *A. Overview of Current Payment System for LTCHs*

##### **1. Exclusion of Certain Facilities From the Acute Care Hospital Inpatient Prospective Payment System**

Although payment for operating costs of most hospital inpatient services became subject to a prospective payment system under the Social Security Amendments of 1983 (Pub. L. 98-21) which added section 1886(d) to the Act, certain types of hospitals and units were excluded from that payment system. Section 1886(d)(1)(B) of the Act lists the following classes of excluded hospitals:

- Psychiatric hospitals and units.
- Rehabilitation hospitals and units.
- LTCHs.
- Children's hospitals.

Effective with cost reporting periods beginning on or after October 1, 1989, cancer hospitals were added to this list by section 6004(a) of the Omnibus Budget Reconciliation Act of 1989 (Pub. L. 101-239).

The hospital inpatient prospective payment system is a system of average-based payments that assumes that some patient stays will consume more resources than the typical stay, while others will demand fewer resources. Therefore, an efficiently operated

hospital should be able to deliver care to its Medicare patients for an overall cost that is at or below the amount paid under the hospital inpatient prospective payment system. In a report to the Congress, Hospital Prospective Payment for Medicare (1982), the Department of Health and Human Services stated that the "467 DRGs were not designed to account for these types of treatment" found in the four classes of excluded hospitals, and noted that "including these hospitals will result in criticism and their application to these hospitals would be inaccurate and unfair."

The Congress excluded these hospitals from the hospital inpatient prospective payment system because they typically treated cases that involved stays that were, on average, longer or more costly than would be predicted by the DRG system. The legislative history of the 1983 Social Security Amendments stated that the "DRG system was developed for short-term acute care general hospitals and as currently constructed does not adequately take into account special circumstances of diagnoses requiring long stays." (Report of the Committee on Ways and Means, U.S. House of Representatives, to Accompany HR 1900, H.R. Rept. No. 98-25, at 141 (1983)). Therefore, these hospitals could be systemically underpaid if the same DRG system were applied to them.

Following enactment in April 1983 of the Social Security Amendments of 1983, we implemented the hospital inpatient prospective payment system on October 1, 1983, including the initial publication in the **Federal Register** of the rules and regulations for the hospital inpatient prospective payment system—the September 1, 1983 interim final rule (48 FR 39752) and the January 3, 1984 final rule (49 FR 234). Updates and modifications of the regulations have been published annually in the **Federal Register**. We also developed payment policy for hospitals that were seeking to be excluded from the hospital inpatient prospective payment system. The regulations concerning exclusion of LTCHs from the hospital inpatient prospective payment system are found in 42 CFR part 412, subpart B.

##### **2. Requirements for LTCHs To Be Excluded From the Acute Care Hospital Inpatient Prospective Payment System**

Under section 1886(d)(1)(B) of the Act, the prospective payment system for hospital inpatient operating costs set forth in section 1886(d) of the Act does not apply to several specified types of hospitals, including LTCHs defined in section 1886(d)(1)(B)(iv)(I) of the Act as " \* \* \* a hospital which has an average

inpatient length of stay (as determined by the Secretary) of greater than 25 days." Public Law 105-33 added section 1886(d)(1)(B)(iv)(II) to the Act, which also provides another definition of LTCHs, specifically, a hospital that was first excluded in 1986 which has an average inpatient length of stay (as determined by the Secretary) of greater than 20 days and has 80 percent or more of its annual Medicare inpatient discharges with a principal diagnosis of neoplastic disease in the 12-month cost reporting period ending in FY 1997.

Implementing regulations at § 405.471(c)(5) (now § 412.23(e)) require the facility to have a provider agreement with Medicare to participate as a hospital, and an average inpatient length of stay greater than 25 days as calculated under the following formula: The average length of stay is calculated by dividing the total number of inpatient days (excluding leave of absence or pass days) for all patients by the total number of discharges for the hospital's most recent complete cost reporting period. The determination of whether or not a hospital qualifies as an LTCH is based on the hospital's most recently filed cost report, or if a change in the hospital's average length of stay is indicated, by the same method for the immediately preceding 6-month period (§ 412.23(e)(3)). (Requirements for hospitals seeking classification as LTCHs that have undergone a change in ownership, as described in § 489.18, are set forth in § 412.23(e)(3)(iii).)

### 3. Payment System Requirements Prior to the BBA

Hospitals that are excluded from the hospital inpatient prospective payment system under section 1886(d)(1)(B) of the Act are paid for inpatient operating costs under the provisions of Public Law 97-248 (TEFRA) that are found in section 1886(b) of the Act and implemented in regulations at 42 CFR part 413. Public Law 97-248 established payments based on hospital-specific limits for inpatient operating costs. A ceiling on payments to hospitals excluded from the acute care hospital inpatient prospective payment system is determined by calculating the product of a facility's base year costs (the year on which its target reimbursement limit is based) per discharge, updated to the current year by a rate-of-increase percentage, and multiplied by the number of total current year discharges. (A detailed discussion of target amount payment limits under Public Law 97-248 can be found in the September 1, 1983 final rule published in the **Federal Register** (48 FR 39746).)

The base year for a facility varied, depending on when the facility was initially determined to be a prospective payment system-excluded provider. The base year for facilities that were established prior to the implementation of Public Law 97-248 was 1982, when Public Law 97-248 was enacted. For facilities established after implementation of Public Law 97-248 (section 1886(b) of the Act), we originally provided in the regulations for payment to these facilities for their full "reasonable" costs for their first 3 cost reporting years, and allowed the facilities to choose which of those years would be used in the future to determine their target limit. This "new provider" period was later shortened to 2 cost reporting years (§ 413.40(f)(1) (1992)), and we designated the second cost reporting year as the cost reporting year used to determine the hospital's per discharge target amount.

Excluded facilities whose costs were below their target amounts received bonus payments equal to the lesser of half of the difference between costs and the target amount, up to a maximum of 5 percent of the target amount, or the hospital's costs. For excluded facilities whose costs exceeded their target amounts, Medicare provided relief payments equal to half of the amount by which the hospital's costs exceeded the target amount up to 10 percent of the target amount. Excluded facilities that experienced a more significant increase in patient acuity could also apply for an additional amount under the regulations for Medicare exception payments (§ 413.40(d)).

### 4. Effect of the Current Payment System

Utilization of post-acute care services has grown rapidly in recent years since the implementation of the acute care hospital inpatient prospective payment system. Average length of stay in acute care hospitals has decreased, and patients are increasingly being discharged to post-acute care settings such as LTCHs, skilled nursing facilities (SNFs), home health agencies (HHAs), and inpatient rehabilitation facilities (IRFs) to complete their course of treatment. The increased utilization of post-acute care providers, including hospitals excluded from the prospective payment system, has resulted in the rapid growth in Medicare payments to these hospitals in recent years. In addition, there has been a significant increase in the number of LTCHs. In 1991, there were 91 LTCHs; in 1994, 155 LTCHs; in 1999, 225 LTCHs; in December 2000, 252 LTCHs; and in November 2001, 270 LTCHs. Payments to post-acute care providers were among

the fastest growing providers under the Medicare program throughout the 1990s. (Prospective Payment Assessment Commission (ProPAC) June 1996 Report to Congress, p. 91.)

LTCHs have experienced faster growth in the number of facilities and Medicare program payments than any other category of prospective payment system-excluded provider. In its June 1996 Report to Congress, ProPAC found that, from 1990 to 1993, payment to rehabilitation facilities rose about 25 percent per year, while payments to LTCHs increased 33 percent annually (p. 92). ProPAC also found that, from 1991 to 1995, the number of rehabilitation facilities increased 21 percent (from 852 in 1991 to 1,029 in 1995), while the number of LTCHs increased 93 percent (from 91 in 1991 to 176 in 1995) (p. 93). Furthermore, the best available Hospital Cost Report Information System (HCRIS) data indicate \$398 million in payments for inpatient operating services to 105 LTCHs in FY 1993 and \$1.05 billion in payments for inpatient operating services to 206 LTCHs in FY 1998. This is more than a 96 percent increase in the number of LTCHs and a 164 percent increase in payments to LTCHs in 5 years.

In its March 1999 report to the Congress, the Medicare Payment Advisory Commission (MedPAC) (formerly ProPAC) stated that: "[The] TEFRA system has remained in effect longer than expected partly because of difficulties in accounting for the variation in resource use across patients in exempted facilities. The unintended consequences of sustaining that system have been a steady growth in the number of prospective payment system-exempt facilities and a substantial payment inequity between older and newer facilities. In particular, the payment system encouraged new exempt facilities to maximize their costs in the base year to establish high cost limits. Once subject to its relatively high limit, a recent entrant could reduce its costs below its limit, resulting in reimbursement of its full costs plus bonus payment. By contrast, facilities that existed before they became subject to TEFRA could not influence their cost limits. Given the relatively low limits of older facilities, they are more likely to incur costs above their limits and thus receive payments less than their costs." (p. 72)

To address concerns regarding the historical growth in payments and the disparity in payments to existing and newly excluded hospitals and units, the BBA mandated several changes to the existing payment system. These changes

are outlined in section I.B.1. of this preamble.

#### 5. Research and Discussion of a Prospective Payment System for LTCHs Prior to the BBA

Section 603(a)(2)(C)(ii) of Public Law 98–21 required the Secretary to include the results of research studies on whether and how excluded hospitals and units can be paid on a prospective basis, in the 1985 Report to the Congress on the Impact of Prospective Payment Methodology. HCFA (now CMS) undertook and funded a wide range of research projects that resulted in 1987 in a report to the Congress entitled “Developing a Prospective Payment System for Excluded Hospitals.” In that report, the Secretary presented an examination of the then current state of the four classes of excluded hospitals and units and offered recommendations for the development of a prospective payment system. “Long-term” or “chronic disease” hospitals, the report noted, “are the least understood of the excluded hospital types” (p. 3–51).

The following information was clear—there were a relatively small number of facilities (94 at that time); LTCHs were not dispersed throughout the country and, therefore, potential long-term care patients were receiving necessary care elsewhere; LTCHs, as defined by the greater than 25-day average length of stay, constituted a diverse set that closely resembled other hospitals, both included (acute care) and excluded (psychiatric, rehabilitation, and children’s) under the prospective payment system (pp. 3–51 through 3–63). The Report concluded with the following discussion: “Because this class of hospitals treats a very heterogeneous patient population and does not share a common set of facility characteristics, the development of a separate classification system for prospective payment purposes would appear to be both infeasible and undesirable. At the same time, as part of HCFA’s [now CMS’s] impact analysis, we were investigating the feasibility of including LTCHs under the current prospective payment system, where their cases would be expected to be paid predominantly under the prospective payment system outlier policy.” (pp. 3–63 through 3–64)

The 1987 report further noted that present and future research on LTCHs would focus on acquiring a broader understanding of LTCHs, long-term care patients, and other treatment settings and on the preliminary financial impact of a prospective payment system on both LTCHs and the Medicare system. An initial inquiry was also planned

“into the role of those hospitals as a component of the continuum of care between acute care hospitals and skilled nursing facilities, as a general first step in developing a classification system for patients in these facilities. \* \* \*” (p. 3–54)

ProPAC’s March 1996 Report to Congress endorsed the concept of prospective payment systems for all post-acute services, emphasizing consistent payment methods across all classes of facilities in order to encourage provider efficiency (p. 75). ProPAC’s extensive analysis of “patients using post-acute care providers and in these providers’ treatment patterns” based on FY 1994 data discussed in the June 1996 Report to Congress, concluded that “[a]lthough there was significant overlap in the hospital assigned DRGs across settings, other patient characteristics, such as medical complexity or functional status, may influence which patients use a particular site.” (p. 110)

In ProPAC’s March 1, 1997 report, ProPAC’s Recommendation 33, entitled “Coordinating Post-Acute Care Provider Payment Methods” stated that “the Commission urges the Congress and the Secretary to consider the overlap in services and beneficiaries across post-acute care providers as they modify Medicare payment policies.” (p. 60)

The passage of Public Law 105–33 (the BBA) provided for the establishment of separate and distinct prospective payment systems for post-acute care providers: SNFs (section 4432(a)), IRFs (section 4421), and HHAs (section 4603(b)). In addition, Congress directed the Secretary to develop a legislative proposal to pay LTCHs prospectively as well (section 4422).

#### *B. Requirements of the BBA, BBRA, and BIPA for LTCHs*

##### 1. Provisions of the Current Payment System

a. BBA. The BBA amendments to section 1886(b) of the Act significantly altered the payment provisions for excluded hospitals and units and also added other qualifying criteria for certain hospitals excluded from the hospital inpatient prospective payment system (sections 4411, 4412, 4413, 4414, 4415, 4416, 4417, 4418, and 4419). Provisions of these amendments that related to the current payment system were explained in detail and implemented in our final rule published in the **Federal Register** on August 29, 1997 (62 FR 45966).

Section 4411 of the BBA amended section 1886(b)(3)(B) of the Act and restricted the rate-of-increase

percentages that are applied to each provider’s target amount so that excluded hospitals and units experiencing lower inpatient operating costs relative to their target amounts receive lower rates of increase.

Section 4412 amended section 1886(g) of the Act to establish a 15-percent reduction in capital payments for excluded psychiatric and rehabilitation hospitals and units and LTCHs, for portions of cost reporting periods occurring during the period of October 1, 1997, through September 30, 2002.

Section 4413(b) of Public Law 105–33 amended section 1886(b)(3) of the Act to permit certain LTCHs to elect a rebasing of the target amount for the 12-month cost reporting period beginning during FY 1996.

Section 4414 of the BBA amended section 1886(b)(3) of the Act to establish caps on the target amounts for excluded hospitals and units at the 75th percentile of target amounts for similar facilities for cost reporting periods beginning on or after October 1, 1997, through September 30, 2002. These caps on the target amounts apply only to psychiatric and rehabilitation hospitals and units and LTCHs. Payments for these excluded hospitals and units are based on the lesser of a provider’s cost per discharge or its hospital-specific cost per discharge, subject to this cap.

Section 4415 of the BBA amended section 1886(b)(1) of the Act by revising the percentage factors used to determine the amount of bonus and relief payments, and establishing continuous improvement bonus payments for cost reporting periods beginning on or after October 1, 1997 for hospitals and units excluded from the prospective payment system that meet specified criteria. If a hospital is eligible for the continuous improvement bonus, the bonus payment is equal to the lesser of: (1) 50 percent of the amount by which operating cost are less than expected costs; or (2) 1 percent of the target amount.

Sections 4416 and 4419 of the BBA amended section 1886(b) of the Act to establish a new framework for payments for new excluded providers. Section 4416 added a new section 1886(b)(7) to the Act that established a new statutory methodology for new psychiatric and rehabilitation hospitals and units and LTCHs. Prior to this change, new hospitals excluded from the acute care hospital inpatient prospective payment system were exempted from the target amount per discharge ceiling until the end of the first cost reporting period ending at least 2 years after they accepted their first patient. This new provider “exemption” was eliminated from all classes of excluded providers

except children's hospitals for cost reporting periods beginning on or after October 1, 1997, by section 4419(a) of the BBA. Under section 4416, payment to these new excluded providers for their first two cost reporting periods is limited to the lesser of the operating costs per case, or 110 percent of the national median of target amounts, as adjusted for differences in wage levels, for the same class of hospital for cost reporting periods ending during FY 1996, updated to the applicable period.

It is important to note that prior to enactment of the BBA, the payment provisions for excluded hospitals and units applied consistently to all classes of excluded providers (that is, psychiatric, rehabilitation, long-term care, children's, and cancer). However, effective for cost reporting periods beginning on or after October 1, 1997, there are specific payment provisions for certain classes of excluded providers, as well as modifications for all excluded providers.

b. BBRA. With the enactment of the BBRA of 1999, Congress refined some of the policies mandated by the BBA for hospitals excluded from the acute care hospital inpatient prospective payment system. The provisions of the BBRA, which amended section 1886(b)(3)(H) of the Act relating to the current payment system for excluded hospitals, were explained in detail and implemented in our interim final rule published in the **Federal Register** on August 1, 2000 (65 FR 47026) and in our final rule also published on August 1, 2000 (65 FR 47054).

Section 4414 of the BBA had provided for caps on target amounts for excluded hospitals and units for cost reporting periods beginning on or after October 1, 1997. Section 121 of the BBRA amended section 1886(b)(3)(H) of the Act to provide for an appropriate wage adjustment to these caps on the target amounts for existing psychiatric and rehabilitation hospitals and units and LTCHs, effective for cost reporting periods beginning on or after October 1, 1999 through September 30, 2002.

Section 122 of BBRA provided for an increase in the continuous improvement bonus for eligible LTCHs and psychiatric hospitals and units for cost reporting periods beginning on or after October 1, 2000 and before September 30, 2002.

c. BIPA. Two provisions of BIPA that amended section 1886(b)(3) of the Act were directed at LTCHs. Section 307(a) of BIPA provided for a 2-percent increase to the wage-adjusted 75th percentile cap on the target amount for existing LTCHs, effective for cost reporting periods beginning during FY

2001. Section 307(a) also provided a 25-percent increase to the hospital-specific target amounts for existing LTCHs for cost reporting periods beginning in FY 2001, subject to the wage-adjusted national cap.

## 2. Provisions for a LTCH Prospective Payment System

a. BBA. In section 4422 of the BBA, the Congress mandated that the Secretary develop a legislative proposal for a case-mix adjusted prospective payment system under the Medicare program, for submission by October 1999 based on consideration of several payment methodologies, including the feasibility of expanding the current DRGs and the prospective payment system currently in place for acute care hospitals.

b. BBRA. Section 123 of the BBRA specifically requires that the prospective payment system for LTCHs be designed as a per discharge system with a DRG-based patient classification system that reflects the differences in patient resources and costs in LTCHs while maintaining budget neutrality. Section 123 also requires that a report be submitted to the Congress describing the system design of the mandated LTCH prospective payment system no later than October 1, 2001, and that the system be implemented for cost reporting periods beginning on or after October 1, 2002.

c. BIPA. The BIPA reiterated the dates of implementation of the LTCH prospective payment system set forth in the BBRA. This statute also directs the Secretary to examine the following specific payment adjustments: adjustments to DRG weights, area wage adjustments, geographic reclassification, outliers, updates, and a disproportionate share adjustment. Furthermore, if the Secretary is unable to implement the prospective payment system by October 1, 2002, the BIPA mandates that a default LTCH prospective payment system be implemented, based on existing DRGs, modified where feasible to account for the specific resource use of long-term care patients.

### *C. Research Supporting the Establishment of the LTCH Prospective Payment System: Legislative Requirements*

Section 4422 of the BBA required us to formulate a legislative proposal on the development of a prospective payment system for LTCHs for submission to the Congress by October 1, 1999. To prepare for this proposal, we awarded a contract to The Urban Institute (Urban) following the enactment of the BBA for a multifaceted

analysis of LTCHs, including a description of facilities and patients, as well as exploration of a variety of classification and payment system options.

In section 123(a) of the BBRA, Congress mandated a per-discharge, DRG-based model for the prospective payment system for LTCHs. Our basic objective remained unchanged—to arrive at a clearer understanding of the universe of LTCHs in relation to facility characteristics; beneficiary utilization; and beneficiary characteristics such as diagnoses, treatment, and discharge patterns.

Under the terms of our original contract with Urban, 3M Health Information Systems (3M) was subcontracted to provide an analysis and assessment of alternative classification systems for use in LTCHs in keeping with variables such as treatment patterns, patient demographics, and diagnoses and procedure codes for patients at LTCHs and acute care hospitals.

After the enactment of section 123 of the BBRA, we instructed 3M to limit its analyses to several DRG-driven classification systems, using the database constructed by Urban describing LTCHs, patients at LTCHs, and patients with the same diagnoses as LTCH patients treated in other facilities. We also contracted with 3M to develop and analyze the data necessary for us to design and develop the proposed Medicare LTCH prospective payment system based on DRGs.

### *D. Description of Sources of Research Data*

The records for all Medicare hospital inpatient discharges (including discharges for LTCHs) are contained in the Medicare provider analysis and review file (MedPAR), which includes patient demographics (age, gender, race, and residence zip code), clinical characteristics (diagnoses and procedures), and hospitalization characteristics. (Beneficiary data were encrypted to prevent the identification of specific Medicare beneficiaries.) The Medicare cost report data constitute the HCRIS, and includes information on facility characteristics, utilization data, and cost and charge data by cost center.

The description of the universe of LTCHs in section I.E. of this proposed rule is based on calendar year (CY) 1997 MedPAR, the HCRIS file containing the best available cost data for cost reporting periods that began during FYs 1996 and 1997, and 1997 data from the Online Survey Certification and Reporting System (OSCAR).

The 1997 OSCAR data provided information from the State survey and certification process to identify and characterize providers that participate in Medicare and Medicaid and includes a list of all hospitals that were designated as LTCHs by Medicare. OSCAR data included the number of employees of various types and the number of different types of beds and care units, as well as variables on certification date, type of control, geographic region, and hospital size.

*E. The Universe of LTCHs*

1. Background Issues

LTCHs typically furnish extended medical and rehabilitative care for patients who are clinically complex and have multiple acute or chronic conditions. Generally, Medicare patients in LTCHs have been transferred from acute care hospitals and receive a range of "post-acute care" services at LTCHs, including comprehensive rehabilitation, cancer treatment, head trauma treatment, and pain management. (MedPAC March 1999 Report to Congress, p. 95.) A LTCH must be certified as an acute care hospital that meets criteria set forth in section 1861(e) of the Act in order to participate as a hospital in the Medicare program. Generally, under Medicare, hospitals are paid as LTCHs if they have an inpatient average length of stay greater than 25 days.

LTCHs are a heterogeneous group of facilities ranging from old tuberculosis and chronic disease hospitals to newer facilities designed primarily to care for ventilator-dependent patients. They are unevenly distributed across the United States, with one-third (72 of 203 in 1997) located in Massachusetts, Texas, and Louisiana. As of 1997, 203 facilities were determined by Medicare to be LTCHs; by early 2000, 239 facilities were determined by Medicare to be LTCHs; and as of November 2001, OSCAR had data on 270 LTCHs.

LTCHs constitute a relatively small provider group in the Medicare program and have not been widely studied. Only limited information has been published about their characteristics in terms of types of patients served and resources used. As stated earlier in section I.C. of this preamble, the primary goal of the initial research contract with Urban was to increase our knowledge about LTCHs and their patients. In addition to describing the providers and patients, the study was expected to provide insight into the ways in which LTCHs differ from other Medicare post-acute care providers. In the following summary and tables, we provide a description of Urban's findings that formed the basis for the design of the proposed prospective payment system for LTCHs presented in this proposed rule.

2. General Medicare Policies

Inpatient stays at LTCHs are covered under the Part A hospital benefit and include room and board, medical and nursing services, laboratory tests, X-rays, pharmaceuticals, supplies, and other diagnostic or therapeutic services (§§ 409.10 and 412.50). LTCHs can offer specialized services (for example, physical rehabilitation or ventilator-dependent care) or can provide more generalized services (for example, chronic disease care).

Hospital services are covered for up to 90 days during a Medicare-defined "benefit period," which is a period that begins with admission as an inpatient to an acute care or other hospital and ends when the beneficiary has spent 60 consecutive days outside of an inpatient facility (§ 409.60). There are 60 additional covered lifetime reserve days that may be used over a beneficiary's lifetime. One inpatient deductible payment (\$792 in 2002) is required for each benefit period, so a beneficiary generally does not have to make a new deductible payment for a LTCH stay unless the LTCH stay is not preceded by

another hospital stay. A patient with a long LTCH stay, however, is subject to a coinsurance payment (\$198 in 2002) for days 61 through 90 of hospital use during a benefit period. For the lifetime reserve days, the Medicare beneficiary is subject to a daily coinsurance amount (\$396 in 2002) (§ 409.61). LTCHs must meet State licensure requirements for acute care hospitals and must have a provider agreement with Medicare in order to receive Medicare payment. Intermediaries verify that LTCHs meet the required average length of stay of greater than 25 days.

3. Exclusion From the Acute Care Hospital Inpatient Prospective Payment System

As discussed more fully in section I.A.2 of this preamble, LTCHs were excluded from the FY 1984 implementation of the acute care hospital inpatient prospective payment system and continued to be paid based on their cost per discharge, subject to per discharge limits.

4. Geographic Distribution

Overall, 203 LTCHs filed Medicare claims in 1997. This number translates into an average of approximately one facility per 200,000 Medicare enrollees. As can be seen in Table 1, LTCHs are not distributed across all States in proportion to the number of Medicare enrollees in those States. They are unevenly distributed across the United States, with one-third (72 of 203) located in Massachusetts, Texas, and Louisiana. These three States together account for 36 percent of the LTCHs, but only fewer than 10 percent of Medicare enrollees. Furthermore, 13 small States have no LTCHs, although they account for approximately 7 percent of Medicare enrollees. In contrast, the three largest Medicare States (California, Florida, and New York) account for 24.1 percent of Medicare enrollees together, but only 13.8 percent of LTCHs.

TABLE 1.—PERCENTAGE DISTRIBUTION OF NUMBER OF LONG-TERM CARE HOSPITALS (LTCHS), MEDICARE ENROLLEES, AND CERTIFIED BEDS, BY STATE, 1997

State	Number of LTCHs	Percent of LTCHs	Number of medicare enrollees	Percent of medicare enrollees	Number of certified beds	Percent of certified beds
Alabama .....	1	0.5	696,586	1.8	191	1.0
Alaska .....	0	0.0	38,570	0.1	0	0.0
Arizona .....	4	2.0	667,226	1.7	187	1.0
Arkansas .....	0	0.0	453,195	1.1	0	0.0
California .....	12	5.9	3,920,674	9.9	1,304	7.1
Colorado .....	4	2.0	464,299	1.2	277	1.5
Connecticut .....	4	2.0	531,805	1.3	716	3.9
Delaware .....	0	0.0	111,171	0.3	0	0.0
District of Columbia .....	1	0.5	80,028	0.2	23	0.1
Florida .....	11	5.4	2,853,420	7.2	805	4.4



TABLE 1.—PERCENTAGE DISTRIBUTION OF NUMBER OF LONG-TERM CARE HOSPITALS (LTCHS), MEDICARE ENROLLEES, AND CERTIFIED BEDS, BY STATE, 1997—Continued

State	Number of LTCHs	Percent of LTCHs	Number of medicare enrollees	Percent of medicare enrollees	Number of certified beds	Percent of certified beds
Georgia	6	3.0	915,577	2.3	557	3.0
Hawaii	1	0.5	163,217	0.4	13	0.1
Idaho	0	0.0	163,303	0.4	0	0.0
Illinois	5	2.5	1,701,123	4.3	703	3.8
Indiana	11	5.4	877,656	2.2	434	2.4
Iowa	0	0.0	498,288	1.3	0	0.0
Kansas	3	1.5	406,752	1.0	74	0.4
Kentucky	1	0.5	633,802	1.6	337	1.8
Louisiana	19	9.4	622,805	1.6	1,288	7.0
Maine	0	0.0	218,265	0.6	0	0.0
Maryland	4	2.0	651,710	1.7	465	2.5
Massachusetts	17	8.4	991,641	2.5	3,077	16.8
Michigan	3	1.5	1,435,420	3.6	280	1.5
Minnesota	2	1.0	669,708	1.7	313	1.7
Mississippi	2	1.0	428,729	1.1	65	0.4
Missouri	3	1.5	888,959	2.3	317	1.7
Montana	0	0.0	139,392	0.4	0	0.0
Nebraska	1	0.5	263,287	0.7	25	0.1
Nevada	3	1.5	225,152	0.6	106	0.6
New Hampshire	0	0.0	170,031	0.4	0	0.0
New Jersey	3	1.5	1,239,890	3.1	212	1.2
New Mexico	2	1.0	231,517	0.6	86	0.5
New York	5	2.5	2,780,994	7.0	1,262	6.9
North Carolina	1	0.5	1,129,329	2.9	59	0.3
North Dakota	0	0.0	107,628	0.3	0	0.0
Ohio	7	3.4	1,766,266	4.5	653	3.6
Oklahoma	8	3.9	523,358	1.3	294	1.6
Oregon	0	0.0	500,035	1.3	0	0.0
Pennsylvania	6	3.0	2,183,850	5.5	412	2.3
Rhode Island	1	0.5	177,247	0.4	700	3.8
South Carolina	2	1.0	562,732	1.4	0	0.0
South Dakota	0	0.0	123,401	0.3	211	1.2
Tennessee	6	3.0	838,357	2.1	210	1.1
Texas	36	17.7	2,275,673	5.8	1,818	9.9
Utah	1	0.5	204,525	0.5	39	0.2
Vermont	0	0.0	89,821	0.2	0	0.0
Virginia	3	1.5	893,602	2.3	664	3.6
Washington	2	1.0	742,589	1.9	97	0.5
West Virginia	0	0.0	349,684	0.9	0	0.0
Wisconsin	1	0.5	806,951	2.0	34	0.2
Wyoming	1	0.5	65,699	0.2	3	0.0
Total	195	100.00	36,322,068	100.00	18,311	100.00

Source: 1997 Online Survey and Certification Reporting System (OSCAR).

Although the distribution of certified beds generally tracks the distribution of LTCHs across States, there is not always a direct relationship between the number of LTCHs and the bed capacity in a given State. For instance, Massachusetts has only 8.4 percent of LTCHs, but 16.8 percent of Medicare-certified beds. In contrast, Texas has 17.7 percent of LTCHs, but only 9.9 percent of the certified beds.

##### 5. Characteristics by Date of Medicare Participation

The OSCAR program provided data captured by the State survey and certification process that can be used to identify and characterize providers participating in Medicare and Medicaid. The following analyses were based on

LTCHs for which data were available. Eight facilities, which account for only 1 percent of all LTCH stays and 1.3 percent of certified beds, were excluded from the analysis since 1997 OSCAR records were not available for these facilities.

Given the known payment variations for old and new facilities that were excluded facilities paid under the target amount methodology, we divided the LTCHs by age (the date of the LTCH's first Medicare participation, as reported by OSCAR) to gain a sense of the variation among the existing LTCHs in 1997. A strong correlation is found between the age of a LTCH and other key characteristics, such as location and ownership control, as well as operating costs and Medicare payments. For

analytical purposes, therefore, the total sample of LTCHs was stratified based on age ("old," "middle," or "new"). Of the 195 LTCHs in OSCAR in 1997, 20 percent were in existence before the hospital inpatient prospective payment system and hospital inpatient prospective payment system exclusions went into effect in October 1983 (old LTCHs); 30 percent were determined to be LTCHs between October 1983 and September 1993 (middle LTCHs); and 50 percent were determined to be LTCHs between October 1993 and September 1997 (new LTCHs). This pattern is consistent with reports of the large growth in the number of LTCHs in recent years. (As of November 2001, OSCAR had data on 270 LTCHs, which indicate that the growth has continued.)

Old LTCHs are generally located in the northeast region of the United States, while newer LTCHs are typically located in the southern region. Most notably, the ownership of the LTCHs that began Medicare participation before and after the implementation of the acute care hospital inpatient prospective payment system is quite different. Old LTCHs are either government controlled (about 63 percent) or nonprofit (about 37 percent). In contrast, one-half of the LTCHs that began participation in Medicare between 1983 and 1993, and two-thirds of those that began participation in Medicare in FY 1994 or later, are proprietary facilities. Virtually no new LTCHs are government controlled.

#### 6. Hospitals-Within-Hospitals and Satellite Facilities

The Medicare statute does not contemplate the recognition of "LTCH units" of prospective payment system acute care hospitals; the statute does reference rehabilitation and psychiatric units. Long-term care units of prospective payment system hospitals are not allowed in part because of the concern that transfers of acute care patients into the LTCH units could inappropriately maximize prospective payments under the hospital inpatient prospective payment system. The presence of a long-term care "unit", excluded from the hospital inpatient prospective payment system and co-located in an acute care hospital, could enable the acute care hospital to shift patients to the long-term care "unit" without completing the full course of treatment. These patient transfers could result in inappropriate payments under Medicare since the acute care hospital would make money in those cases where it received a full DRG payment without providing the full course of treatment to the beneficiary and could avoid losing any money for other more costly patients by prematurely discharging them to the LTCH. Since payments to hospitals under the hospital inpatient prospective payment system were based on hospital costs that included the costs of patients with longer lengths of stay, such a patient shift would result in an "overpayment" to the acute care hospital and the LTCH would receive an additional payment for that same patient.

Nonetheless, in the mid-1990s, of the roughly 150 LTCHs in existence at the time, about 12 recently established LTCHs were, in fact, LTCHs located in the buildings or on the campuses of acute care hospitals. In order to prevent the gaming of the Medicare system that would result from inappropriate

transfers between the inpatient acute care hospital and the LTCH located within the acute care hospital, we have implemented additional qualifying criteria at § 412.22(e) for these entities. These criteria require that in order to be excluded from the prospective payment system, a hospital located in or on the campus of an acute care hospital (referred to as a "hospital-within-a-hospital") must have a separate governing body, chief executive officer, chief medical officer, and medical staff. In addition, the hospital must perform basic functions independently from the host hospital, incur no more than 15 percent of its total inpatient operating costs for items and services supplied by the hospital in which it is located, and have an inpatient load of which at least 75 percent of patients are admitted from sources other than the host hospital. Originally, these regulations were effective as of October 1994. However, section 4417(a) of the BBA amended section 1886(d)(1)(B) of the Act to provide that a hospital that was excluded from the prospective payment system on or before September 30, 1995, as an LTCH, shall continue to be so classified, notwithstanding that it is located in the same building or in one or more buildings located on the same campus as another hospital. (See § 412.22(f).)

In the late 1990s, we became aware of a newly developing entity that was physically similar, but legally unrelated, to a hospital-within-a-hospital. These entities were hospital-within-hospital type facilities (in the buildings or on the campuses of acute care hospitals) owned by a separate existing LTCH. We identified these facilities as "long-term care hospital satellites."

In the July 30, 1999 **Federal Register** (64 FR 41540), we revised § 412.22(h) to require that in order to be excluded from the hospital inpatient prospective payment system, a satellite of a hospital: (1) Must maintain admission and discharge records that are separately identified from those of the hospital in which it is located; (2) cannot commingle beds with beds of the hospital in which it is located; (3) must be serviced by the same fiscal intermediary as the hospital of which it is a part; (4) Must be treated as a separate cost center of the hospital of which it is a part; (5) for cost reporting purposes, must use an accounting system that properly allocates costs and maintains adequate data to support the basis of allocation; and (6) must report costs in the cost report of the hospital of which it is a part, covering the same fiscal period and using the same method of apportionment as that hospital. In

addition, the satellite facility must independently comply with the qualifying criteria for exclusion from the hospital inpatient prospective payment system. The total number of State-licensed and Medicare-certified beds (including those of the satellite facility) for a hospital that was excluded from the prospective payment system for the most recent cost reporting period beginning before October 1, 1997, may not exceed the hospital's number of beds on the last day of that cost reporting period.

#### 7. Specialty Groups of LTCHs by Patient Mix

There is a widely held view that the population of LTCHs is heterogeneous. We believe that understanding the composition of this population and identifying and classifying subgroups within it are fundamental to designing a prospective payment system for LTCHs.

Broad categories of conditions as defined by major diagnostic categories (MDCs), the principal diagnostic categorization tool used under the hospital inpatient prospective payment system, were used to classify LTCHs according to the medical conditions of their patient caseloads. (MDCs were formed by dividing all possible principal diagnoses into 25 mutually exclusive categories. Most MDCs correspond to a major organ system, though a few correspond to etiology.)

We also explored the possibility of grouping patients by DRGs or by selected individual diagnoses. These attempts resulted in creating groups too small for any effective characterization. However, the analysis did reveal that while some LTCHs treat a wide range of conditions, others specialize in one or two types of conditions. In order to analyze a grouping based on patient mix, under its contract with us, Urban first examined the proportion of facilities' caseloads in specific MDCs. There are five MDCs in which at least one LTCH has a majority (that is, more than 50 percent) of its cases. Patients with respiratory system problems are the most common caseload concentration—in 1997, 13 percent of LTCHs have a caseload concentration of 50 percent to 75 percent, and another 7 percent of LTCHs have more than 75 percent of their cases in this MDC.

The other three MDCs that make up a majority of at least one LTCH's patient caseload (nervous system MDC, musculoskeletal and connective tissue disorders MDC, and factors influencing health status MDC) are all related to rehabilitation needs. (Because rehabilitation-related DRGs are common

to LTCHs and fall into the "Factors Influencing Status" MDC, we are proposing to classify all cases in this MDC as rehabilitation services for the purpose of this analysis.) Seven percent of LTCHs have a majority of their caseload in an MDC related to rehabilitation-related services. A significantly less common concentration is seen in the 2 percent of LTCHs that have a majority of their patients in the mental diseases and disorders MDC. All but two LTCHs in our analysis have some share of patients with respiratory system problems. Similarly, all but five LTCHs have some patients with circulatory problems.

Based on these findings, we developed a grouping that consists of four broad categories of LTCHs based on patient caseload. Facilities with greater than 50 percent of their cases in the respiratory MDC were assigned to a "respiratory specialty" group for the purpose of this analysis. Similarly, all facilities with over 50 percent of their caseload in the mental MDC were designated as "mental specialty" facilities. The three rehabilitation-related MDCs were combined into one "rehabilitation-related MDC" category and grouped into a "rehabilitation specialty" group. All remaining facilities (that did not have high concentrations of patients in the respiratory MDC, the mental MDC, or the rehabilitation-related MDCs category) were placed into a "multispecialty" facility group. LTCHs in this category provide care to a wider range of patient types than LTCHs in the first three categories.

To better understand the relatively large number of multispecialty LTCHs, we explored their MDC composition. Not unexpectedly, most of these facilities have high proportions of cases in the respiratory MDC and the rehabilitation-related MDCs category, although some LTCHs do not serve either of these populations in great numbers. Few LTCHs do not have a significant share of their caseload in either the respiratory MDC or the rehabilitation-related MDCs category. Only 2 percent of multispecialty LTCHs have less than 25 percent of their caseload in either specialty group. Similarly, only 7 percent of multispecialty facilities have less than 35 percent of their caseload in either of the two groups. In contrast, about 60 percent of LTCHs have at least half of their caseload in either the respiratory MDC or the rehabilitation-related MDCs category. This high share demonstrates that, despite their assignment to the multispecialty category, most LTCHs serve a high percentage of patients with

respiratory or rehabilitation problems, or both.

Although respiratory and rehabilitation specialty facilities are prevalent in the LTCH population, there are also some "niche" LTCHs that have unique patient populations or provide uncommon services. These hospitals include, for example, a large hospital where most admitted individuals (90 percent) die in the facility.

Several LTCHs provide services for special populations. One facility provides services for a prison population. A large share of this facility's funding is through Medicaid; cost report data show Medicaid covers two-thirds of its patient stays.

Some other facilities work with similarly specialized populations and have very small Medicare caseloads. In particular, two facilities that focus on developmentally disabled children and younger adults had fewer than 10 Medicare stays in 1997. Cost reports show that one of these facilities, which provides rehabilitation for its Medicare patients, has few discharges (under 100) regardless of payer source. The other, which provides mostly psychiatric services, relies on public funding for only a small share of its discharge payments.

Although there are a few niche facilities in the LTCH population, our analysis indicates that a preponderance of the LTCHs can be classified in distinct specialty groups that focus on adult rehabilitation and respiratory system care.

#### 8. Sources and Destinations of LTCH Patients

Another useful perspective on LTCHs is the pattern of sources from which patients are admitted to LTCHs and destinations to which LTCH patients are discharged. This information shows how such transition patterns differ among the specialty groups. In general, the findings are consistent with the notion that LTCHs as a group are heterogeneous in terms of the patients they serve.

The vast majority (70 percent) of LTCH patients are admitted from acute care hospitals. Within this group, acute care patients whose stays are designated as "outlier" stays, as defined by section 1886(d)(5)(A)(i) of the Act and implemented in § 412.80, were identified separately. Sixteen percent of LTCH admissions were acute care hospital outlier patients, while 54 percent were admitted from acute care hospitals but did not have extraordinarily long acute care stays. After acute care hospitals, direct admission from the community is the

next most common source of admissions (14 percent) to LTCHs.

The admission patterns vary somewhat by LTCH specialty type. Notably, 85 percent of admissions to respiratory specialty LTCHs are from acute care hospitals, including 22 percent that are acute care hospital outlier cases. A very small percentage (7 percent) of admissions to respiratory specialty LTCHs are from the community. In contrast, the admission sources for the rehabilitation specialty LTCHs are more similar to that of the multispecialty LTCHs. Notably, a higher than average share of patients come from SNFs (8 percent) and HHAs (6 percent) and a lower percentage of patients transition from acute care hospital outlier stays (12 percent). A relatively large share (11 percent) of patients at rehabilitation specialty LTCHs are admitted directly from the community compared to patients at respiratory specialty LTCHs (7 percent). These findings suggest that patients admitted to rehabilitation specialty LTCHs might present a less medically intensive clinical picture than patients admitted to respiratory specialty LTCHs.

The admission pattern of patients admitted to the mental specialty LTCHs is quite different from those of the other specialties. A relatively small percentage (31 percent) of patients are admitted from acute care hospitals and only 2 percent are admitted after being acute care hospital outliers. In contrast, large proportions are admitted directly from the community (40 percent) or from some other type of Medicare provider (27 percent).

An analysis of the pattern of discharge destinations for LTCHs shows that, overall, 38 percent of LTCH stays are discharged to the community without additional Medicare services. Equal percentages (18 percent) are discharged to SNFs and acute care hospitals, and 21 percent of patients are discharged to HHAs.

Some variations in discharge destination patterns exist among LTCHs by specialty. Relative to the overall sample, the respiratory specialty LTCHs have higher than average percentages of patients discharged to SNFs (24 percent versus 18 percent), and lower percentages discharged to HHAs (14 percent versus 21 percent). Rehabilitation specialty facilities, however, have a relatively high proportion of cases (34 percent) discharged to HHAs, and a lower than average proportion discharged to the community without additional Medicare services (28 percent versus 38 percent). Finally, mental specialty hospitals have an unusually high

percent of cases (71 percent) discharged to the community without additional Medicare services. These findings suggest that patients served by respiratory specialty LTCHs are more likely to require extended care in institutional settings (for example, SNFs), while patients discharged from rehabilitation specialty facilities also require extended care, but not necessarily in institutional settings.

#### 9. LTCHs and Patterns Among Post-Acute Care Facilities

Urban's research also produced data regarding a comparison of LTCHs with other post-acute care settings in order to provide us with the broadest possible understanding of the universe of LTCHs. The findings were only preliminary comparisons of patients among and across post-acute settings because of the nature of each category of post-acute care providers. Even though data suggest substantial clinical differences among the providers with some areas of overlap, because of some similarities we found it useful to draw parallels and distinctions among post-acute care providers. Moreover, findings from this research supported conclusions published in several reports to the Congress produced by ProPAC and MedPAC over the past decade.

Most patients in LTCHs have several diagnosis codes on their Medicare claims, indicating that they have multiple comorbidities and are probably less stable upon admission than patients admitted to other post-acute care settings. Relative to IRFs, LTCHs have a higher proportion of patient costs attributable to ancillary services (for example, pharmacy, laboratory, and radiology charges) (MedPAC March 1999 Report to Congress, p. 95). LTCHs also provide care to a disproportionately large number of Medicare beneficiaries who are eligible because of disability. While individuals with disabilities make up about 10 percent of the Medicare population, they make up 17 percent of LTCH patients.

Urban's analysis also explored the demographic characteristics of LTCH patients compared to IRF patients. The proportion of LTCH patients who are under 65 years of age (18 percent) is twice that of IRF patients (9 percent). The share of LTCH patients over 85 years old is slightly higher (18 percent) compared to IRF patients (14 percent). LTCHs also have a higher proportion of male patients and a lower proportion of white patients than IRFs. LTCHs have long median lengths of stay: 21 days versus 16 days for IRFs. About one-third of the LTCH Medicare stays are by beneficiaries who are also eligible for

Medicaid, compared to fewer Medicaid-eligible beneficiary stays at IRFs (17 percent). It has been widely documented that dually eligible beneficiaries are generally much sicker than non-Medicaid eligible Medicare beneficiaries.

Urban's analysis also included a description of the demographic characteristics of LTCH patient stays by admission sources—outlier acute care hospital, nonoutlier acute care hospital, and other. Those with prior outlier acute care hospital stays seem to be the most distinctive group in terms of length of stay, gender, race, and poverty: they have the highest mean and median length of stay in the LTCH, the highest proportion male, the highest proportion white, and the lowest proportion of Medicaid-eligible patients. However, in terms of age, those with prior hospital stays (whether outlier or nonoutlier) are quite different from those with other admission sources. Those without a prior acute care hospital stay are younger and about twice as many are under age 65, whose mean age is about 5 and 3 years lower than those with a prior outlier stay and those with a prior nonoutlier stay, respectively. Among those with an acute care hospital stay, the nonoutliers are slightly older on average, with higher percentages in the oldest groups (75 to 84 and 85 plus) and the highest median age of all three groups.

The policies that we are proposing in this proposed rule were determined in part based on analysis of the above data and information gathered on LTCHs and their Medicare patients.

#### F. Overview of System Analysis for the Proposed LTCH Prospective Payment System

For the systems analysis, 3M used the MedPAR (FY 1999 through FY 2000), OSCAR (FY 2000), and HCRIS (FYs 1998 and early 1999) files. Specifically, for this proposed rule, 3M performed the following tasks:

- Construction of an updated data file, using the most recent data available from CMS.
- Analysis of issues, factors, or variables and presentation of options for possible use in the design and implementation of the proposed prospective payment system.
- Data simulation of various system features to analyze their impact on the design of the proposed prospective payment system.

A data file was constructed to serve as the basis of our proposed patient classification system and the development of proposed payment weight rates and proposed payment

adjustments. The analysis of this data file helped us regarding the structure of the proposed prospective payment system in this proposed rule. We relied upon patient charge data from FY 2000 MedPAR for setting proposed LTC-DRG weights and upon costs data from FY 1998 and FY 1999 cost reports for proposed payment rates. We expect that the availability of updated FY 2000 MedPAR data and updated FY 1999 HCRIS data, further analysis of the data file, and review of the comments that we receive in response to this proposed rule may result in refinements to our proposed policies, particularly in the areas of weights and rates.

#### G. Evaluation of DRG-Based Patient Classification Systems

Section 307(b) of Public Law 106-554 modified the requirements of section 123 of Public Law 106-113 by specifically requiring that the Secretary examine "the feasibility and the impact of basing payment under such a system [the LTCH prospective payment system] 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 order to comply with statutory mandates, our evaluation of DRG-based patient classification systems focused on two models—the LTC-all patient-refined DRGs (LTC-APR-DRGs Version, 1.0), a severity-based case-mix classification system developed specifically for LTCHs; and the LTC-CMS-DRGs, a modification of the DRG system used in the acute care hospital inpatient prospective payment system.

The LTC-APR-DRGs, a condensed version of 3M's all-patient refined DRGs (APR-DRGs) for acute care hospitals, was developed by Dr. Norbert Goldfield, Clinical Director of 3M Health Information Systems for exclusive use in LTCHs. The LTC-APR-DRG system was designed to reflect the clinical characteristics of LTCH patients. This case-mix classification model contains 26 base LTC-APR-DRGs, subdivided by 4 severity of illness levels to yield 104 classification levels. In this system, the patient's secondary diagnoses, their interaction, and their clinical impact on the primary diagnosis determine the severity level assigned to each of the 26 LTC-APR-DRGs.

The LTC-CMS-DRGs are based on research done by The Lewin Group (Developing a Long-Term Hospital Prospective Payment System Using Currently Available Administrative Data for the National Association of Long-

Term Hospitals (NALTH), July 1999.) This model uses our existing hospital inpatient DRGs with weights that accounted for the difference in resource use by patients exhibiting the case complexity and multiple medical problems characteristic of LTCHs. In order to deal with the large number of low volume DRGs (all DRGs with fewer than 25 cases), the LTC-CMS-DRG model groups low volume DRGs into 5 quintiles based on average charge per discharge. The result was 184 classification groups (179 DRG-based and 5 charge-based payment groups) based on patient data from FYs 1994 and 1995. (CMS updated this analysis using patient data from FYs 1999 and 2000 for purposes of system evaluations.)

Under either classification system, DRG weights would be based on data for the population of LTCH discharges, reflecting the fact that LTCH patients represent a different patient mix than patients in short-term acute care hospitals. GROUPER software programs enabled us to examine the most recent LTCH and acute care hospital inpatient prospective payment system patient discharge data in light of the features of each system. Using regression analyses and simulations, the impact of each patient classification system on potential adjustment features for the prospective payment system was assessed. (Data files used in these analyses are specified in section I.C.2.) Our medical staff as well as physicians involved in treatment of patients at LTCHs provided additional input from the standpoint of clinical coherence and practical applicability.

The system that we are proposing for the LTCH prospective payment system is the LTC-CMS-DRG GROUPER that is based on the Lewin model because we believe it accurately predicts costs without the problems that we believe could be inherent with the APR-DRG system. (In section III. of this proposed rule, which describes the functioning of the classification system as a component of the proposed LTCH prospective payment system, the LTC-CMS-DRGs are referred to as the proposed LTC-DRGs.)

It is important to note that we have analyzed both systems based on MedPAR files generated by LTCH patient data, using the best available data. Since the TEFRA payment system, under which LTCHs are currently paid, is not tied to patient diagnoses, the coding data from LTCHs have not been used for payment. Nevertheless, data analyses indicated that there was a minimal difference in both systems' abilities to predict costs. (The difference

in the  $R^2$ , a statistical measure of how much variation in resource use among cases is explained by the models, was only 0.0313.)

We believe that either classification system would result in more equitable payments for LTCHs compared to current payment methods. The proposed LTCH prospective payment system would generally improve the accuracy of payments for more clinically complex patients. (See our discussion of the TEFRA payment system in section I.A. of this proposed rule.) As the Congress intended, the DRG weights under the proposed LTCH prospective payment system would reflect the " \* \* \* different resource use of long-term care hospital patients." Patients requiring more intensive complex services would be classified in LTC-DRGs with higher relative weights and hospitals would receive appropriately higher payments for these patients. We solicit comments on the impact one system may have over another as it applies to different kinds of LTCHs.

Although either system would result in more equitable payments to LTCHs, we have several interrelated concerns about adopting the LTC-APR-DRG system based upon its complexity, its clinical subjectivity, and its utility as it relates to other Medicare prospective payment systems. The LTC-APR-DRG model provides a clinical description of the population of LTCHs, patients exhibiting a range of severity of illness with multiple comorbidities as indicated by secondary diagnoses. The clinical interaction of the primary diagnosis with these comorbidities determines the severity level of the primary diagnoses, resulting in the final assignment to a LTC-APR-DRG by the GROUPER software designed for this system.

One aspect of our examination of the LTC-APR-DRG system included clinical review of actual case studies provided by physicians at several LTCHs and evaluations of the LTC-APR-DRG assignments that would have resulted based on the clinical logic of the APR-DRG GROUPER. A review of a number of those cases by different medical professionals resulted in different possible classifications for the GROUPER program. Looking at the same case, different views were held as to which APR-DRG category or to which level of severity the case should be grouped. Given the array of specialization at different LTCHs reflecting a range of services and patient types, as described in section I.E.7. of this preamble, we believe that we lack sufficient data, at this point in time, to

definitely determine the effect of particular comorbidities on patient resource needs in LTCHs. Furthermore, it appears that depending on how many of the diagnoses are coded, medical judgement suggests that it could be possible to classify the same patient in more than one group or level of severity. Because of these concerns, we believe that payments under such a policy could be insufficiently well-defined, given currently available data, to ensure consistently appropriate Medicare payments.

We are aware that the forthcoming prospective payment system for IRFs is based on a patient classification system that includes a measure of comorbidities, the combination of the case-mix group (CMG) and comorbidity tier. In general, most IRF patients are treated for one primary rehabilitation condition (for example, a hip replacement) that is associated with functional measures and sometimes age. The CMGs constructed for IRF patients account for diagnostic, functional, and age variables. These variables are used to explain the variability in the cost among the various CMGs. Some of the remaining variability in cost could then be further explained by selected comorbidities which the inpatient rehabilitation data showed were statistically significant.

In contrast, determining whether particular comorbidities increase the cost of a case for a LTCH patient is complicated by the nature of the clinical characteristics of these patients. More specifically, many LTCH patients have numerous conditions that may not all be relevant to the cost of care for a particular discharge. Although the patient actually has a specific condition, including this condition among secondary diagnoses coded under the LTC-APR-DRG system, may assign an inaccurate severity level to the primary diagnosis and result in inappropriate LTC-APR-DRG payment. We also believe that reliance on existing comorbidity information submitted on LTCH bills could result in significant variation in the assignment of the specific LTC-APR-DRGs.

The LTC-CMS-DRG system is a system that is familiar to hospitals because it is based on the current DRG system under the acute care hospital inpatient prospective payment system. We believe that the familiarity of the LTC-CMS-DRG model may best facilitate the transition from the cost-based system to the prospective payment system as well as providing continuity in payment methodology across related sites of care (for example,

an acute care hospitalization for a patient with a chronic condition.)

We further wish to note that the adoption of severity-adjusted DRGs will be explored by CMS for use under the hospital inpatient prospective payment system. In its June 2000 Report to Congress, MedPAC recommended that the Secretary “\* \* \* improve the hospital inpatient prospective payment system by adopting, as soon as practicable, diagnosis related group refinements that more fully capture differences in severity of illness among patients.” (Recommendation 3A, p. 63.) Although we are not proposing LTC-APR-DRGs in this proposed rule, we are interested in receiving comments on this issue. We also wish to note that in the event the LTCH prospective payment system is implemented using LTC-DRGs, we could have the opportunity to propose a severity-adjusted patient classification for LTCHs in the future, particularly if the acute care hospital inpatient prospective payment system moves in this direction.

#### *H. Recommendations by MedPAC for a LTCH Prospective Payment System*

As we noted in the section I.A.5. of this proposed rule, since the establishment of the acute care hospital inpatient prospective payment system in 1983, the topic of post-acute care payments under Medicare has been addressed in reports to the Congress prepared by ProPAC and its successor, MedPAC. Recommendations in these reports encouraged modifications to Medicare payment policies, examined the differences among post-acute care providers and within each category of providers, and reiterated the goal of eventually implementing prospective payment systems for providers being paid under the target amount payment methodology.

In its March 1, 1996 Report and Recommendations to the Congress, ProPAC recommended that “prospective payment systems should be implemented for all post-acute services. The payment method for each service should be consistent across delivery sites. The Secretary should explore methods to control the volume of post-acute service use, such as bundling services for a single payment.” (Recommendation 20, p. 75)

The following year, in its March 1, 1997 Report and Recommendations to the Congress, ProPAC recommended “\* \* \* the Congress and the Secretary to consider the overlap in services and beneficiaries across post-acute care providers as they modify Medicare payment policies. Changes to one provider’s payment method could shift

utilization to other sites and thus fail to curb overall spending. To this end, ProPAC commends HCFA’s (now CMS’s) efforts to identify elements common to the various facility-specific patient classification systems to use in comparing beneficiaries across settings.” Ultimately, Medicare should move towards more uniform payment policies across sites, the Report continued, and “payment amounts should vary depending on the intensity and nature of the services beneficiaries require, rather than on the setting. Further, providers should have incentives to coordinate services or an episode \* \* \*” (p. 60)

However, with enactment of the BBA, the Congress enacted legislation to provide for distinct prospective payment systems for HHAs (section 4603(b)), SNFs (section 4432(a)), and IRFs (section 4421). The BBA further required the development of a legislative proposal for the case-mix adjusted LTCH prospective payment system. Section 123 of the BBRA requires the Secretary to develop a per discharge DRG-based system for LTCHs, and section 307(a) of BIPA mandates that the Secretary examine the feasibility and impact of basing payments to LTCHs using the existing DRGs, modified to account for the resource use of LTCH patients. Thus, Congress mandated systems that would result in different payments, depending on the site of service, and not a system that is uniform across sites.

Notwithstanding the mandate to establish post-acute care prospective payment systems, MedPAC continued to articulate concern regarding the overlap of services among post-acute providers. In its June 1998 Report to Congress, MedPAC stated that “all of these policy changes, in combination with the fact that similar services can be provided in multiple post-acute settings, indicate the need for continued monitoring and analysis of post-acute providers, policies, and service utilization.” (p. 90)

In its March 1999 Report to Congress, MedPAC encouraged the Secretary to “\* \* \* collect a core set of patient assessment information across all post-acute care settings.” (Recommendation 5A, p. 82)

Section 123 of BBRA specifically mandated a per discharge, DRG-based prospective payment system for LTCHs and established a timetable for the presentation of the proposed system in a report to the Congress by October 1, 2001 and for implementation of the actual prospective payment system by October 1, 2002. Further direction for a distinct prospective payment system for LTCHs was indicated in section 307(b)

of BIPA, which directed the Secretary to examine a number of payment adjustment factors and establishes a default system if the Secretary is unable to meet the implementation timetable.

As we develop the prospective payment system for LTCHs described in this proposed rule, however, we wish to state that we do not believe that the establishment of distinct prospective payment systems for each post-acute care provider group eliminates the need to monitor payments and services across all service settings. We endorse MedPAC’s Recommendation 3G, in its March 2000 Report to Congress, that encourages the Secretary to “assess important aspects of the care uniquely provided in a particular setting, compare certain processes and outcomes of care provided in alternative settings, and evaluate the quality of care furnished in multiple-provider episodes of post-acute care.” (p. 65). We intend to monitor the appropriateness of LTCH stays by tracking the number of LTCH patients and SNF patients and the frequency of subsequent admissions to an acute care hospital. We believe this data will be valuable in assessing the outcome of care provided in these settings.

Furthermore, we strongly support the additional research that will be required to choose or to develop an assessment instrument that will evaluate the quality of services delivered to beneficiaries in post-acute settings.

#### *I. Evaluated Options for the Proposed Prospective Payment System for LTCHs*

Section 123 of BBRA and section 307(b) of BIPA establish the statutory authority for the development of the proposed prospective payment system for LTCHs that is discussed in this proposed rule. Under the BBRA, we are required to:

- Develop a per discharge prospective payment system for inpatient hospital services furnished by LTCHs described in section 1886(d)(1)(B)(iv) of the Act.
- Include an adequate patient classification system that is based on DRGs that reflect the differences in patient resource use and costs.
- Maintain budget neutrality.
- Submit a report to the Congress describing this system by October 1, 2001.
- Implement this system for cost reporting periods beginning on or after October 1, 2002.

Section 307(b) of BIPA modified the requirements of section 123 of the BBRA by requiring the Secretary to—

- Examine the feasibility and the impact of basing payment under the prospective payment system on the use

of existing (or refined) DRGs that have been modified to account for different resource use of LTCH patients, as well as the use of the most recently available hospital data.

- Examine appropriate adjustments to LTCH prospective payments, including adjustments to DRG weights, area wage adjustments, geographic reclassification, outliers, updates, and a disproportionate share adjustment.

In the event that we are unable to meet the implementation deadline of October 1, 2002, a default system will be implemented in which the payment is based on existing hospital DRGs, modified where feasible to account for resource use of LTCH patients. This default system would be based on the most recently available hospital discharge data for such services furnished on or after that date.

Although the statutory mandate for development of the LTCH prospective payment system established in the BBRA and the BIPA requires a per discharge, DRG-based system, generally the statute gives the Secretary broad discretion in designing the prospective payment system. The design of any prospective payment system requires decisions on the following issues:

- The categories used to classify services such as DRGs.
- The methodology for calculating the relative weights that are assigned to each patient category to reflect the relative difference in resource use across DRGs (these are relative values in economic terminology).
- The methodology for calculating the base rate, which is the basis for determining the DRG-based Federal payment rates. It is a standardized payment amount that is based on average costs from a base period and also reflects the combined aggregate effects of the payment weights and various facility and case level adjustments. Operating and capital-related costs may be combined in this base rate or may be treated separately.

- Adjustments to the base rate to reflect cost differences across providers, such as disproportionate share adjustments, indirect graduate medical education programs, and outliers.

- Finally, a procedure for the transition from the current system to the DRG-based prospective payment system must be established.

We pursued a two-pronged strategy as we developed the proposed prospective payment system for LTCHs. First, we analyzed the data and empirical facts about LTCH patients and providers summarized in section I.E. of this proposed rule. Secondly, in light of this information, we analyzed each option

based on regressions and simulations, using the data sets described in section I.D. of this preamble.

Both technical and proposed policy considerations were important in these design proposals. We reviewed features of other recent prospective payment systems designed or implemented by CMS for other post-acute care providers to determine the feasibility of including features in the LTCH prospective payment system and to identify modifications that might enhance their application for this system. In addition, we considered factors that were important to the development of Medicare's acute care hospital inpatient prospective payment system, such as urban and rural location, and whether the hospital served a disproportionate share of low-income patients. We also analyzed clinical significance, administrative simplicity, availability of data, and consistency with other Medicare payment policies.

In addition to satisfying statutory requirements, the design of the proposed prospective payment system for LTCHs presented in this proposed rule is the result of the following factors:

- Our empirical understanding of the "universe" of LTCHs and long-term care patients, as set forth in section I.E. of this preamble.

- Our experience with the acute care hospital inpatient prospective payment system.

- Consideration of recommendations in MedPAC's reports to Congress on post-acute care.

- Our monitoring of the establishment and continuing development and refinement of prospective payment systems for IRFs, SNFs, and HHAs.

Additionally, as we deliberated on the choice of the specific model of DRG-based system we are proposing to use for the LTCH prospective payment system, we consulted with LTCH physicians and LTCH representatives.

## II. General Discussion of the Proposed LTCH Prospective Payment System

### A. Goals of the Proposed LTCH Prospective Payment System

We have designed the proposed prospective payment system for LTCHs in this proposed rule with the following objectives:

- To base the prospective payment system on an analysis of the best information and data available.
- To establish a payment model using our experience in implementing other prospective payment systems.
- To provide incentives to control costs and to furnish services as efficiently as possible.

- To base payment on clinically coherent categories and to appropriately reflect average resource needs across different categories.

- To minimize opportunities and incentives for inappropriately maximizing Medicare payments.

- To establish a system that is beneficiary centered by formulating procedures for quality monitoring.

- To develop a system that is administratively feasible.

### B. Applicability of the Proposed LTCH Prospective Payment System

Our existing regulations at 42 CFR Part 482, Subparts A through D set forth the general conditions that hospitals must meet to qualify to participate in Medicare. There are no additional conditions for LTCHs as there are for psychiatric facilities.

Criteria for classification as a LTCH for purposes of payment are set forth in existing § 412.23(e), which provides that a LTCH must—

- Have a provider agreement to participate as a hospital and an average inpatient length of stay greater than 25 days or for cost reporting periods beginning on or after August 5, 1997, for a hospital that was first excluded from the prospective payment system in 1986, have an average inpatient length of stay of greater than 20 days and demonstrate that at least 80 percent of its annual Medicare inpatient discharges in the 12-month cost reporting period ending in FY 1997 have a principal diagnosis that reflects a finding of neoplastic disease, as defined in regulations. The calculation of the average inpatient length of stay is calculated by dividing the number of total inpatient days (less leave or pass days) by the number of total discharges for the hospital's most recent complete cost reporting period.

- Meet the additional criteria specified in § 412.22(e) if it is to be classified as a hospital-within-a-hospital and to be excluded from the acute care hospital inpatient prospective payment system.

- Meet the additional criteria specified in § 412.22(h) if it is to be classified as a satellite facility and to be excluded from the acute care hospital inpatient prospective payment system.

Results of our research on LTCHs, as set forth in section I.D. of this preamble, have suggested the following particular issue that we have evaluated and are proposing to address concurrent with the proposed implementation of the proposed LTCH prospective payment system:

*Proposed Change in the Average 25-Day Total Inpatient Stay Requirement.*

Section 1886(d)(1)(B)(iv)(I) of the Act describes a LTCH generally as “a hospital which has an average inpatient length of stay (as determined by the Secretary) of greater than 25 days.” Thus, the statute gives the Secretary extremely broad discretion in determining the average inpatient length of stay for hospitals for purposes of determining whether a hospital warrants exclusion from the prospective payment system in section 1886(d) of the Act. Existing Medicare regulations at § 412.23(e)(1) and (e)(2) include all hospital inpatients in this calculation of the average inpatient length of stay.

Our data have revealed that approximately 52 percent of Medicare patients at LTCHs have lengths of stay of less than  $\frac{2}{3}$  of the average length of stay for the proposed LTC-DRGs in this proposed rule, and 20 percent have a length of stay of even less than 8 days. This means that some hospitals, while currently qualifying as LTCH by averaging non-Medicare long stay patients to maintain a length of stay of over 25 days, do not furnish “long-term care” on average to their Medicare patients. In these situations, many of the hospitals’ short stay Medicare patients could be receiving appropriate services as patients at acute care hospitals. Under the proposed LTCH prospective payment system, the proposed LTC-DRG weights and proposed standard Federal payment rate are based on the charges and costs of LTCH patients, which are typically more medically complex and more costly than acute care hospital patients.

Since the proposed LTCH prospective payment system would result in higher per discharge payments for LTCHs than payments under the acute care hospital inpatient prospective payment system for patients that would group into identical DRGs under each system, we believe that under current policy, which factors in non-Medicare patients’ lengths of stay in determining LTCH status, could result in inappropriately higher payments for those Medicare short-stay patients who happen to be treated in a LTCH instead of an acute care hospital. This is the case since if the average length of stay of patients at a hospital would not reach the mandatory 25-days threshold for designation as a LTCH unless non-Medicare patients are included in the calculation, the hospital would be paid for its Medicare patients under the acute care hospital inpatient prospective payment system. Therefore, if a hospital is not treating Medicare patients that, on average, require the more costly services

offered at LTCHs that differentiate these hospitals from acute care hospitals, we believe that Medicare payments should be determined under the acute care hospital inpatient prospective payment system. Such payments would be lower for each DRG than would be paid for under the LTC-DRG system, reflecting the lower costs of acute care hospitals.

Under the current TEFRA reasonable cost-based reimbursement system, Medicare payments to LTCHs are commensurate with the actual reasonable costs incurred by the hospital. Therefore, under that system, Medicare payments for shorter lengths of stay patients reflect the lower costs of those patients. However, under the proposed LTCH prospective payment system, which is based on average costs of treatment for particular diagnosis, the hospital would receive prospective payments based on such average costs for these much shorter length of stay patients. Even under our proposed short-stay outlier policy, as described in section IV.B.2. of this proposed rule, the hospital would have the opportunity to be paid 150 percent of its costs.

Therefore, under our broad authority in the statute to determine the average inpatient length of stay, we are proposing to specify that we would include the hospital’s Medicare patients, but not non-Medicare patients, in determining the average inpatient length of stay (proposed § 412.23(e)(2)) for purposes of section 1886(d)(1)(B)(iv)(I) of the Act. In proposing this change in policy, we believe there would be a strong incentive for LTCHs not to admit many short-stay Medicare patients since doing so could jeopardize their status as a LTCH. Instead, those patients could receive appropriate care at an acute care hospital and the care would be paid under the hospital inpatient prospective payment system. Furthermore, changing the methodology for determining the average inpatient length of stay to be based only on Medicare patients is consistent with the intent of our proposed very short-stay discharge policy (described in section IV.B.1. of this proposed rule) and our proposed short-stay outlier policy (described in section IV.B.2. of this proposed rule), which are also intended to discourage LTCHs under the proposed prospective payment system from treating Medicare patients that do not require the more costly resources of LTCHs and who could reasonably be treated in acute care hospitals.

We would monitor the types of hospitals that would qualify as LTCHs based on this proposed definition. It is possible that hospitals that currently

qualify as either rehabilitation hospitals or psychiatric hospitals would also qualify as LTCHs under this proposed revised criteria, and could be paid as LTCHs in order to maximize Medicare payments. We also would monitor whether the proposed change in methodology for measuring the average length of stay in LTCHs would result in unanticipated shifts of patients to those settings. If a pattern of these behaviors is observed, we believe it may be appropriate that Congress address the issues raised through a legislative change.

As indicated above, pursuant to our broad authority in the statute, we are proposing to change the methodology for determining the average inpatient length of stay for purposes of section 1886(d)(1)(B)(iv)(I) of the Act, but we are not proposing to change the methodology for purposes of section 1886(d)(1)(B)(iv)(II) of the Act (proposed § 412.23(e)). For purposes of the latter provision (subclause (II)), we are proposing to retain the current methodology (which includes non-Medicare as well as Medicare patients) because we believe that the considerations underlying the proposed change in methodology for subclause (I) are not present under subclause (II). As discussed above, we are proposing to revise the methodology for purposes of the general definition of LTCH under subclause (I) because it has come to our attention that some hospitals that might not warrant exclusion from the prospective payment system have nevertheless obtained status as excluded hospitals under the current methodology. We believe that excluding non-Medicare patients in determining the average inpatient length of stay for purposes of subclause (I) would be more appropriate in identifying the hospitals that warrant exclusion under the general definition of LTCH in subclause (I). However, in enacting subclause (II), Congress provided an exception to the general definition of LTCH under subclause (I), and we have no reason to believe that the proposed change in methodology for determining the average inpatient length of stay would better identify the hospitals that Congress intended to exclude under subclause (II). Therefore, at this time, we are proposing to retain the current methodology for purposes of subclause (II).

*C. LTCHs Not Subject to the Proposed LTCH Prospective Payment System*

We are proposing that only hospitals qualifying as LTCHs under the proposed revised criteria described in section II.B.



of this proposed rule and in proposed revised § 412.23(e) by October 1, 2002, would be subject to the proposed LTCH prospective payment system. (This proposed system is summarized below in section II.D. and described in detail in section IV. of this proposed rule.) Our proposed treatment of hospitals first qualifying as LTCHs after October 1, 2002, is addressed in section IV.H. of this proposed rule.

The following hospitals are paid under special payment provisions, as described in existing § 412.22(c) and, therefore, would not be subject to the proposed LTCH prospective payment system rules:

- Veterans Administration hospitals.
- Hospitals that are reimbursed under State cost control systems approved under 42 CFR part 403.
- Hospitals that are reimbursed in accordance with demonstration projects authorized under section 402(a) of Public Law 90–248 (42 U.S.C. 1395b–1) or section 222(a) of Public Law 92–603 (42 U.S.C. 1395b–1 (note)).
- Nonparticipating hospitals furnishing emergency services to Medicare beneficiaries.

#### *D. Summary Description of the Proposed LTCH Prospective Payment System*

In accordance with the requirements of section 123 of Public Law 106–113, as modified by section 307(b) of Public Law 106–554, we are proposing to implement a prospective payment system for LTCHs that would replace the current reasonable cost-based payment system under TEFRA. The proposed prospective payment system would utilize information from LTCH patient records to classify patients into distinct DRGs based on clinical characteristics and expected resource needs. Separate payments would be calculated for each DRG with additional adjustments applied, as described below.

##### 1. Procedures

We are proposing that, upon the discharge of the patient from a LTCH, the LTCH would assign appropriate diagnosis and procedure codes from the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM). The LTCH would then enter these codes on the current Medicare claims form and submit the completed claims form to its Medicare fiscal intermediary. At present, the standard Medicare claims form is the UB–92. Under a requirement of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104–191, electronic health

care claims, including Medicare claims, will be required to be in the new national standard claims format and medical data code sets in accordance with regulations at 45 CFR Parts 160 and 162. The Medicare fiscal intermediary would enter the information into its claims processing systems and subject it to a series of edits called the Medicare Code Editor (MCE). This editor is designed to identify cases that would require further review before classification into a proposed LTC–DRG (described in sections II.D.2. and III. of this proposed rule).

After screening through the MCE, each claim would be classified into the appropriate LTC–DRG by the Medicare LTCH GROUPER. The LTCH GROUPER is specialized computer software based on the GROUPER utilized by the acute care hospital inpatient prospective payment system, which was developed as a means of classifying each case into a DRG on the basis of diagnosis and procedure codes and other demographic information (age, sex, and discharge status). Following the LTC–DRG assignment, the Medicare fiscal intermediary would determine the prospective payment by using the Medicare PRICER program, which accounts for hospital-specific adjustments.

As provided for under the acute care hospital inpatient prospective payment system, we are proposing to provide opportunity for the LTCH to review the LTC–DRG assignments made by the fiscal intermediary (proposed § 412.513(c)). A hospital would have 60 days after the date of the notice of the initial assignment of a discharge to a LTC–DRG to request a review of that assignment. The hospital would be allowed to submit additional information as part of its request. The fiscal intermediary would review that hospital's request and any additional information and would decide whether a change in the LTC–DRG assignment is appropriate. If the intermediary decides that a different LTC–DRG should be assigned, the case would be reviewed by the appropriate Peer Review Organization (PRO) as specified in § 476.71(c)(2). Following this 60-day period, the hospital would not be able to submit additional information with respect to the LTC–DRG assignment or otherwise revise its claim.

The operational aspects and instructions for completing and submitting Medicare claims under the LTCH prospective payment system will be addressed in a Medicare Program Memorandum once the final system requirements are developed and implemented.

##### 2. Patient Classification Provisions

We are proposing a patient classification system called long-term care diagnosis-related groups (LTC–DRGs). The LTC–DRGs would classify patient discharges based on the principal diagnosis, up to eight additional diagnoses, and up to six procedures performed during the stay, as well as age, sex, and discharge status of the patient. We began the development of the proposed LTC–DRGs by using the CMS DRGs under the acute care hospital inpatient prospective payment system with the most recent data available. We address the issue of the use of proposed low volume LTC–DRGs (less than 25 LTCH cases) in determining the LTC–DRG weights. Further details of the proposed LTC–DRG classification system are discussed in section III. of this proposed rule.

##### 3. Payment Rates

In accordance with section 123(a)(1) of Public Law 106–113, we are proposing to use a discharge as the payment unit for the proposed LTCH prospective payment system for Medicare patients. We would update these per discharge payment amounts annually. The proposed payment rates would encompass both inpatient operating and capital-related costs of furnishing covered inpatient LTCH services, including routine and ancillary costs, but not the costs of bad debts, approved educational activities, blood clotting factors, anesthesia services furnished by hospital-employed nonphysician anesthesiologists or obtained under arrangement, or the costs of photocopying and mailing medical records requested by a PRO, which are costs paid outside the prospective payment system. Consistent with current policy, beneficiaries may be charged only for deductibles, coinsurance, and noncovered services (for example, telephone and television). They may not be charged for the differences between the hospital's cost of providing covered care and the proposed Medicare LTCH prospective payment amount.

We are proposing to determine the LTCH prospective payment rates using relative weights to account for the variation in resource use among LTC–DRGs. During FY 2003, the LTCH prospective payment system would be "budget neutral" in accordance with section 123(a)(1) of Public Law 106–113. That is, total payments for LTCHs during FY 2003 would be projected to equal payments that would have been paid for operating and capital-related costs of LTCHs had this proposed new

payment system not been enacted. Budget neutrality is discussed in detail in section IV. of this preamble.

Based on our analysis of the data, we are proposing to make additional payments to LTCHs for discharges meeting specified criteria as "outliers." For purposes of this proposed rule, outliers are cases that have unusually high costs, exceeding the LTC-DRG payment plus the fixed loss amount as discussed in section IV.D. of this proposed rule. In conjunction with a high cost outlier policy, we are proposing payment policies regarding very short-stay discharges, short-stay outliers, and interrupted stays. A detailed description of these proposed policies appears in section IV.B. of this preamble.

#### 4. Limitation on Charges to Beneficiaries

In accordance with existing regulations and for consistency with other established hospital prospective payment systems policies, we are proposing to specify that a LTCH may not charge a beneficiary for any services for which payment is made by Medicare, even if the hospital's costs of furnishing services to that beneficiary are greater than the amount the hospital would be paid under the proposed LTCH prospective payment system (proposed § 412.507). We also are proposing to specify under proposed § 412.507 that a LTCH receiving a prospective payment for a covered hospital stay (that is, a stay that includes at least one covered day) may charge the Medicare beneficiary or other person only for the applicable deductible and coinsurance amounts under §§ 409.82, 409.83, and 409.87 of the existing regulations, and for items or services specified under § 489.20(a) of the existing regulations.

#### 5. Medical Review Requirements

In accordance with existing regulations at §§ 412.44, 412.46, and 412.48 and for consistency with other established hospital prospective payment systems policies, we are proposing to specify that a LTCH must have an agreement with a PRO to have the PRO review, on an ongoing basis, the medical necessity, reasonableness, and appropriateness of hospital admissions and discharges and of inpatient hospital care for which outlier payments are sought; the validity of the hospital's diagnostic and procedural information; the completeness, adequacy, and quality of the services furnished in the hospital; and other medical or other practices with respect to beneficiaries or billing for services furnished to beneficiaries (proposed

§ 412.508(a)). In addition, we are proposing to require that, because payment under the proposed prospective payment system is based in part on each patient's principal and secondary diagnoses and major procedures performed, as evidenced by the physician's entries in the patient's medical record, physicians must complete an acknowledgement statement to that effect. We are proposing to apply the existing hospital requirements for the contents and filing of the physician acknowledgment statement (proposed § 412.508(b)).

Also, consistent with existing established hospital prospective payment system policies, we are proposing that if CMS determines, on the basis of information supplied by the PRO, that a hospital has misrepresented admissions, discharges, or billing information or has taken an action that results in the unnecessary admission or multiple admission of individuals entitled to Part A benefits or other inappropriate medical or other practices, CMS may deny payment (in whole or in part) for inpatient hospital services related to the unnecessary or subsequent readmission of an individual or require the hospital to take actions necessary to prevent or correct the inappropriate practice. Notice and appeal of a denial of payment would be provided under procedures established to implement section 1155 of the Act. In addition, a determination of a pattern of inappropriate admissions and billing practices that has the effect of circumventing the prospective payment system would be referred to the Department's Office of Inspector General, for handling in accordance with 42 CFR 1001.301.

#### 6. Furnishing of Inpatient Hospital Services Directly or Under Arrangements

In accordance with existing regulations at § 414.15(m) and for consistency with other established hospital prospective payment systems policies, we are proposing that a LTCH must furnish covered services to Medicare beneficiaries either directly or under arrangements. Under proposed § 412.509, we are proposing that the LTCH prospective payment would be payment in full for all inpatient hospital services, as defined in § 409.10 of the existing regulations. We also are proposing that we would not pay any provider or supplier other than the LTCH for services furnished to a Medicare beneficiary who is an inpatient of the LTCH, except for those services that are not included as inpatient hospital services that are listed

under existing § 412.50 (that is, physicians' services that meet the requirements of § 415.102(a) for payment on a fee schedule basis; physician assistant services as defined in section 1861(s)(2)(K)(i) of the Act; nurse practitioners and clinical nurse specialist services, as defined in section 1861 (s)(2)(K)(ii) of the Act; certified nurse midwife services, as defined in section 1861(gg) of the Act; qualified psychologist services, as defined in section 1861(ii) of the Act; and services of an anesthetist, as defined in § 410.69).

#### 7. Reporting and Recordkeeping Requirements

We are proposing to impose the same recordkeeping and cost reporting requirements of §§ 413.20 and 413.24 of the existing regulations on all LTCHs that would participate in the proposed LTCH prospective payment system (proposed § 412.511).

#### 8. Implementation of the Proposed Prospective Payment System

We are proposing a 5-year transition period from cost-based reimbursement to prospective payment for LTCHs as discussed in section IV.G. of this proposed rule. During this period, two payment percentages would be used to determine a LTCH's total payment under the prospective payment system. The proposed blend percentages are as follows:

Cost reporting periods beginning on or after	Prospective payment federal rate percentage	Cost-based reimbursement percentage
October 1, 2002	20	80
October 1, 2003	40	60
October 1, 2004	60	40
October 1, 2005	80	20
October 1, 2006	100	0

Therefore, for a cost reporting period beginning on or after October 1, 2002, and before October 1, 2003, the total prospective payment would consist of 80 percent of the amount based on the current cost-based reimbursement system and 20 percent of the proposed Federal prospective payment rate. The percentage of payment based on the LTCH prospective payment Federal rate would increase by 20 percent and the cost-based reimbursement rate percentage would decrease by 20 percent for each of the remaining 4 fiscal years in the transition period. For cost reporting periods beginning on or after October 1, 2006, Medicare payment to LTCHs would be determined entirely under the proposed Federal prospective payment system methodology. Furthermore, we are proposing that

LTCHs would have the option to elect to be paid 100 percent of the Federal rate and not be subject to the 5-year transition. (See section IV.G. of this proposed rule.)

### III. Long-Term Care Diagnosis-Related Group (LTC-DRG) Classifications

Section 307(b) of Public Law 106-554 requires that the Secretary examine "the feasibility and the impact of basing payment under such a system (the LTCH prospective payment system) 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." The DRG-based patient classification system described in this section for the proposed LTCH prospective payment system would be based on the existing CMS DRG system used in the acute care hospital inpatient prospective payment system, modified where feasible to reflect the fact that LTCH patients represent a different patient mix from patients in short-term acute care hospitals, as required by section 307(b) of Public Law 106-554. Therefore, an understanding of pertinent facts about the CMS DRG system is essential to an understanding of the proposed LTC-DRGs that would be employed in the proposed LTCH prospective payment system.

#### A. Background

The design and development of DRGs began in the late 1960s at Yale University. The initial motivation for developing the DRGs was the creation of an effective framework for monitoring the quality of care and the utilization of services in a hospital setting. The first large-scale application of the DRGs as a basis for payments was in the late 1970s in New Jersey. New Jersey's State Department of Health used DRGs as the basis of a prospective payment system in which hospitals were reimbursed a fixed DRG-specific amount for each patient treated. In 1972, section 223 of Public Law 92-603 originally authorized the Secretary to set limits on costs reimbursed under Medicare for inpatient hospital services. In 1982, section 101(b)(3) of Public Law 97-248 required the Secretary to develop a legislative proposal for Medicare payments to hospitals, SNFs, and, to the extent feasible, other providers on a prospective basis. (See the September 1, 1983 *Federal Register* (48 FR 39754).) In 1983, Title VI of Public Law 98-21 added section 1886(d) to the Act, which established a national DRG-based hospital prospective payment system for

Medicare inpatient acute care services. (See the January 3, 1984 *Federal Register* (49 FR 234).)

#### B. Historical Exclusion of LTCHs

Since the hospital inpatient DRG system had been developed from the cost and utilization experience of general acute care hospitals, it did not account for the resource costs for the types of patients treated in hospitals such as rehabilitation, psychiatric, and children's hospitals, as well as LTCHs and rehabilitation and psychiatric units of acute care hospitals. Therefore, the statute (section 1886(d)(1)(B) of the Act) excluded these classes of hospitals and units from the prospective payment system for general acute care hospitals. The excluded hospitals and units continued to receive payments based on costs subject to a cap on each facility's per discharge costs during a base year, with a yearly update as set forth in Public Law 97-248. (Cancer hospitals were added to the list of excluded hospitals by section 6004(a) of Pub. L. 101-239.)

#### C. Patient Classifications by DRGs

##### 1. Objectives of the Classification System

The DRGs are a patient classification system that provides a means of relating the type of patients treated by a hospital (that is, its case-mix) to the costs incurred by the hospital. In other words, DRGs relate a hospital's case-mix to the resource demands and associated costs experienced by the hospital. Therefore, a hospital that has a more complex case-mix treats patients who require more hospital resources.

While each patient is unique, groups of patients have demographic, diagnostic, and therapeutic attributes in common that determine their level of resource intensity. Given that the purpose of DRGs is to relate a hospital's case-mix to its resource intensity, it was necessary to develop a way of determining the types of patients treated and to relate each patient type to the resources they consumed. In the development of the existing CMS DRGs, in order to aggregate patients into meaningful patient classes, it was essential to develop clinically similar groups of patients with similar resource intensity. The characteristics of a practical and meaningful DRG system were distilled into the following objectives:

- The patient characteristics should be limited to information routinely collected on hospital abstract systems.

- There should be a manageable number of DRGs encompassing all patients.

- Each DRG should contain patients with a similar pattern of resource intensity.

- DRGs should be clinically coherent, that is, containing patients who are similar from a clinical perspective.

Under a DRG-based system, patient information routinely collected include the following six data items: principal diagnosis, secondary or additional diagnoses, procedures, age, gender, and discharge status. All hospitals routinely collect this information; therefore, a classification system based on these elements could be applied uniformly across hospitals.

Limiting the number of DRGs to a manageable total (that is, hundreds of patient classes instead of thousands) ensures that, for most of the DRGs, hospital discharge data would allow for meaningful comparative analysis to be performed. If a hospital has a sufficient number of cases in particular DRGs, this will allow for evaluations and comparisons of resource consumption by patients grouped to those DRGs as compared to resources consumed by patients grouped to other DRGs. A large number of DRGs with only a few patients in each group would not provide useful patterns of case-mix complexity and cost performance.

The resource intensity of the patients in each DRG must be similar in order to establish a relationship between the case-mix of a hospital and the resources it consumes. (Similar resource intensity means that the resources used are relatively consistent across the patients in each DRG.) In implementing the original DRGs for the acute care hospital inpatient prospective payment system, we recognized that some variation in resource intensity would be present among the patients in each DRG, but the level of variation would be identifiable and predictable.

The last characteristic for an effective patient classification system is that the patients in a DRG are similar from a clinical perspective; that is, the definition of a DRG has to be clinically coherent. This objective requires that the patient characteristics included in the definition of each DRG be related to a common organ system or etiology, and that a specific medical specialty should typically provide care to the patients in a particular DRG.

##### 2. DRGs and Medicare Payments

The LTC-DRGs that we are proposing as the patient classification component of the proposed LTCH prospective payment system would correspond to

the DRGs in the acute care hospital inpatient prospective payment system. As discussed in section IV.A.2. of this proposed rule, we are proposing to modify the CMS DRGs for the proposed LTCH prospective payment system by developing LTCH-specific relative weights to account for the fact that LTCHs generally treat patients with multiple medical problems. Therefore, we are presenting a brief review of the DRG patient classification system in the acute care hospital inpatient prospective payment system.

Generally, under the prospective payment system for short-term acute care hospital inpatient services, Medicare payment is made at a predetermined, specific rate for each discharge; that payment varies by the DRG to which a beneficiary's stay is assigned. Cases are classified into DRGs for payment based on the following six data elements:

- (1) Principal diagnosis.
- (2) Up to eight additional diagnoses.
- (3) Up to six procedures performed.
- (4) Age.
- (5) Sex.
- (6) Discharge status of the patient.

The diagnostic and procedure information from the patient's hospital record is reported by the hospital using ICD-9-CM codes on the uniform billing form currently in use.

Medicare fiscal intermediaries enter the clinical and demographic information into their claims processing systems and subject it to a front-end automated screening process called the Medicare Code Editor (MCE). These screens are designed to identify cases that require further review before assignment into a DRG can be made. During this process, cases such as the following are selected for further development:

- Cases that are improperly coded (for example, diagnoses are shown that are inappropriate, given the sex of the patient. Code 68.6, Radical abdominal hysterectomy, would be an inappropriate code for a male.).
- Cases including surgical procedures not covered under Medicare (for example, organ transplant in a nonapproved transplant center).
- Cases requiring more information. (For example, ICD-9-CM codes are required to be entered at their highest level of specificity. There are valid 3-digit, 4-digit, and 5-digit codes. That is, code 136.3, Pneumocystosis, contains all appropriate digits, but if it is reported with either fewer or more than 4 digits, it will be rejected by the MCE as invalid.)
- Cases with principal diagnoses that do not usually justify admission to the

hospital. (For example, 437.9, Unspecified cerebrovascular disease. While this code is valid according to the ICD-9-CM coding scheme, a more precise code should be used for the principal diagnosis.)

After screening through the MCE and any further development of the claims, cases are classified into the appropriate DRG by a software program called the GROUPER using the six data elements noted above.

The GROUPER is used both to classify past cases in order to measure relative hospital resource consumption to establish the DRG weights and to classify current cases for purposes of determining payment. The records for all Medicare hospital inpatient discharges are maintained in the MedPAR file. The data in this file are used to evaluate possible DRG classification changes and to recalibrate the DRG weights during our annual update.

The DRGs are organized into 25 Major Diagnostic Categories (MDCs), most of which are based on a particular organ system of the body; the remainder involve 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. While we do not anticipate large numbers of surgical cases in LTCHs, surgical DRGs are assigned based on a surgical hierarchy that orders individual procedures or groups of procedures by resource intensity. Generally, the GROUPER does not recognize certain other procedures; that is, those procedures not surgical (for example, EKG), or minor surgical procedures generally not performed in an operating room and, therefore, not considered as surgical by the GROUPER (for example, 86.11, Biopsy of skin and subcutaneous tissue).

The medical DRGs are generally differentiated on the basis of diagnosis. Both medical and surgical DRGs may be further differentiated based on age, discharge status, and presence or absence of complications or comorbidities (CC). It should be noted that CCs are defined by certain secondary diagnoses not related to or inherently a part of the disease process identified by the principal diagnosis (for example, the GROUPER would not recognize a code from the 800.0x series, Skull fracture, as a comorbidity or complication when combined with principal diagnosis 850.4, Concussion with prolonged loss of consciousness, without return to pre-existing conscious level). Additionally, we would note that the presence of additional diagnoses

does not automatically generate a CC, as not all DRGs recognize a comorbid or complicating condition in their definition. (For example, DRG 466, Aftercare without History of Malignancy as Secondary Diagnosis, is based solely on the principal diagnosis, without consideration of additional diagnoses for DRG determination.)

#### *D. Proposed LTC-DRG Classification System for LTCHs*

Unless otherwise noted, our analysis of a per discharge DRG-based patient classification system is based on LTCH data from the FY 2000 MedPAR file which contains hospital bills received through May 31, 2001, for discharges in FY 2000.

The proposed patient classification system for the proposed LTCH prospective payment system would be based on the hospital inpatient prospective payment system currently used for Medicare beneficiaries, as described in section III.C. of this proposed rule. Within the LTCH data set, as identified by provider number, we would classify all cases to the CMS DRGs. We identified individual LTCH cases with a length of stay equal to or less than 7 days (see section IV.B.1. of this preamble for a discussion of the proposed very short-stay discharge policy under § 412.527) and grouped them into two proposed very short-stay LTC-DRGs; one for psychiatric cases and one for all other cases. Therefore, the proposed patient classification system would consist of 501 DRGs that would form the basis of the proposed FY 2003 LTCH prospective payment system GROUPER. The 501 proposed LTC-DRGs include two DRGs for very short-stay discharges (see section IV.B.1.) and two error DRGs. The other 497 proposed LTC-DRGs are the same DRGs used in the hospital inpatient prospective payment system GROUPER for FY 2002 (version 18). Cases submitted to the fiscal intermediaries would be processed using the data elements, MCE, and the GROUPER system already in place for the acute care hospital inpatient prospective payment system as described above.

There is one significant difference in this proposed system that sets it apart from the concept of DRG definition based on clinical coherence. As noted above, cases with a length of stay equal to or less than 7 days (referred to hereafter as "very short-stay") were identified and grouped together in two separate LTC-DRGs.

We are proposing to group cases that stayed 7 days or fewer that would otherwise be grouped into DRGs 424 through 432 in MDC 19 (Mental

Diseases and Disorders) or DRGs 433 through 437 in MDC 20 (Alcohol/Drug Use and Alcohol/Drug-Induced Organic Mental Disorders) into a new proposed psychiatric very short-stay group. We are proposing to classify all other cases that stayed 7 days or fewer, that is, very short-stay cases not classified into MDC 19 or 20, into the second new proposed very short-stay, nonpsychiatric group. Additionally, as in the acute care hospital inpatient prospective payment system, we are proposing to include two "error DRGs" in the LTC-DRG system where cases that cannot be assigned to valid DRGs will be grouped. These are DRG 469 (Principal diagnosis invalid as a discharge diagnosis) and DRG 470 (Ungroupable). (See 66 FR 40062, August 1, 2001.) Therefore, the LTC-DRG system that we are proposing would include 4 nonclinical categories into which LTCH patients can be grouped.

#### E. ICD-9-CM Coding System

##### 1. Historical Use of ICD-9-CM Codes

The Ninth Revision of the International Classification of Diseases, Clinical Modification, was adapted for use in the United States in 1979. This coding system is the basis for the CMS DRGs, upon which the proposed LTC-DRGs would be based. Additionally, the Standards for Electronic Transactions (65 FR 50312) designates the ICD-9-CM volumes 1 and 2 (including the official ICD-9-CM Guidelines for Coding and Reporting) as the standard medical data code set for capturing diseases, injuries, impairments, other health-related problems and their manifestations and causes. The ICD-9-CM volume 3 procedures (including the Official ICD-9-CM Guidelines for Coding and Reporting) have been adopted as the HIPAA standard code set for prevention, diagnosis, treatment, and management of actions taken for diseases, injuries, and impairments on hospital inpatients. These guidelines are available through a number of sources, including the following Web site: <http://www.cdc.gov/nchs/data/icdguide.pdf>.

(We note that should the Secretary, in the future, adopt a different medical data code set for capturing diseases, injuries, or impairments, hospitals participating in the Medicare program would be required to use those codes.)

##### 2. Uniform Hospital Discharge Data Set (UHDDS) Definitions

Because the assignment of a case to a particular proposed LTC-DRG would determine the amount that would be paid for the case, it is important that the coding is accurate. We are proposing

that classifications and terminology used in the proposed LTCH prospective payment system would be consistent with the ICD-9-CM and the UHDDS, as recommended to the Secretary by the National Committee on Vital and Health Statistics (Uniform Hospital Discharge Data: Minimum Data Set, National Center for Health Statistics, April 1980) and as revised in 1984 by the Health Information Policy Council (HIPC) of the U.S. Department of Health and Human Services.

We wish to point out that the ICD-9-CM coding terminology and the definitions of principal and other diagnoses of the UHDDS are consistent with the requirements of the HIPAA Administrative Simplification Act of 1996 (see 45 CFR part 162). Furthermore, the UHDDS has been used as a standard for the development of policies and programs related to hospital discharge statistics by both governmental and nongovernmental sectors for over 30 years. Additionally, the following definitions (as described in the 1984 Revision of the Uniform Hospital Discharge Data Set, approved by the Secretary of Health and Human Services for use starting January 1986) are requirements of the ICD-9-CM coding system, and have been used as a standard for the development of the CMS DRGs:

- Diagnoses include all diagnoses that affect the current hospital stay.
- Principal diagnosis is defined as the condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.
- Other diagnoses (also called secondary diagnoses or additional diagnoses) are defined as all conditions that coexist at the time of admission, that develop subsequently, or that affect the treatment received or the length of stay or both. Diagnoses that relate to an earlier episode of care that have no bearing on the current hospital stay are excluded.

All procedures performed would be reported. This includes those that are surgical in nature, carry a procedural risk, carry an anesthetic risk, or require specialized training.

As discussed in section II.D.1. of this proposed rule and consistent with the procedures for review of CMS DRGs under the acute care hospital inpatient prospective payment system, we are proposing to provide LTCHs with a 60-day window after the date of the notice of the initial LTC-DRG assignment to request review of that assignment. Additional information may be provided by the LTCH to the fiscal intermediary as part of that review.

##### 3. Maintenance of ICD-9-CM System

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) 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 standardizing coding applications and upgrading the quality of the classification system.

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) (formerly American Medical Record Association (AMRA)), the American Hospital Association (AHA), and various physician specialty groups, as well as physicians, medical record administrators, 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 presents proposals for coding changes at two public meetings per year held at the CMS Central Office located in Baltimore, Maryland. The agenda and date of the meeting can be accessed on the CMS Web site at: <http://www.cms.gov/medicare/icd9cm.htm>.

After consideration of public comments received at both meetings, as well as in writing, coding changes are published by CMS in the annual proposed and final rules in the **Federal**

**Register** on Medicare program changes to the short-term acute care hospital inpatient prospective payment systems. For example, new codes effective for discharges on or after October 1, 2001, can be found in Tables 6A through 6F of the August 1, 2001 hospital inpatient prospective payment system and rates for FY 2002 final rule (66 FR 40063 through 40066).

All changes to the ICD-9-CM coding system that affect DRG assignment are addressed annually in the acute care hospital inpatient prospective payment system proposed and final rules. Since the proposed DRG-based patient classification system for the proposed LTCH prospective payments system is based on the acute care hospital inpatient prospective payment system DRGs, these changes would also affect the proposed LTCH prospective payment system DRG patient classification system. As coding changes may have an impact on DRG assignment, LTCHs would be encouraged to obtain and correctly use the most current edition of the ICD-9-CM codes. The official version of the ICD-9-CM is available on CD-ROM from the U.S. Government Printing Office. The FY 2002 version can be ordered by contacting the Superintendent of Documents, U.S. Government Printing Office, Dept. 50, Washington, DC 20402-9329, telephone: (202) 512-1800. The stock number is 017-022-01510-2, and the price is \$22.00. In addition, private vendors also publish the ICD-9-CM.

Copies of the Coordination and Maintenance Committee minutes can be obtained from the CMS Web site at: <http://www.cms.gov/medicare/icd9cm.htm>. 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 1100, 6525 Belcrest Road, Hyattsville, MD 20782. Comments may be sent by e-mail to: [dfp4@cdc.gov](mailto: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, Purchasing Policy Group, Division of Acute Care, Mail Stop C4-08-06, 7500 Security Boulevard, Baltimore, MD 21244-1850. Comments may be sent by e-mail to: [pbrooks@cms.hhs.gov](mailto:pbrooks@cms.hhs.gov).

As noted above, the ICD-9-CM code changes that have been approved would become effective at the beginning of the Federal fiscal year, October 1. Of particular note to LTCHs would be the

invalid diagnosis codes (Table 6C) and the invalid procedure codes (Table 6D). Use of invalid codes would cause claims to fail the MCE screens.

#### 4. Coding Rules and Use of ICD-9-CM in LTCHs

The emphasis on the need for proper coding cannot be overstated. Inappropriate coding of cases can adversely affect the uniformity of cases in each LTC-DRG and produce inappropriate weighting factors at recalculation.

Because of our concern with correct coding practice, we have been working with the AHA editorial advisory board for its publication "Coding Clinic for ICD-9-CM" since 1984. Coding Clinic was developed to improve the accuracy and uniformity of medical record coding and is recognized in the industry as the definitive source of coding instruction. In 1987, the AHA created the cooperating parties, who have final approval of the coding advice provided in Coding Clinic. The cooperating parties consist of the AHA, the AHIMA (formerly the AMRA), CMS (formerly HCFA), and NCHS. As we participate on the editorial advisory board and are one of the cooperating parties, we support the use of Coding Clinic for coding advice for LTCHs. Information about Coding Clinic can be obtained from the American Hospital Association, Central Office on ICD-9-CM, One North Franklin, Chicago, IL 60606, or at its Web site at <http://www.ahacentraloffice.org>.

Even though we recognize that the **Federal Register** may not be the most efficient vehicle for coding instruction, we believe it is important to briefly review some of the basic instructions for coding. Our compelling need is based on the review of the data submitted by LTCHs. We note that the logic of the care patterns or place of treatment should not be considered in reviewing the following scenarios. Rather, we are attempting to present simplistic examples to illustrate correct coding practice.

- **Principal diagnosis**—As noted above, the specific definition for principal diagnosis established by the 1984 Revision of the Uniform Hospital Discharge Data Set is "the condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care." When a patient is discharged from an acute care facility and admitted to a LTCH, the appropriate principal diagnosis at the LTCH is not necessarily the same diagnosis for which the patient received care at the acute care hospital. For example, a patient who suffers a

stroke (code 436, Acute, but ill-defined, cerebrovascular disease) is admitted to an acute hospital for diagnosis and treatment. The patient is then transferred to a LTCH for further treatment of left-sided hemiparesis and dysphasia. The appropriate principal diagnosis at the LTCH would be a code from section 438 (Late effects of cerebrovascular disease), such as 438.20 (Late effects of cerebrovascular disease, Hemiplegia affecting unspecified side) or 438.12 (Late effects of cerebrovascular disease, Dysphasia).

Coding guidelines state that the residual condition is sequenced first followed by the cause of the late effect. In the case of cerebrovascular disease, the combination code describes both the residual of the stroke (for example, speech or language deficits or paralysis), and the cause of the residual (the stroke). Code 436 would only be used for the first (initial) episode of care for the stroke that was in the acute care setting.

- **Other diagnoses**—Secondary diagnoses that have no bearing on the LTCH stay would not be coded. For example, a patient who has recovered from pneumonia during a previous episode of care would not have a diagnosis code for pneumonia included in his or her list of discharge diagnoses. The pneumonia was not treated during this LTCH admission and, therefore, has no bearing on this case.

- **Procedures**—Codes reflecting procedures provided during a previous acute care hospital stay would not be included because the procedure was not performed during this LTCH admission. For example, a patient with several chronic illnesses is admitted to an acute care hospital with a diagnosis of appendicitis for which he or she receives an appendectomy. The patient subsequently is transferred to a LTCH for medical treatment following surgery, and as a result of the multiple secondary conditions, the patient needs a higher level of care than he or she could receive at a SNF or at home with an HHA. In this situation, appendicitis would not be coded because this condition was resolved with the removal of the appendix. The procedure code for appendectomy would not be used on the LTCH record, as the procedure was performed in the acute care setting, not during the LTCH admission.

We would train fiscal intermediaries and providers on the new system prior to its implementation. We also would issue manuals containing procedures as well as coding instructions to LTCHs and fiscal intermediaries following the publication of the final rule.

#### IV. Proposed Payment System for LTCHs

The LTCH prospective payment system proposed in this rule would use Federal prospective payment rates across 501 proposed distinct LTC-DRGs. We are proposing to establish a standard Federal payment rate based on the best available LTCH cost data. LTC-DRG relative weights would be applied to the standard Federal rate to account for the relative differences in resource use across the LTC-DRGs. The proposed system would also include an adjustment for very short-stay discharges, short-stay outliers, and high-cost outlier cases, as described in section IV.B. of this preamble.

The proposed standard Federal prospective payment rate, which is the basis for determining proposed Federal payment rates for each proposed LTC-DRG, would be determined based on average costs from a base period, and also would reflect the combined aggregate effects of the proposed payment weights and other proposed policies discussed in this section. In discussing the proposed methodology, we begin by describing the various adjustments and factors that would serve as the input used in establishing the proposed standard Federal prospective payment rate. Accordingly, we are proposing to develop prospective payments for LTCHs using the following major steps:

- Develop the LTC-DRG relative weights.
- Determine appropriate payment system adjustments.
- Calculate the budget neutral standard Federal prospective payment rate.
- Calculate the Federal LTC-DRG prospective payments.

A detailed description of each step and a discussion of our proposed policies for special cases, phase-in implementation, and other policies follows.

##### A. Development of the Proposed LTC-DRG Relative Weights

###### 1. Overview of Development of the Proposed LTC-DRG Relative Weights

As previously stated, one of the primary goals for the implementation of the proposed LTCH prospective payment system would be to pay each LTCH an appropriate amount for the efficient delivery of 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 beneficiaries whose care is more costly. To

accomplish these goals, we are proposing to adjust the standard Federal prospective payment system rate by the LTC-DRG relative weights in determining payment to LTCHs for each case.

In this proposed payment system, relative weights for each LTC-DRG would be a primary element used to account for the variations in cost per discharge and resource utilization among the payment groups (proposed § 412.515). To ensure that Medicare patients classified to each proposed LTC-DRG would have access to an appropriate level of services and to encourage efficiency, we are proposing to calculate a relative weight for each LTC-DRG that represents the resources needed by an average inpatient LTCH case in that LTC-DRG. For example, cases in a LTC-DRG with a relative weight of 2 would, on average, cost twice as much as cases in a LTC-DRG with a weight of 1.

To calculate the proposed relative weights, we obtained charges from FY 2000 Medicare bill data in the June 2001 update of the MedPAR and we used version 18.0 of the CMS GROUPER (used under the hospital inpatient prospective payment system for FY 2001). In the final rule, we would recalculate the relative weights based on the most recent MedPAR data and version 19.0 of the CMS GROUPER (used under the hospital inpatient prospective payment system for FY 2002). 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. Such nonarbitrary distribution of cases with relatively high (or low) charges in specific 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, we are proposing to use a hospital-specific relative value method to calculate relative weights. We believe this method would remove this hospital-specific source of bias in measuring average charges. Specifically, we would reduce the impact of the variation in charges across providers on any particular LTC-DRG relative weight by converting each LTCH's charge for a case to a relative value based on that LTCH's average charge. As MedPAC noted in its June 2000 Report to Congress, the hospital-specific relative value method eliminates distortion in the weights due to systematic differences among hospitals in the level

of charge markups or costs (p. 58). The case-mix index is the average case weight (adjusted to eliminate the effect of short-stay outliers that are described in section IV.B.2. of this preamble) for cases at each LTCH.

Under the hospital-specific relative value method, we would 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 average 1.0 for each LTCH by definition). 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 values will be 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).

We would standardize charges for each case by first dividing the adjusted charge for the case (adjusted for short-stay outliers as described in section IV.B.2. of this proposed rule) by the average adjusted charge for all cases at the LTCH in which the case was treated. The average adjusted charge would reflect the average intensity of the health care services delivered by a particular LTCH and the average cost level of that LTCH. The resulting ratio would be 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 in a hospital with higher average costs than they would at a LTCH with low average costs in order to adjust each LTCH's relative charge value to reflect its case-mix relative to the average case-mix for all LTCHs. Because we are proposing to standardize charges in this manner, we would 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 in 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 in 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 would more accurately reflect 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.

As explained in section III. of this proposed rule, we would group cases with a 7-day or fewer length of stay (very short-stay discharges under proposed § 412.527 described in section IV.B.1. of this preamble) into one of two proposed groups. We are proposing that discharges with a 7-day or fewer length of stay that would otherwise be grouped into DRGs 424 through 432 in MDC 19 (Mental Diseases and Disorders) or DRGs 433 through 437 in MDC 20 (Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders) would be grouped into a proposed psychiatric very short-stay discharge group. All other very short-stay discharges would be grouped into the second very short-stay discharge, nonpsychiatric group. Each of these very short-stay discharge groups would have its own relative weight and an average length of stay computed using the same methodology used to determine the relative weights for the “regular” (length of stay greater than 7 days) LTC-DRGs.

In addition, in order to account for LTC-DRGs with low volume (that is, with fewer than 25 LTCH cases), we would group those low volume LTC-DRGs into one of five categories (quintiles) based on average charges, for

the purposes of determining relative weights. Using LTCH cases from the June 2001 update of the FY 2000 MedPAR, we identified 188 LTC-DRGs that contained between 1 and 24 cases. This list of LTC-DRGs was then divided into one of the five low volume quintiles, each containing a minimum of 37 LTC-DRGs (188/5 = 37 with 3 LTC-DRGs as a remainder). We made an assignment to a specific quintile by sorting the 188 low volume DRGs in ascending order by average charge. Since the number of LTC-DRGs with less than 25 LTCH cases is not evenly divisible by five, the average charge of the low volume LTC-DRG was used to determine which quintiles received an additional LTC-DRG. After sorting the 188 volume LTC-DRGs in ascending order, the first fifth of low volume (37) LTC-DRGs with the lowest average charge are grouped into Quintile 1. Since the average charge of the next LTC-DRG (38th in the sorted list) is closer to the previous LTC-DRG’s average charge (assigned to Quintile 1) than to the average charge of the 39th LTC-DRG on the sorted list (to be assigned to Quintile 2), it is placed into Quintile 1. This process was repeated through the remaining low volume

LTC-DRGs so that 3 quintiles contained 38 LTC-DRGs and 2 quintiles contained 37 LTC-DRGs. The highest average charge cases would be grouped into Quintile 5. In order to determine the proposed relative weights for the 188 LTC-DRGs with low volume, we used the five low volume quintiles described above. The composition of each of the five low volume quintiles shown below in Table 2 would be used in determining the proposed LTC-DRG relative weights. We would determine a proposed relative weight and average length of stay for each of the proposed five low volume quintiles using the formula applied to the regular LTC-DRGs (25 or more cases), as described in section IV.A.2 of this proposed rule. We would assign the same relative weight and average length of stay to each of the proposed LTC-DRGs that make up that proposed low volume quintile. We note that as this proposed system is dynamic, it is entirely possible that the number and specific type of LTC-DRGs with a low volume of LTCH cases would vary in the future. We would use the best available claims data in the MedPAR to identify low volume LTC-DRGs and to calculate the relative weights based on our proposed methodology.

TABLE 2.—COMPOSITION OF PROPOSED LOW VOLUME QUINTILES

LTC-DRG	Description
<b>Proposed Quintile 1</b>	
45 .....	NEUROLOGICAL EYE DISORDERS
47 .....	OTHER DISORDERS OF THE EYE AGE >17 W/O CC
53 .....	SINUS & MASTOID PROCEDURES AGE >17
55 .....	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES
69 .....	OTITIS MEDIA & URI AGE >17 W/O CC
149 .....	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC
158 .....	ANAL & STOMAL PROCEDURES W/O CC
160 .....	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC
161 .....	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC
171 .....	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC
178 .....	UNCOMPLICATED PEPTIC ULCER W/O CC
219 .....	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC
252 .....	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE 0-17
257 .....	TOTAL MASTECTOMY FOR MALIGNANCY W CC
258 .....	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC
282 .....	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0-17
290 .....	THYROID PROCEDURES
295 .....	DIABETES AGE 0-35
299 .....	INBORN ERRORS OF METABOLISM
305 .....	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON-NEOPL W/O CC
307 .....	PROSTATECTOMY W/O CC
326 .....	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC
336 .....	TRANSURETHRAL PROSTATECTOMY W CC
337 .....	TRANSURETHRAL PROSTATECTOMY W/O CC
344 .....	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY
353 .....	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY
355 .....	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC
356 .....	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES
358 .....	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC
359 .....	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC
396 .....	RED BLOOD CELL DISORDERS AGE 0-17
419** .....	FEVER OF UNKNOWN ORIGIN AGE >17 W CC
436 .....	ALC/DRUG DEPENDENCE W REHABILITATION THERAPY



TABLE 2.—COMPOSITION OF PROPOSED LOW VOLUME QUINTILES—Continued

LTC-DRG	Description
437 .....	ALC/DRUG DEPENDENCE, COMBINED REHAB & DETOX THERAPY
447 .....	ALLERGIC REACTIONS AGE >17
450 .....	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC
467 .....	OTHER FACTORS INFLUENCING HEALTH STATUS
494 .....	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC
<b>Proposed Quintile 2</b>	
21 .....	VIRAL MENINGITIS
46 .....	OTHER DISORDERS OF THE EYE AGE >17 W CC
74 .....	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0–17
95 .....	PNEUMOTHORAX W/O CC
117 .....	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT
124** .....	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG
128 .....	DEEP VEIN THROMBOPHLEBITIS
129 .....	CARDIAC ARREST, UNEXPLAINED
206 .....	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEPA W/O CC
208 .....	DISORDERS OF THE BILIARY TRACT W/O CC
211 .....	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC
224 .....	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC
232 .....	ARTHROSCOPY
273 .....	MAJOR SKIN DISORDERS W/O CC
276 .....	NON-MALIGANT BREAST DISORDERS
284 .....	MINOR SKIN DISORDERS W/O CC
288 .....	O.R. PROCEDURES FOR OBESITY
301 .....	ENDOCRINE DISORDERS W/O CC
306 .....	PROSTATECTOMY W CC
309 .....	MINOR BLADDER PROCEDURES W/O CC
311 .....	TRANSURETHRAL PROCEDURES W/O CC
324 .....	URINARY STONES W/O CC
328 .....	URETHRAL STRICTURE AGE >17 W CC
338 .....	TESTES PROCEDURES, FOR MALIGNANCY
347 .....	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC
348 .....	BENIGN PROSTATIC HYPERTROPHY W CC
349* .....	BENIGN PROSTATIC HYPERTROPHY W/O CC
360 .....	VAGINA, CERVIX & VULVA PROCEDURES
369 .....	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS
399 .....	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC
408 .....	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC
419* .....	FEVER OF UNKNOWN ORIGIN AGE >17 W CC
420 .....	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC
449 .....	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC
454 .....	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC
455 .....	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC
465 .....	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS
507 .....	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA
509 .....	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAUMA
511 .....	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA
<b>Proposed Quintile 3</b>	
4 .....	SPINAL PROCEDURES
8 .....	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC
22 .....	HYPERTENSIVE ENCEPHALOPATHY
32 .....	CONCUSSION AGE >17 W/O CC
66 .....	EPISTAXIS
81 .....	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0–17
84 .....	MAJOR CHEST TRAUMA W/O CC
157 .....	ANAL & STOMAL PROCEDURES W CC
177 .....	UNCOMPLICATED PEPTIC ULCER W CC
197 .....	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC
216 .....	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE
225 .....	FOOT PROCEDURES
228 .....	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC
229 .....	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC
255 .....	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE 0–17
261 .....	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION
279 .....	CELLULITIS AGE 0–17
298 .....	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0–17
304 .....	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON-NEOPL W CC
308 .....	MINOR BLADDER PROCEDURES W CC
319 .....	KIDNEY & URINARY TRACT NEOPLASMS W/O CC

TABLE 2.—COMPOSITION OF PROPOSED LOW VOLUME QUINTILES—Continued

LTC-DRG	Description
322	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17
323	URINARY STONES W CC, &/OR ESW LITHOTRIPSY
341	PENIS PROCEDURES
349**	BENIGN PROSTATIC HYPERTROPHY W/O CC
368	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM
385	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY
390	NEONATE W OTHER SIGNIFICANT PROBLEMS
401	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC
409	RADIOTHERAPY
421	VIRAL ILLNESS AGE >17
427	NEUROSES EXCEPT DEPRESSIVE
432	OTHER MENTAL DISORDER DIAGNOSES
493	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC
497	SPINAL FUSION W CC
508	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA
510	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA

**Proposed Quintile 4**

1	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA
5	EXTRACRANIAL VASCULAR PROCEDURES
91	SIMPLE PNEUMONIA & PLEURISY AGE 0-17
104	CARDIAC VALVE & OTHER MAJOR CARDIOTHORACIC PROC W CARDIAC CATH
105	CARDIAC VALVE & OTHER MAJOR CARDIOTHORACIC PROC W/O CARDIAC CATH
110	MAJOR CARDIOVASCULAR PROCEDURES W CC
115	PRM CARD PACEM IMPL W AMI, HRT FAIL OR SHK, OR AICD LEAD OR GNRTR P
118	CARDIAC PACEMAKER DEVICE REPLACEMENT
124*	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG
125*	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG
148	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC
150	PERITONEAL ADHESIOLYSIS W CC
159	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC
184	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17
185	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17
191	PANCREAS, LIVER & SHUNT PROCEDURES W CC
210	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC
218	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC
223	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC
231	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR
285	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DISORDERS
292	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC
293*	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC
310	TRANSURETHRAL PROCEDURES W CC
312	URETHRAL PROCEDURES, AGE >17 W CC
350	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM
352	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES
363	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY
400	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE
410	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS
424	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS
439	SKIN GRAFTS FOR INJURIES
443	OTHER O.R. PROCEDURES FOR INJURIES W/O CC
482	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES
492	CHEMOTHERAPY W ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS
500	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC
503	KNEE PROCEDURES W/O PDX OF INFECTION
504	EXTENSIVE 3RD DEGREE BURNS W SKIN GRAFT
505	EXTENSIVE 3RD DEGREE BURNS W/O SKIN GRAFT
506	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA

**Proposed Quintile 5**

2	CRANIOTOMY FOR TRAUMA AGE >17
31	CONCUSSION AGE >17 W CC
44	ACUTE MAJOR EYE INFECTIONS
63	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES
75	MAJOR CHEST PROCEDURES
77	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC
112	PERCUTANEOUS CARDIOVASCULAR PROCEDURES
116	OTH PERM CARD PACEMAK IMPL OR PTCA W CORONARY ARTERY STENT IMPLNT
125**	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG
152	MINOR SMALL & LARGE BOWEL PROCEDURES W CC

TABLE 2.—COMPOSITION OF PROPOSED LOW VOLUME QUINTILES—Continued

LTC-DRG	Description
154	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W CC
155	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC
193	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC
199	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY
201	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES
209	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY
226	SOFT TISSUE PROCEDURES W CC
227	SOFT TISSUE PROCEDURES W/O CC
230	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR
233	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC
265	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC
266	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC
267	PERIANAL & PILONIDAL PROCEDURES
268	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES
293**	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC
303	KIDNEY, URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM
333	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0–17
339	TESTES PROCEDURES, NON-MALIGNANCY AGE >17
345	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY
365	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES
394	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS
406	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC
417	SEPTICEMIA AGE 0–17
479***	OTHER VASCULAR PROCEDURES W/O CC
486	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA
488	HIV W EXTENSIVE O.R. PROCEDURE
499	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC
501	KNEE PROCEDURES W PDX OF INFECTION W CC

\*One of the original 188 low volume LTC-DRGs initially assigned to a different low volume quintile; reassigned to this low volume quintile in addressing nonmonotonicity (see step 4 below).

\*\*One of the original 188 low volume LTC-DRGs initially assigned to this low volume quintile; reassigned to a different low volume quintile in addressing nonmonotonicity (see step 4 below).

\*\*\*One of the original 188 low volume LTC-DRGs initially assigned to this low volume quintile; removed from the low volume quintiles in addressing nonmonotonicity (see step 4 below).

After grouping the cases in the appropriate proposed LTC-DRG, we calculate the proposed relative weights in this proposed rule by first adjusting the number of cases in each LTC-DRG for the effect of short-stay outlier cases under proposed § 412.529. The short-stay adjusted discharges and corresponding charges would be used to calculate proposed “relative adjusted weights” in each LTC-DRG using the hospital-specific relative value method described above. We describe each of these steps in greater detail below.

## 2. Steps for Calculating the Proposed Relative Weights

*Step 1—Adjust charges for the effects of short-stay outliers.* The first step in the calculation of the relative weights is to adjust each LTCH’s charges per discharge for short-stay outlier cases (that is, a patient with a length of stay in excess of 7 days, but below two-thirds the average length of stay of the LTC-DRG as described in section IV.B.2. of this proposed rule).

We would 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 LTC-DRG

for nonshort-stay outlier cases. This would have the effect of proportionately reducing the impact of the lower charges for the short-stay outlier cases in calculating the average charge for the LTC-DRG. This process produces the same result as if the actual charges per discharge of a short-stay outlier case would be adjusted to what they would have been had the patient’s length of stay been equal to the average length of stay of the LTC-DRG.

Counting short-stay outlier cases as full discharges with no adjustment in determining the relative weights would lower the relative weight for affected LTC-DRGs because the relatively lower charges of the short-stay outlier cases bring down the average charge for all cases within a LTC-DRG. This would result in an “underpayment” to nonshort-stay outlier cases and an “overpayment” to short-stay outlier cases. Therefore, adjusting for short-stay outlier cases in this manner would result in more appropriate payments for all LTCH cases. The result of step 1 is that each LTCH’s average cost per discharge is adjusted for short-stay outliers (as described above) before removing statistical outliers (step 2) and calculating the LTC-DRG relative

weights on an iterative basis (step 3) using the hospital-specific relative value method.

*Step 2—Remove statistical outliers.* We are proposing to 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 proposed LTC-DRG. After adjusting each LTCH’s discharges for short-stay outlier cases (see step 1), these statistical outliers would be removed prior to calculating the proposed relative weights. We believe that they may represent aberrations in the data that would distort the measure of average resource use. Including those cases in the calculation of the relative weights could result in an inaccurate weight that does not truly reflect relative resource use among the proposed LTC-DRGs. Thus, removing statistical outliers would result in more appropriate payments. These adjusted charges per discharge for each proposed LTC-DRG are then used to calculate the average adjusted charge of all cases at the LTCH in determining the proposed relative weight for the proposed LTC-DRGs.

*Step 3—Calculate the LTC-DRG relative weights on an iterative basis.* The process of calculating the LTC-DRG relative weights would be iterative. First, for each case, we would calculate a hospital-specific relative charge value by dividing the short-stay outlier adjusted charge per discharge (see step 1) of the case (after removing the statistical outlier (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 LTC-DRG, the proposed LTC-DRG relative weight would then be calculated by dividing the average of the adjusted hospital-specific relative charge values (from above) for the LTC-DRG by the overall average hospital-specific relative charge value across all cases for all LTCHs. Using these recalculated LTC-DRG relative weights, each LTCH's average relative weight for all of its cases (case-mix) would be calculated by dividing the sum of all the LTCH's LTC-DRG relative weights by its total number of cases. The LTCHs' hospital-specific relative charge values above would be 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 LTC-DRG relative weights across all LTCHs. This iterative process would be continued until there is convergence between the weights produced at adjacent steps, for example, when the maximum difference is less than 0.0001.

*Step 4—Adjust the LTC-DRG relative weights to account for nonmonotonically increasing relative weights.* As explained in section III.C. of this proposed rule, the proposed LTC-DRGs would contain "pairs" that are differentiated based on the presence or absence of CCs. Proposed LTC-DRGs with CCs are defined by certain secondary diagnoses not related to or inherently a part of the disease process identified by the principal diagnosis, but the presence of additional diagnoses does not automatically generate a CC. The value of monotonically increasing relative weights rises as the resource use increases (for example, from uncomplicated to more complicated). The presence of CCs in a LTC-DRG means that cases classified into a "without CC" LTC-DRG are expected to have lower resource use (and lower costs). In other words, resource use (and costs) are expected to decrease across "with CC"/"without CC" pairs of LTC-

DRGs. For a case to be assigned to a proposed LTC-DRG with CCs, more coded information is called for (that is, at least one relevant secondary diagnosis), than for a case to be assigned to a proposed LTC-DRG without CCs (which is based on only one primary diagnosis and no relevant secondary diagnoses). Currently, the database includes both accurately coded cases without complications and cases that have complications (and cost more) but were not coded completely. Both types of cases would be grouped to a proposed LTC-DRG "without CCs" since only one primary diagnosis was coded. Since LTCHs are currently paid under cost-based reimbursement, which is not based on patient diagnoses, LTCHs' coding for these cases may not have been as detailed as possible.

Thus, in developing the proposed relative weights for the LTCH prospective payment system, we found on occasion that the data suggested that cases classified to the proposed LTC-DRG "with CCs" of a "with CC"/"without CC" pair had a lower average charge than the corresponding proposed LTC-DRG "without CCs." We believe this anomaly may be due to coding that may not have fully reflected all comorbidities that were present. Specifically, LTCHs may have failed to code relevant secondary diagnoses, which resulted in cases that actually had complications and comorbidities being classified into a "without CC" LTC-DRG. It would not make sense to pay a lower amount for the "with CC" LTC-DRG, so we are proposing to group both the cases "with CCs" and "without CCs" together for the purpose of calculating the proposed relative weights for the proposed LTC-DRGs until we have adequate data to calculate appropriate separate weights for these anomalous DRG pairs. We expect that, as was the case when we first implemented the acute care hospital inpatient prospective payment system, this problem will be self-correcting, as LTCHs submit more completely coded data in the future.

Using the LTCH cases in the June 2001 update of the FY 2000 MedPAR, we identified three types of "with CC" and "without CC" pairs of proposed LTC-DRGs that are nonmonotonic, that is, where the "without CC" LTC-DRG would have a higher average charge than the "with CC" LTC-DRG.

The first category of nonmonotonically increasing relative weights for LTC-DRG pairs "with and without CCs" contains 5 pairs of LTC-DRGs in which both the LTC-DRG "with CCs" and the LTC-DRG "without CCs" had 25 or more LTCH cases and,

therefore, did not fall into one of the 5 quintiles. For each pair of LTC-DRGs, we would combine the cases and compute a new relative weight based on the case-weighted average of the combined cases of the LTC-DRGs. The case-weighted average charge would be determined by dividing the total charges for all cases by the total number of cases for the combined LTC-DRG. This new relative weight would be assigned to both of the LTC-DRGs in the pair. For the proposed FY 2003 implementation of the LTCH prospective payment system, the following proposed LTC-DRGs would be in this category: LTC-DRGs 10 and 11, 89 and 90, 138 and 139, 141 and 142, and 274 and 275.

The second category of nonmonotonically increasing relative weights for proposed LTC-DRG pairs with and without CCs consists of 4 pairs of LTC-DRGs that have fewer than 25 cases and are both grouped to different quintiles in which the "without CC" LTC-DRG would be in a higher-weighted quintile than the "with CC" LTC-DRG. For each pair, we would combine the cases and determine the case-weighted average charge for all cases. The case-weighted average charge would be determined by dividing the total charges for all cases by the total number of cases for the combined LTC-DRG. Based on the case-weighted average charge, we determined which quintile the "combined LTC-DRG" would be grouped. Both LTC-DRGs in the pair would then be grouped into the same quintile, and thus have the same proposed relative weight. For the proposed FY 2003 implementation of the LTCH prospective payment system, the following proposed LTC-DRGs would be in this category: 124 and 125 (low volume quintile 4), 292 and 293 (low volume quintile 4), 348 and 349 (low volume quintile 2), and 419 and 420 (low volume quintile 2).

The third category of nonmonotonically increasing relative weights for proposed LTC-DRG pairs with and without CCs has one pair of LTC-DRGs where one of the LTC-DRGs has fewer than 25 LTCH cases and is grouped to a quintile and the other LTC-DRG has 25 or more LTCH cases and would have its own LTC-DRG weight, and the LTC-DRG "without CCs" would have the higher weight. We would remove the low volume pair LTC-DRG from the quintile and combine it with the other pair LTC-DRG for the computation of a new relative weight for each of these LTC-DRGs. This proposed new relative weight would be assigned to both LTC-DRGs, so they would each have the same relative weight. For the proposed FY

2003 implementation of the LTCH prospective payment system, proposed LTC-DRGs 478 and 479 would be in this category.

In addition, for the FY 2003 implementation of the LTCH prospective payment system, we are proposing to determine the relative weight for each LTC-DRG using charges reported on the June 2001 update of the FY 2000 MedPAR. Of the proposed 501 LTC-DRGs in the proposed CMS LTCH prospective payment system, we identified 111 LTC-DRGs for which there were no LTCH cases in the database. That is, based on the FY 2000 MedPAR, no patients who would have been classified to those DRGs were treated in LTCHs during FY 2000 and, therefore, no charge data were reported for those DRGs. Thus, in the process of determining the relative weights of proposed LTC-DRGs, we were unable to determine weights for these 111 LTC-DRGs using the method described above. However, since patients with a number of the diagnoses under these LTC-DRGs may be treated at LTCHs

beginning in FY 2003 when the LTCH prospective payment system would be implemented, we are proposing to assign relative weights to each of the 111 "no volume" LTC-DRGs based on clinical similarity and relative costliness to one of the remaining 390 (501 - 111 = 390) LTC-DRGs for which we are able to determine relative weights, based on FY 2000 charge data.

As there are currently no LTCH cases in these "no volume" LTC-DRGs, we are proposing to establish relative weights for the 111 LTC-DRGs with no LTCH cases in the FY 2000 MedPAR by grouping them to the appropriate low volume quintile. This methodology would be consistent with our methodology used in determining relative weights to account for low volume LTC-DRGs described above.

Our proposed methodology for determining relative weights for the "no volume" LTC-DRGs is as follows: First, we would cross-walk the no volume LTC-DRGs by matching them to other similar LTC-DRGs for which there were LTCH cases in the FY 2000 MedPAR

based on clinical similarity and intensity of use of resources as determined by care provided during the period of time surrounding surgery, surgical approach (if applicable), length of time of surgical procedure, post-operative care, and length of stay. We would assign the weight for the applicable quintile to the no volume LTC-DRG if the LTC-DRG to which it would be cross-walked was grouped to one of the low volume quintiles. If the LTC-DRG to which the no volume LTC-DRG would be cross-walked was not one of the LTC-DRGs grouped to one of the low volume quintiles, we would compare the weight of the LTC-DRG to which the no volume LTC-DRG would be cross-walked to the weights of each of the five quintiles and assign the no volume LTC-DRG the relative weight of the quintile with the closest weight. A list of the proposed no volume LTC-DRGs and the LTC-DRG to which it would be crosswalked in order to determine the appropriate low volume quintile for the assignment of a relative weight is shown below in Table 3.

TABLE 3.—PROPOSED NO VOLUME LTC-DRG CROSSWALK AND PROPOSED QUINTILE ASSIGNMENT <sup>1</sup>

LTC-DRG	Description	Cross-walked LTC-DRG	Low volume quintile assigned
3	CRANIOTOMY AGE 0-17	1	Quintile 4.
6	CARPAL TUNNEL RELEASE	8	Quintile 3.
26	SEIZURE & HEADACHE AGE 0-17	25	Quintile 2.
30	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 0-17	29	Quintile 3.
33	CONCUSSION AGE 0-17	32	Quintile 3.
36	RETINAL PROCEDURES	47	Quintile 1.
37	ORBITAL PROCEDURES	47	Quintile 1.
38	PRIMARY IRIS PROCEDURES	47	Quintile 1.
39	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	47	Quintile 1.
40	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	47	Quintile 1.
41	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	47	Quintile 1.
42	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	47	Quintile 1.
43	HYPHEMA	47	Quintile 1.
48	OTHER DISORDERS OF THE EYE AGE 0-17	47	Quintile 1.
49	MAJOR HEAD & NECK PROCEDURES	73	Quintile 3.
50	SIALOADENECTOMY	73	Quintile 3.
51	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	73	Quintile 3.
52	CLEFT LIP & PALATE REPAIR	53	Quintile 1.
56	RHINOPLASTY	55	Quintile 1.
57	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	55	Quintile 1.
58	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	55	Quintile 1.
59	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	55	Quintile 1.
60	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	55	Quintile 1.
61	MYRINGOTOMY W TUBE INSERTION AGE >17	55	Quintile 1.
62	MYRINGOTOMY W TUBE INSERTION AGE 0-17	55	Quintile 1.
67	EPIGLOTTITIS	73	Quintile 3.
70	OTITIS MEDIA & URI AGE 0-17	69	Quintile 1.
71	LARYNGOTRACHEITIS	69	Quintile 1.
72	NASAL TRAUMA & DEFORMITY	69	Quintile 1.
98	BRONCHITIS & ASTHMA AGE 0-17	97	Quintile 1.
106	CORONARY BYPASS W PTCA	104	Quintile 4.
107	CORONARY BYPASS W CARDIAC CATH	104	Quintile 4.
108	OTHER CARDIOTHORACIC PROCEDURES	104	Quintile 4.
109	CORONARY BYPASS W/O PTCA OR CARDIAC CATH	104	Quintile 4.
119	VEIN LIGATION & STRIPPING	131	Quintile 2.
137	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0-17	136	Quintile 2.
146	RECTAL RESECTION W CC	148	Quintile 4.
147	RECTAL RESECTION W/O CC	148	Quintile 4.

TABLE 3.—PROPOSED NO VOLUME LTC–DRG CROSSWALK AND PROPOSED QUINTILE ASSIGNMENT<sup>1</sup>—Continued

LTC–DRG	Description	Cross-walked LTC–DRG	Low volume quintile assigned
156	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0–17	155	Quintile 5.
163	HERNIA PROCEDURES AGE 0–17	160	Quintile 1.
164	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	157	Quintile 3.
165	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	158	Quintile 1.
166	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	158	Quintile 1.
167	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	158	Quintile 1.
168	MOUTH PROCEDURES W CC	185	Quintile 4.
169	MOUTH PROCEDURES W/O CC	185	Quintile 4.
187	DENTAL EXTRACTIONS & RESTORATIONS	185	Quintile 4.
190	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0–17	189	Quintile 3.
195	CHOLECYSTECTOMY W C.D.E. W CC	191	Quintile 4.
196	CHOLECYSTECTOMY W C.D.E. W/O CC	197	Quintile 3.
200	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	199	Quintile 5.
212	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0–17	211	Quintile 2.
220	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE 0–17	219	Quintile 1.
259	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	257	Quintile 1.
260	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	258	Quintile 1.
262	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	258	Quintile 1.
286	ADRENAL & PITUITARY PROCEDURES	292	Quintile 4.
289	PARATHYROID PROCEDURES	290	Quintile 1.
291	THYROGLOSSAL PROCEDURES	290	Quintile 1.
317	ADMIT FOR RENAL DIALYSIS	316	Quintile 3.
327	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0–17	326	Quintile 1.
334	MAJOR MALE PELVIC PROCEDURES W CC	354	Quintile 5.
335	MAJOR MALE PELVIC PROCEDURES W/O CC	354	Quintile 5.
340	TESTES PROCEDURES, NON-MALIGNANCY AGE 0–17	347	Quintile 2.
342	CIRCUMCISION AGE >17	344	Quintile 1.
343	CIRCUMCISION AGE 0–17	344	Quintile 1.
351	STERILIZATION, MALE	344	Quintile 1.
357	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	346	Quintile 3.
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	367	Quintile 3.
362	ENDOSCOPIC TUBAL INTERRUPTION	367	Quintile 3.
364	D&C, CONIZATION EXCEPT FOR MALIGNANCY	360	Quintile 2.
370	CESAREAN SECTION W CC	365	Quintile 5.
371	CESAREAN SECTION W/O CC	365	Quintile 5.
372	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	359	Quintile 1.
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	359	Quintile 1.
374	VAGINAL DELIVERY W STERILIZATION &/OR D&C	359	Quintile 1.
375	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	359	Quintile 1.
376	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	359	Quintile 1.
377	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	359	Quintile 1.
378	ECTOPIC PREGNANCY	359	Quintile 1.
379	THREATENED ABORTION	359	Quintile 1.
380	ABORTION W/O D&C	359	Quintile 1.
381	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	359	Quintile 1.
382	FALSE LABOR	359	Quintile 1.
383	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	359	Quintile 1.
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	359	Quintile 1.
386	EXTREME IMMATURETY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	385	Quintile 3.
387	PREMATURITY W MAJOR PROBLEMS	385	Quintile 3.
388	PREMATURITY W/O MAJOR PROBLEMS	385	Quintile 3.
389	FULL TERM NEONATE W MAJOR PROBLEMS	385	Quintile 3.
391	NORMAL NEWBORN	390	Quintile 3.
392	SPLENECTOMY AGE >17	197	Quintile 3.
393	SPLENECTOMY AGE 0–17	197	Quintile 3.
405	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0–17	416	Quintile 3.
411	HISTORY OF MALIGNANCY W/O ENDOSCOPY	171	Quintile 1.
412	HISTORY OF MALIGNANCY W ENDOSCOPY	171	Quintile 1.
422	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0–17	421	Quintile 3.
441	HAND PROCEDURES FOR INJURIES	229	Quintile 3.
446	TRAUMATIC INJURY AGE 0–17	445	Quintile 3.
448	ALLERGIC REACTIONS AGE 0–17	447	Quintile 1.
451	POISONING & TOXIC EFFECTS OF DRUGS AGE 0–17	450	Quintile 1.
471	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	209	Quintile 5.
481	BONE MARROW TRANSPLANT	394	Quintile 5.
484	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	2	Quintile 5.
485	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TR	486	Quintile 5.
491	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	486	Quintile 5.
496	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	497	Quintile 3.

<sup>1</sup> This table does not reflect the four transplant LTC–DRGs, for which we propose to assign a relative weight of 0.0000.

To illustrate the methodology we are proposing for determining relative weights for the 111 LTC-DRGs with no LTCH cases, we are providing the following examples, which refer to the no volume LTC-DRGs crosswalk information provided above in Table 3:

*Example 1:* There were no cases in the FY 2000 MedPAR file for LTC-DRG 3 (Craniotomy Age 0-17). Since the period of time surrounding the surgery and the post-operative care are similar in resource use and the length and complexity of the surgical procedures and the length of stay are similar, we determined that LTC-DRG 1 (Craniotomy Age > 17 Except for Trauma), which is assigned to low volume quintile 4 for the purpose of determining the proposed relative weights, displayed similar clinical and resource use. Therefore, we are proposing to assign the same relative weight of LTC-DRG 1 of 1.3735 (quintile 4) (see Table 4 below) to LTC-DRG 3.

*Example 2:* There were no LTCH cases in the FY 2000 MedPAR file for LTC-DRG 98 (Bronchitis & Asthma Age 0-17). Since the severity of illness in patients with bronchitis and asthma are similar in patients regardless of age, we determined that LTC-DRG 97 (Bronchitis & Asthma Age>17 W/O CC) displayed similar clinical and resource use characteristics and have a similar length of stay to LTC-DRG 98. There were over 25 cases in LTC-DRG 97. Therefore, it is not assigned to a low volume quintile for the purpose of determining the relative weights. However, under our proposed methodology,

LTC-DRG 98, with no LTCH cases, needs to be grouped to a low volume quintile. We identified that the quintile with the closest weight to LTC-DRG 97 (0.5239; see Table 4 below) was quintile 3 (0.5268; see Table 4 below). Therefore, we are proposing to assign LTC-DRG 98 a relative weight of 0.5268.

Furthermore, we are proposing to establish LTC-DRG relative weights of 0.0000 for heart, kidney, liver, and lung transplants (proposed LTC-DRGs 103, 302, 480, and 495, respectively) because Medicare will only cover these procedures if they are performed at a hospital that has been certified for the specific procedures by Medicare. We are only proposing to include these four transplant LTC-DRGs in the GROUPER program for administrative purposes. Since we are proposing to use the same GROUPER program for LTCHs as is used under the acute care hospital inpatient prospective payment system, removing these DRGs would be administratively burdensome. For further discussion of the Medicare coverage of heart, kidney, liver, and lung transplants, see the following **Federal Register** documents: February 2, 1995 final rule (60 FR 6537); April 12, 1991 final rule (56 FR 15006); and April 6, 1987 final rule (52 FR 10935). Based on our research, we found that most LTCHs only perform minor surgeries, such as minor small and large

bowel procedures, if any surgeries at all. Given the extensive criteria that must be met to become certified as a transplant center for Medicare, we do not believe that any LTCHs would become certified as a transplant center. In fact, in the nearly 20 years since the implementation of the hospital inpatient prospective payment system, there has never been a LTCH that even expressed an interest in becoming a transplant center. We specifically solicit comments on whether there is a need for CMS to address determining relative weights (other than zero) for transplant LTC-DRGs. We are proposing to assign proposed LTC-DRGs 103, 302, 480, and 495 a relative weight of zero, as shown in Table 4 below.

Again, we note that as this proposed system is dynamic, it is entirely possible that the number of LTC-DRGs with a zero volume of LTCH cases based on the system we are proposing would vary in the future. We would use the best available claims data in the MedPAR to identify zero volume LTC-DRGs and to determine the relative weights in the final rule.

Table 4 lists the proposed LTC-DRGs and their proposed relative weights and arithmetic mean length of stay.

TABLE 4.—PROPOSED LTC-DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
1	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA <sup>4</sup>	1.3735	36.5	13
2	CRANIOTOMY FOR TRAUMA AGE >17 <sup>5</sup>	2.1422	48.3	1
3	CRANIOTOMY AGE 0-17 <sup>4*</sup>	1.3735	36.5	0
4	SPINAL PROCEDURES <sup>3</sup>	0.9568	30.0	10
5	EXTRACRANIAL VASCULAR PROCEDURES <sup>4</sup>	1.3735	36.5	2
6	CARPAL TUNNEL RELEASE <sup>3*</sup>	0.9568	30.0	0
7	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	1.8690	46.3	60
8	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC <sup>3</sup>	0.9568	30.0	2
9	SPINAL DISORDERS & INJURIES	1.5321	41.1	180
10	NERVOUS SYSTEM NEOPLASMS W CC	1.0668	31.8	162
11	NERVOUS SYSTEM NEOPLASMS W/O CC	1.0668	31.8	69
12	DEGENERATIVE NERVOUS SYSTEM DISORDERS	0.9289	32.6	1,955
13	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	0.7511	25.4	126
14	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1.0143	30.9	2,678
15	TRANSIENT ISCHEMIC ATTACK & PRECEREBRAL OCCLUSIONS	0.8800	27.6	182
16	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	1.1461	29.8	114
17	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	0.8295	25.9	28
18	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	0.9063	28.9	138
19	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	0.8609	30.5	72
20	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	1.5115	36.4	189
21	VIRAL MENINGITIS <sup>2</sup>	0.7107	24.5	2
22	HYPERTENSIVE ENCEPHALOPATHY <sup>3</sup>	0.9568	30.0	8
23	NONTRAUMATIC STUPOR & COMA	1.2866	36.1	71
24	SEIZURE & HEADACHE AGE >17 W CC	0.9144	29.2	141
25	SEIZURE & HEADACHE AGE >17 W/O CC	0.6727	25.1	74
26	SEIZURE & HEADACHE AGE 0-17 <sup>2</sup>	0.7107	24.5	0
27	TRAUMATIC STUPOR & COMA, COMA >1 HR	1.5525	38.6	54
28	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	1.0679	29.7	134
29	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	0.8326	27.2	95
30	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 0-17 <sup>3</sup>	0.9568	30.0	0
31	CONCUSSION AGE >17 W CC <sup>5</sup>	2.1422	48.3	2
32	CONCUSSION AGE >17 W/O CC <sup>3</sup>	0.9568	30.0	2

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
33	CONCUSSION AGE 0–17 <sup>3</sup>	0.9568	30.0	0
34	OTHER DISORDERS OF NERVOUS SYSTEM W CC	1.1042	30.8	518
35	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	0.9505	30.3	190
36	RETINAL PROCEDURES 1*	0.5239	18.2	0
37	ORBITAL PROCEDURES 1*	0.5239	18.2	0
38	PRIMARY IRIS PROCEDURES 1*	0.5239	18.2	0
39	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY 1*	0.5239	18.2	0
40	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17 1*	0.5239	18.2	0
41	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0–17 1*	0.5239	18.2	0
42	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS 1*	0.5239	18.2	0
43	HYPHEMA 1*	0.5239	18.2	0
44	ACUTE MAJOR EYE INFECTIONS <sup>5</sup>	2.1422	48.3	3
45	NEUROLOGICAL EYE DISORDERS <sup>1</sup>	0.5239	18.2	6
46	OTHER DISORDERS OF THE EYE AGE >17 W CC <sup>2</sup>	0.7107	24.5	9
47	OTHER DISORDERS OF THE EYE AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	3
48	OTHER DISORDERS OF THE EYE AGE 0–17 1*	0.5239	18.2	0
49	MAJOR HEAD & NECK PROCEDURES <sup>3*</sup>	0.9568	30.0	0
50	SIALOADENECTOMY <sup>3*</sup>	0.9568	30.0	0
51	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY <sup>3*</sup>	0.9568	30.0	0
52	CLEFT LIP & PALATE REPAIR 1*	0.5239	18.2	0
53	SINUS & MASTOID PROCEDURES AGE >17 <sup>1</sup>	0.5239	18.2	1
54	SINUS & MASTOID PROCEDURES AGE 0–17 <sup>1</sup>	0.5239	18.2	0
55	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES <sup>1</sup>	0.5239	18.2	1
56	RHINOPLASTY 1*	0.5239	18.2	0
57	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17 1*	0.5239	18.2	0
58	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0–17 1*	0.5239	18.2	0
59	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17 1*	0.5239	18.2	0
60	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0–17 1*	0.5239	18.2	0
61	MYRINGOTOMY W TUBE INSERTION AGE >17 1*	0.5239	18.2	0
62	MYRINGOTOMY W TUBE INSERTION AGE 0–17 1*	0.5239	18.2	0
63	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES <sup>5</sup>	2.1422	48.3	5
64	EAR, NOSE, MOUTH & THROAT MALIGNANCY	1.4108	35.1	144
65	DYSEQUILIBRIUM	0.7130	27.0	25
66	EPISTAXIS <sup>3</sup>	0.9568	30.0	3
67	EPIGLOTTITIS <sup>3</sup>	0.9568	30.0	0
68	OTITIS MEDIA & URI AGE >17 W CC	0.8959	23.7	25
69	OTITIS MEDIA & URI AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	7
70	OTITIS MEDIA & URI AGE 0–17 1*	0.5239	18.2	0
71	LARYNGOTRACHEITIS 1*	0.5239	18.2	0
72	NASAL TRAUMA & DEFORMITY 1*	0.5239	18.2	0
73	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	1.0917	33.3	31
74	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0–17 <sup>2</sup>	0.7107	24.5	1
75	MAJOR CHEST PROCEDURES <sup>5</sup>	2.1422	48.3	19
76	OTHER RESP SYSTEM O.R. PROCEDURES W CC	2.7153	50.7	327
77	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC <sup>5</sup>	2.1422	48.3	13
78	PULMONARY EMBOLISM	0.8294	24.8	122
79	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	1.2588	31.5	2,047
80	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	1.0733	30.0	204
81	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0–17 <sup>3</sup>	0.9568	30.0	10
82	RESPIRATORY NEOPLASMS	0.9690	26.9	755
83	MAJOR CHEST TRAUMA W CC	0.9797	24.8	33
84	MAJOR CHEST TRAUMA W/O CC <sup>3</sup>	0.9568	30.0	10
85	PLEURAL EFFUSION W CC	1.2406	30.1	132
86	PLEURAL EFFUSION W/O CC	0.7529	25.0	30
87	PULMONARY EDEMA & RESPIRATORY FAILURE	2.4202	44.1	5,741
88	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	0.9390	25.3	4,229
89	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	0.9740	27.2	2,387
90	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	0.9740	27.2	554
91	SIMPLE PNEUMONIA & PLEURISY AGE 0–17 <sup>4</sup>	1.3735	36.5	21
92	INTERSTITIAL LUNG DISEASE W CC	0.8885	24.8	181
93	INTERSTITIAL LUNG DISEASE W/O CC	0.7284	23.8	38
94	PNEUMOTHORAX W CC	0.9341	28.3	43
95	PNEUMOTHORAX W/O CC <sup>2</sup>	0.7107	24.5	5
96	BRONCHITIS & ASTHMA AGE >17 W CC	0.8855	24.4	139
97	BRONCHITIS & ASTHMA AGE >17 W/O CC	0.5268	17.8	67
98	BRONCHITIS & ASTHMA AGE 0–17 1*	0.5239	18.2	0
99	RESPIRATORY SIGNS & SYMPTOMS W CC	1.4609	32.1	384
100	RESPIRATORY SIGNS & SYMPTOMS W/O CC	1.0387	27.9	156



TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
101	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	1.3776	30.9	164
102	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	0.6568	22.0	34
103	HEART TRANSPLANT <sup>6</sup>	0.0000	0.0	0
104	CARDIAC VALVE & OTHER MAJOR CARDIOTHORACIC PROC W CARDIAC CATH <sup>4</sup>	1.3735	36.5	2
105	CARDIAC VALVE & OTHER MAJOR CARDIOTHORACIC PROC W/O CARDIAC CATH <sup>4</sup>	1.3735	36.5	2
106	CORONARY BYPASS W PTCA <sup>4*</sup>	1.3735	36.5	0
107	CORONARY BYPASS W CARDIAC CATH <sup>4*</sup>	1.3735	36.5	0
108	OTHER CARDIOTHORACIC PROCEDURES <sup>4*</sup>	1.3735	36.5	0
109	CORONARY BYPASS W/O PTCA OR CARDIAC CATH <sup>4*</sup>	1.3735	36.5	0
110	MAJOR CARDIOVASCULAR PROCEDURES W CC <sup>4</sup>	1.3735	36.5	1
111	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	1.3735	36.5	0
112	PERCUTANEOUS CARDIOVASCULAR PROCEDURES <sup>5</sup>	2.1422	48.3	3
113	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	1.5915	43.7	109
114	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1.7160	46.5	31
115	PRM CARD PACEM IMPL W AMI, HRT FAIL OR SHK, OR AICD LEAD OR GNRTR P <sup>4</sup>	1.3735	36.5	3
116	OTH PERM CARD PACEMAK IMPL OR PTCA W CORONARY ARTERY STENT IMPLNT <sup>5</sup>	2.1422	48.3	4
117	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT <sup>2</sup>	0.7107	24.5	1
118	CARDIAC PACEMAKER DEVICE REPLACEMENT <sup>4</sup>	1.3735	36.5	11
119	VEIN LIGATION & STRIPPING <sup>2*</sup>	0.7107	24.5	0
120	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1.3748	41.6	167
121	CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE	0.8843	24.1	191
122	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP, DISCHARGED ALIVE	0.6762	22.4	64
123	CIRCULATORY DISORDERS W AMI, EXPIRED	1.1855	23.7	58
124	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG <sup>4</sup>	1.3735	36.5	7
125	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG <sup>4</sup>	1.3735	36.5	4
126	ACUTE & SUBACUTE ENDOCARDITIS	1.0442	31.2	193
127	HEART FAILURE & SHOCK	0.8658	25.8	2,434
128	DEEP VEIN THROMBOPHLEBITIS <sup>2</sup>	0.7107	24.5	16
129	CARDIAC ARREST, UNEXPLAINED <sup>2</sup>	0.7107	24.5	22
130	PERIPHERAL VASCULAR DISORDERS W CC	0.9391	29.3	1,139
131	PERIPHERAL VASCULAR DISORDERS W/O CC	0.7878	27.4	279
132	ATHEROSCLEROSIS W CC	0.8672	23.6	641
133	ATHEROSCLEROSIS W/O CC	0.8388	25.3	195
134	HYPERTENSION	0.8482	28.8	136
135	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	0.9344	24.7	152
136	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	0.7211	24.2	42
137	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0-17 <sup>2*</sup>	0.7107	24.5	0
138	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	0.8712	28.1	273
139	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	0.8712	28.1	104
140	ANGINA PECTORIS	0.6919	23.5	85
141	SYNCOPE & COLLAPSE W CC	0.6732	24.4	84
142	SYNCOPE & COLLAPSE W/O CC	0.6732	24.4	71
143	CHEST PAIN	0.6017	20.4	50
144	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	0.9035	25.2	579
145	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	0.6545	20.6	97
146	RECTAL RESECTION W CC <sup>4*</sup>	1.3735	36.5	0
147	RECTAL RESECTION W/O CC <sup>4*</sup>	1.3735	36.5	0
148	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC <sup>4</sup>	1.3735	36.5	12
149	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC <sup>1</sup>	0.5239	18.2	3
150	PERITONEAL ADHESIOLYSIS W CC <sup>4</sup>	1.3735	36.5	2
151	PERITONEAL ADHESIOLYSIS W/O CC <sup>4</sup>	1.3735	36.5	0
152	MINOR SMALL & LARGE BOWEL PROCEDURES W CC <sup>5</sup>	2.1422	48.3	4
153	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC <sup>5</sup>	2.1422	48.3	0
154	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W CC <sup>5</sup>	2.1422	48.3	1
155	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC <sup>5</sup>	2.1422	48.3	1
156	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17 <sup>5*</sup>	2.1422	48.3	0
157	ANAL & STOMAL PROCEDURES W CC <sup>3</sup>	0.9568	30.0	3
158	ANAL & STOMAL PROCEDURES W/O CC <sup>1</sup>	0.5239	18.2	1
159	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC <sup>4</sup>	1.3735	36.5	1
160	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	1
161	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC <sup>1</sup>	0.5239	18.2	2
162	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	0
163	HERNIA PROCEDURES AGE 0-17 <sup>1*</sup>	0.5239	18.2	0
164	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC <sup>3*</sup>	0.9568	30.0	0
165	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC <sup>1*</sup>	0.5239	18.2	0

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
166	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC <sup>1*</sup>	0.5239	18.2	0
167	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC <sup>1*</sup>	0.5239	18.2	0
168	MOUTH PROCEDURES W CC <sup>4*</sup>	1.3735	36.5	0
169	MOUTH PROCEDURES W/O CC	1.3735	36.5	0
170	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	1.8984	42.4	25
171	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC <sup>1</sup>	0.5239	18.2	1
172	DIGESTIVE MALIGNANCY W CC	1.0289	27.9	520
173	DIGESTIVE MALIGNANCY W/O CC	1.0177	28.9	140
174	G.I. HEMORRHAGE W CC	0.9592	26.9	270
175	G.I. HEMORRHAGE W/O CC	0.9181	28.3	62
176	COMPLICATED PEPTIC ULCER	0.9934	24.3	48
177	UNCOMPLICATED PEPTIC ULCER W CC <sup>3</sup>	0.9568	30.0	16
178	UNCOMPLICATED PEPTIC ULCER W/O CC <sup>1</sup>	0.5239	18.2	7
179	INFLAMMATORY BOWEL DISEASE	1.0571	24.0	40
180	G.I. OBSTRUCTION W CC	1.0191	27.8	212
181	G.I. OBSTRUCTION W/O CC	0.9831	24.8	49
182	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE > 17 W CC	0.9781	28.3	375
183	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE > 17 W/O CC	0.7925	24.4	149
184	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0–17 <sup>4</sup>	1.3735	36.5	2
185	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE > 17 <sup>4</sup>	1.3735	36.5	16
186	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0–17 <sup>4</sup>	1.3735	36.5	0
187	DENTAL EXTRACTIONS & RESTORATIONS <sup>4*</sup>	1.3735	36.5	0
188	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE > 17 W CC	1.1863	29.5	476
189	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE > 17 W/O CC	1.0223	25.1	74
190	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0–17 <sup>3*</sup>	0.9568	30.0	0
191	PANCREAS, LIVER & SHUNT PROCEDURES W CC <sup>4</sup>	1.3735	36.5	1
192	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC <sup>4</sup>	1.3735	36.5	0
193	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC <sup>5</sup>	2.1422	48.3	2
194	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC <sup>5</sup>	2.1422	48.3	0
195	CHOLECYSTECTOMY W C.D.E. W CC <sup>4*</sup>	1.3735	36.5	0
196	CHOLECYSTECTOMY W C.D.E. W/O CC <sup>3*</sup>	0.9568	30.0	0
197	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC <sup>3</sup>	0.9568	30.0	2
198	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC <sup>3</sup>	0.9568	30.0	0
199	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY <sup>5</sup>	2.1422	48.3	1
200	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY <sup>5*</sup>	2.1422	48.3	0
201	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES <sup>5</sup>	2.1422	48.3	4
202	CIRRHOSIS & ALCOHOLIC HEPATITIS	0.8110	26.6	128
203	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	0.8782	25.5	247
204	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	1.0512	26.0	205
205	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEP A W CC	0.9764	26.5	99
206	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEP A W/O CC <sup>2</sup>	0.7107	24.5	24
207	DISORDERS OF THE BILIARY TRACT W CC	0.7691	25.8	62
208	DISORDERS OF THE BILIARY TRACT W/O CC <sup>2</sup>	0.7107	24.5	16
209	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY <sup>5</sup>	2.1422	48.3	10
210	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC <sup>4</sup>	1.3735	36.5	9
211	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC <sup>2</sup>	0.7107	24.5	2
212	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0–17 <sup>2*</sup>	0.7107	24.5	0
213	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS.	1.4379	41.5	35
216	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE <sup>3</sup>	0.9568	30.0	9
217	WND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCSKELET & CONN TISS DIS.	1.5497	43.6	185
218	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC <sup>4</sup> .	1.3735	36.5	1
219	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC <sup>1</sup> .	0.5239	18.2	1
220	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE 0–17 <sup>1*</sup>	0.5239	18.2	0
223	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC <sup>4</sup> .	1.3735	36.5	1
224	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC <sup>2</sup> .	0.7107	24.5	1
225	FOOT PROCEDURES <sup>3</sup>	0.9568	30.0	17
226	SOFT TISSUE PROCEDURES W CC <sup>5</sup>	2.1422	48.3	7
227	SOFT TISSUE PROCEDURES W/O CC <sup>5</sup>	2.1422	48.3	1
228	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC <sup>3</sup>	0.9568	30.0	2
229	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC <sup>3</sup>	0.9568	30.0	1
230	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR <sup>5</sup>	2.1422	48.3	1
231	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR <sup>4</sup>	1.3735	36.5	13
232	ARTHROSCOPY <sup>2</sup>	0.7107	24.5	1

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
233	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC <sup>5</sup>	2.1422	48.3	10
234	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC <sup>5</sup>	2.1422	48.3	0
235	FRACTURES OF FEMUR	0.9608	34.9	157
236	FRACTURES OF HIP & PELVIS	0.8221	28.8	1,638
237	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	0.6749	24.3	26
238	OSTEOMYELITIS	1.0920	34.5	962
239	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY.	0.8876	29.2	259
240	CONNECTIVE TISSUE DISORDERS W CC	1.0327	28.8	93
241	CONNECTIVE TISSUE DISORDERS W/O CC	0.8174	28.3	39
242	SEPTIC ARTHRITIS	0.8899	30.8	140
243	MEDICAL BACK PROBLEMS	0.7222	25.4	860
244	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	0.6953	25.5	232
245	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	0.4845	19.3	396
246	NON-SPECIFIC ARTHROPATHIES	0.7693	27.5	35
247	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	0.7016	24.9	343
248	TENDONITIS, MYOSITIS & BURSTITIS	0.7110	24.6	449
249	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	0.9154	30.4	333
250	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	0.8878	30.6	34
251	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	0.8341	29.2	41
252	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE 0–17 <sup>1</sup>	0.5239	18.2	1
253	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W CC	0.9364	31.9	245
254	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	0.7816	28.7	160
255	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE 0–17 <sup>3</sup>	0.9568	30.0	2
256	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	0.9541	30.3	310
257	TOTAL MASTECTOMY FOR MALIGNANCY W CC <sup>1</sup>	0.5239	18.2	1
258	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC <sup>1</sup>	0.5239	18.2	1
259	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC <sup>1*</sup>	0.5239	18.2	0
260	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC <sup>1*</sup>	0.5239	18.2	0
261	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION <sup>3</sup>	0.9568	30.0	1
262	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY <sup>1*</sup>	0.5239	18.2	0
263	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	1.6894	51.6	657
264	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	1.4650	49.2	110
265	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC <sup>5</sup>	2.1422	48.3	11
266	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC <sup>5</sup> .	2.1422	48.3	1
267	PERIANAL & PILONIDAL PROCEDURES <sup>5</sup>	2.1422	48.3	3
268	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES <sup>5</sup>	2.1422	48.3	4
269	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	1.5586	45.1	143
270	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	1.2594	40.1	26
271	SKIN ULCERS	1.2354	39.1	4,021
272	MAJOR SKIN DISORDERS W CC	0.9667	29.9	50
273	MAJOR SKIN DISORDERS W/O CC <sup>2</sup>	0.7107	24.5	11
274	MALIGNANT BREAST DISORDERS W CC	1.2025	32.9	118
275	MALIGNANT BREAST DISORDERS W/O CC	1.2025	32.9	32
276	NON-MALIGANT BREAST DISORDERS <sup>2</sup>	0.7107	24.5	7
277	CELLULITIS AGE >17 W CC	0.8857	28.3	816
278	CELLULITIS AGE >17 W/O CC	0.7680	26.0	359
279	CELLULITIS AGE 0–17 <sup>3</sup>	0.9568	30.0	8
280	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	0.9550	30.7	132
281	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	0.7586	25.2	74
282	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0–17 <sup>1</sup>	0.5239	18.2	0
283	MINOR SKIN DISORDERS W CC	0.9649	29.9	53
284	MINOR SKIN DISORDERS W/O CC <sup>2</sup>	0.7107	24.5	17
285	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DISORDERS <sup>4</sup> .	1.3735	36.5	18
286	ADRENAL & PITUITARY PROCEDURES <sup>4*</sup>	1.3735	36.5	0
287	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	1.5168	42.1	32
288	O.R. PROCEDURES FOR OBESITY <sup>2</sup>	0.7107	24.5	1
289	PARATHYROID PROCEDURES <sup>1*</sup>	0.5239	18.2	0
290	THYROID PROCEDURES <sup>1</sup>	0.5239	18.2	1
291	THYROIDECTOMY PROCEDURES <sup>1*</sup>	0.5239	18.2	0
292	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC <sup>4</sup>	1.3735	36.5	14
293	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC <sup>4</sup>	1.3735	36.5	1
294	DIABETES AGE >35	0.8786	28.2	443
295	DIABETES AGE 0–35 <sup>1</sup>	0.5239	18.2	4
296	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	0.9448	28.2	665
297	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	0.7716	24.5	206
298	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0–17 <sup>3</sup>	0.9568	30.0	5
299	INBORN ERRORS OF METABOLISM <sup>1</sup>	0.5239	18.2	4

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
300	ENDOCRINE DISORDERS W CC	0.8315	27.4	66
301	ENDOCRINE DISORDERS W/O CC <sup>2</sup>	0.7107	24.5	12
302	KIDNEY TRANSPLANT <sup>6</sup>	0.0000	na	0
303	KIDNEY, URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM <sup>5</sup>	2.1422	48.3	2
304	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON-NEOPL W CC <sup>3</sup>	0.9568	30.0	2
305	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON-NEOPL W/O CC <sup>1</sup>	0.5239	18.2	2
306	PROSTATECTOMY W CC <sup>2</sup>	0.7107	24.5	1
307	PROSTATECTOMY W/O CC <sup>1</sup>	0.5239	18.2	2
308	MINOR BLADDER PROCEDURES W CC <sup>3</sup>	0.9568	30.0	4
309	MINOR BLADDER PROCEDURES W/O CC <sup>2</sup>	0.7107	24.5	1
310	TRANSURETHRAL PROCEDURES W CC <sup>4</sup>	1.3735	36.5	7
311	TRANSURETHRAL PROCEDURES W/O CC <sup>2</sup>	0.7107	24.5	5
312	URETHRAL PROCEDURES, AGE >17 W CC <sup>4</sup>	1.3735	36.5	2
313	URETHRAL PROCEDURES, AGE >17 W/O CC <sup>4</sup>	1.3735	36.5	0
314	URETHRAL PROCEDURES, AGE 0-17	1.3735	36.5	0
315	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	1.8305	40.6	99
316	RENAL FAILURE	1.1553	29.1	1,721
317	ADMIT FOR RENAL DIALYSIS <sup>3*</sup>	0.9568	30.0	0
318	KIDNEY & URINARY TRACT NEOPLASMS W CC	1.1129	33.0	118
319	KIDNEY & URINARY TRACT NEOPLASMS W/O CC <sup>3</sup>	0.9568	30.0	24
320	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	0.8814	28.7	730
321	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	0.7213	25.6	202
322	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17 <sup>3</sup>	0.9568	30.0	7
323	URINARY STONES W CC, &/OR ESW LITHOTRIPSY <sup>3</sup>	0.9568	30.0	14
324	URINARY STONES W/O CC <sup>2</sup>	0.7107	24.5	4
325	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	0.5862	21.2	25
326	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	18
327	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17 <sup>1*</sup>	0.5239	18.2	0
328	URETHRAL STRICTURE AGE >17 W CC <sup>2</sup>	0.7107	24.5	1
329	URETHRAL STRICTURE AGE >17 W/O CC <sup>2</sup>	0.7107	24.5	0
330	URETHRAL STRICTURE AGE 0-17 <sup>2</sup>	0.7107	24.5	0
331	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	0.9193	26.7	293
332	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	0.8284	24.8	69
333	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17 <sup>5</sup>	2.1422	48.3	1
334	MAJOR MALE PELVIC PROCEDURES W CC <sup>5*</sup>	2.1422	48.3	0
335	MAJOR MALE PELVIC PROCEDURES W/O CC <sup>5</sup>	2.1422	48.3	0
336	TRANSURETHRAL PROSTATECTOMY W CC <sup>1</sup>	0.5239	18.2	1
337	TRANSURETHRAL PROSTATECTOMY W/O CC <sup>1</sup>	0.5239	18.2	3
338	TESTES PROCEDURES, FOR MALIGNANCY <sup>2</sup>	0.7107	24.5	1
339	TESTES PROCEDURES, NON-MALIGNANCY AGE >17 <sup>5</sup>	2.1422	48.3	1
340	TESTES PROCEDURES, NON-MALIGNANCY AGE 0-17 <sup>2*</sup>	0.7107	24.5	0
341	PENIS PROCEDURES <sup>3</sup>	0.9568	30.0	2
342	CIRCUMCISION AGE >17 <sup>1*</sup>	0.5239	18.2	0
343	CIRCUMCISION AGE 0-17 <sup>1*</sup>	0.5239	18.2	0
344	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY <sup>1</sup>	0.5239	18.2	1
345	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY <sup>5</sup>	2.1422	48.3	3
346	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	0.9607	29.7	154
347	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC <sup>2</sup>	0.7107	24.5	21
348	BENIGN PROSTATIC HYPERTROPHY W CC <sup>2</sup>	0.7107	24.5	5
349	BENIGN PROSTATIC HYPERTROPHY W/O CC <sup>2</sup>	0.7107	24.5	1
350	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM <sup>4</sup>	1.3735	36.5	24
351	STERILIZATION, MALE <sup>1*</sup>	0.5239	18.2	0
352	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES <sup>4</sup>	1.3735	36.5	15
353	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY <sup>1</sup>	0.5239	18.2	1
354	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC <sup>1</sup>	0.5239	18.2	0
355	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC <sup>1</sup>	0.5239	18.2	1
356	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES <sup>1</sup>	0.5239	18.2	5
357	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY <sup>3</sup>	0.9568	30.0	0
358	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC <sup>1</sup>	0.5239	18.2	1
359	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC <sup>1</sup>	0.5239	18.2	4
360	VAGINA, CERVIX & VULVA PROCEDURES <sup>2</sup>	0.7107	24.5	1
361	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION <sup>3*</sup>	0.9568	30.0	0
362	ENDOSCOPIC TUBAL INTERRUPTION <sup>3*</sup>	0.9568	30.0	0
363	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY <sup>4</sup>	1.3735	36.5	1
364	D&C, CONIZATION EXCEPT FOR MALIGNANCY <sup>2*</sup>	0.7107	24.5	0
365	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES <sup>5</sup>	2.1422	48.3	5
366	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	0.9694	29.5	134

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
367	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	0.8881	30.4	43
368	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM <sup>3</sup>	0.9568	30.0	22
369	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS <sup>2</sup>	0.7107	24.5	14
370	*CESAREAN SECTION W CC <sup>5*</sup>	2.1422	48.3	0
371	CESAREAN SECTION W/O CC <sup>5*</sup>	2.1422	48.3	0
372	VAGINAL DELIVERY W COMPLICATING DIAGNOSES <sup>1*</sup>	0.5239	18.2	0
373	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES <sup>1*</sup>	0.5239	18.2	0
374	VAGINAL DELIVERY W STERILIZATION &/OR D&C <sup>1*</sup>	0.5239	18.2	0
375	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C <sup>1*</sup>	0.5239	18.2	0
376	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE <sup>1*</sup>	0.5239	18.2	0
377	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE <sup>1*</sup>	0.5239	18.2	0
378	ECTOPIC PREGNANCY <sup>1*</sup>	0.5239	18.2	0
379	THREATENED ABORTION <sup>1*</sup>	0.5239	18.2	0
380	ABORTION W/O D&C <sup>1*</sup>	0.5239	18.2	0
381	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY <sup>1*</sup>	0.5239	18.2	0
382	FALSE LABOR <sup>1*</sup>	0.5239	18.2	0
383	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS <sup>1*</sup>	0.5239	18.2	0
384	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS <sup>1*</sup>	0.5239	18.2	0
385	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY <sup>3*</sup>	0.9568	30.0	2
386	EXTREME IMMATURETY OR RESPIRATORY DISTRESS SYNDROME, NEONATE <sup>3*</sup>	0.9568	30.0	0
387	PREMATURITY W MAJOR PROBLEMS <sup>3*</sup>	0.9568	30.0	0
388	PREMATURITY W/O MAJOR PROBLEMS <sup>3*</sup>	0.9568	30.0	0
389	FULL TERM NEONATE W MAJOR PROBLEMS <sup>3*</sup>	0.9568	30.0	0
390	NEONATE W OTHER SIGNIFICANT PROBLEMS <sup>3</sup>	0.9568	30.0	2
391	NORMAL NEWBORN <sup>3*</sup>	0.9568	30.0	0
392	SPLENECTOMY AGE >17 <sup>3*</sup>	0.9568	30.0	0
393	SPLENECTOMY AGE 0–17 <sup>3*</sup>	0.9568	30.0	0
394	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS <sup>5</sup>	2.1422	48.3	1
395	RED BLOOD CELL DISORDERS AGE >17	0.8709	25.8	144
396	RED BLOOD CELL DISORDERS AGE 0–17 <sup>1</sup>	0.5239	18.2	2
397	COAGULATION DISORDERS	1.3069	29.5	43
398	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	0.8361	25.4	36
399	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC <sup>2</sup>	0.7107	24.5	10
400	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE <sup>4</sup>	1.3735	36.5	2
401	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC <sup>3</sup>	0.9568	30.0	3
402	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC <sup>3</sup>	0.9568	30.0	0
403	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	1.1242	29.4	280
404	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	0.8288	24.7	88
405	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0–17 <sup>3*</sup>	0.9568	30.0	0
406	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC <sup>5</sup>	2.1422	48.3	1
407	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC <sup>5</sup>	2.1422	48.3	0
408	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC <sup>2</sup>	0.7107	24.5	3
409	RADIOTHERAPY <sup>3</sup>	0.9568	30.0	24
410	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS <sup>4</sup>	1.3735	36.5	14
411	HISTORY OF MALIGNANCY W/O ENDOSCOPY <sup>1*</sup>	0.5239	18.2	0
412	HISTORY OF MALIGNANCY W ENDOSCOPY <sup>1*</sup>	0.5239	18.2	0
413	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	0.9832	26.7	49
414	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	0.8681	29.7	30
415	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	1.9075	44.1	227
416	SEPTICEMIA AGE >17	1.1222	29.4	1,695
417	SEPTICEMIA AGE 0–17 <sup>5</sup>	2.1422	48.3	5
418	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	1.0078	28.4	522
419	FEVER OF UNKNOWN ORIGIN AGE >17 W CC <sup>2</sup>	0.7107	24.5	17
420	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC <sup>2</sup>	0.7107	24.5	11
421	VIRAL ILLNESS AGE >17 <sup>3</sup>	0.9568	30.0	14
422	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0–17 <sup>3*</sup>	0.9568	30.0	0
423	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1.0906	31.9	272
424	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS <sup>4</sup>	1.3735	36.5	15
425	ACUTE ADJUSTMENT REACTION & PSYCHOLOGICAL DYSFUNCTION	0.7912	30.5	63
426	DEPRESSIVE NEUROSES	0.6290	25.5	92
427	NEUROSES EXCEPT DEPRESSIVE <sup>3</sup>	0.9568	30.0	20
428	DISORDERS OF PERSONALITY & IMPULSE CONTROL	0.7423	31.6	31
429	ORGANIC DISTURBANCES & MENTAL RETARDATION	0.6401	27.9	957
430	PSYCHOSES	0.5602	26.4	2,396
431	CHILDHOOD MENTAL DISORDERS	0.5023	23.0	50
432	OTHER MENTAL DISORDER DIAGNOSES <sup>3</sup>	0.9568	30.0	7
433	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	0.2778	12.6	59
434	ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W CC	0.5051	22.2	145
435	ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W/O CC	0.4378	20.2	179

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
436	ALC/DRUG DEPENDENCE W REHABILITATION THERAPY <sup>1</sup>	0.5239	18.2	4
437	ALC/DRUG DEPENDENCE, COMBINED REHAB & DETOX THERAPY <sup>1</sup>	0.5239	18.2	2
439	SKIN GRAFTS FOR INJURIES <sup>4</sup>	1.3735	36.5	13
440	WOUND DEBRIDEMENTS FOR INJURIES	1.2503	39.8	40
441	HAND PROCEDURES FOR INJURIES <sup>3*</sup>	0.9568	30.0	0
442	OTHER O.R. PROCEDURES FOR INJURIES W CC	1.3777	38.6	28
443	OTHER O.R. PROCEDURES FOR INJURIES W/O CC <sup>4</sup>	1.3735	36.5	3
444	TRAUMATIC INJURY AGE >17 W CC	1.2206	34.5	169
445	TRAUMATIC INJURY AGE >17 W/O CC	0.9130	28.0	86
446	TRAUMATIC INJURY AGE 0–17 <sup>3*</sup>	0.9568	30.0	0
447	ALLERGIC REACTIONS AGE >17 <sup>1</sup>	0.5239	18.2	2
448	ALLERGIC REACTIONS AGE 0–17 <sup>1*</sup>	0.5239	18.2	0
449	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC <sup>2</sup>	0.7107	24.5	19
450	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC <sup>1</sup>	0.5239	18.2	11
451	POISONING & TOXIC EFFECTS OF DRUGS AGE 0–17 <sup>1*</sup>	0.5239	18.2	0
452	COMPLICATIONS OF TREATMENT W CC	1.3070	33.1	311
453	COMPLICATIONS OF TREATMENT W/O CC	0.7486	23.6	61
454	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC <sup>2</sup>	0.7107	24.5	11
455	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC <sup>2</sup>	0.7107	24.5	5
461	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	1.5801	43.2	197
462	REHABILITATION	0.7802	28.3	7,505
463	SIGNS & SYMPTOMS W CC	0.8474	29.7	859
464	SIGNS & SYMPTOMS W/O CC	0.7091	28.1	478
465	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS <sup>2</sup>	0.7107	24.5	20
466	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	1.2446	32.0	273
467	OTHER FACTORS INFLUENCING HEALTH STATUS <sup>1</sup>	0.5239	18.2	7
468	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2.3052	49.6	429
469	PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	0.0000	na	0
470	UNGROUPABLE	0.0000	na	0
471	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY <sup>5*</sup>	2.1422	48.3	0
473	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	1.2549	25.3	39
475	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT	2.3043	38.9	4,182
476	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	1.5835	41.1	26
477	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	1.9253	46.5	162
478	OTHER VASCULAR PROCEDURES W CC	1.8876	42.6	42
479	OTHER VASCULAR PROCEDURES W/O CC	1.8876	42.6	4
480	LIVER TRANSPLANT <sup>6</sup>	0.0000	na	0
481	BONE MARROW TRANSPLANT <sup>5*</sup>	2.1422	48.3	0
482	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES <sup>4</sup>	1.3735	36.5	2
483	TRACHEOSTOMY EXCEPT FOR FACE, MOUTH & NECK DIAGNOSES	3.2118	51.4	326
484	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA <sup>5*</sup>	2.1422	48.3	0
485	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TR <sup>5*</sup>	2.1422	48.3	0
486	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA <sup>5</sup>	2.1422	48.3	2
487	OTHER MULTIPLE SIGNIFICANT TRAUMA	1.3111	35.9	77
488	HIV W EXTENSIVE O.R. PROCEDURE <sup>5</sup>	2.1422	48.3	2
489	HIV W MAJOR RELATED CONDITION	1.5141	38.5	106
490	HIV W OR W/O OTHER RELATED CONDITION	1.4702	36.4	48
491	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY <sup>5*</sup>	2.1422	48.3	0
492	CHEMOTHERAPY W ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS <sup>4</sup>	1.3735	36.5	1
493	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC <sup>3</sup>	0.9568	30.0	6
494	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC <sup>1</sup>	0.5239	18.2	1
495	LUNG TRANSPLANT <sup>6</sup>	0.0000	na	0
496	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION <sup>3*</sup>	0.9568	30.0	0
497	SPINAL FUSION W CC <sup>3</sup>	0.9568	30.0	4
498	SPINAL FUSION W/O CC <sup>3</sup>	0.9568	30.0	0
499	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W CC <sup>5</sup>	2.1422	48.3	4
500	BACK & NECK PROCEDURES EXCEPT SPINAL FUSION W/O CC <sup>4</sup>	1.3735	36.5	1
501	KNEE PROCEDURES W PDX OF INFECTION W CC <sup>5</sup>	2.1422	48.3	2
502	KNEE PROCEDURES W PDX OF INFECTION W/O CC <sup>5</sup>	2.1422	48.3	0
503	KNEE PROCEDURES W/O PDX OF INFECTION <sup>4</sup>	1.3735	36.5	3
504	EXTENSIVE 3RD DEGREE BURNS W SKIN GRAFT <sup>4</sup>	1.3735	36.5	2
505	EXTENSIVE 3RD DEGREE BURNS W/O SKIN GRAFT <sup>4</sup>	1.3735	36.5	4
506	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC OR SIG TRAUMA <sup>4</sup>	1.3735	36.5	9
507	FULL THICKNESS BURN W SKIN GRFT OR INHAL INJ W/O CC OR SIG TRAUMA <sup>2</sup>	0.7107	24.5	2
508	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ W CC OR SIG TRAUMA <sup>3</sup>	0.9568	30.0	24

TABLE 4.—PROPOSED LTC—DRG RELATIVE WEIGHTS AND ARITHMETIC MEAN LENGTH OF STAY—Continued

LTC-DRG	Description	Proposed relative weight	Arithmetic mean length of stay	FY 2000 LTCH cases
509	FULL THICKNESS BURN W/O SKIN GRFT OR INH INJ W/O CC OR SIG TRAU-MA <sup>2</sup> .	0.7107	24.5	9
510	NON-EXTENSIVE BURNS W CC OR SIGNIFICANT TRAUMA <sup>3</sup>	0.9568	30.0	23
511	NON-EXTENSIVE BURNS W/O CC OR SIGNIFICANT TRAUMA <sup>2</sup>	0.7107	24.5	10
601	VERY SHORT-STAY ADMISSION NON-PSYCHIATRIC DIAGNOSES <sup>7</sup>	0.1546	4.3	543
602	VERY SHORT-STAY ADMISSION PSYCHIATRIC DIAGNOSES <sup>8</sup>	0.0827	4.5	10,361

\* Proposed relative weights for these LTC—DRGs were determined by assigning these cases to the appropriate low volume quintile because they had no LTCH cases in the FY 2000 MedPAR.

<sup>1</sup> Proposed relative weights for these LTC—DRGs were determined by assigning these cases to low volume quintile 1.

<sup>2</sup> Proposed relative weights for these LTC—DRGs were determined by assigning these cases to low volume quintile 2.

<sup>3</sup> Proposed relative weights for these LTC—DRGs were determined by assigning these cases to low volume quintile 3.

<sup>4</sup> Proposed relative weights for these LTC—DRGs were determined by assigning these cases to low volume quintile 4.

<sup>5</sup> Proposed relative weights for these LTC—DRGs were determined by assigning these cases to low volume quintile 5.

<sup>6</sup> Proposed relative weights for these LTC—DRGs were assigned a value of 0.0.

<sup>7</sup> Proposed relative weights for these LTC—DRGs were determined by combining LTCH cases in MDC 19 or 20 with a length of stay 7 days or fewer.

<sup>8</sup> Proposed relative weights for these LTC—DRGs were determined by combining LTCH cases in MDCs other than 19 or 20 with a length of stay 7 days or fewer.

### B. Special Cases

Under section 123 of Public Law 106–113, the Secretary generally has broad authority in developing the prospective payment system for LTCHs. Thus, the Secretary generally has broad authority in determining whether (and how) to make adjustments to prospective payment system payments. Section 307 of Public Law 106–554 directs the Secretary to “examine” appropriate adjustments to the prospective payment system, including certain specific adjustments, but under that section the Secretary continues to have discretion as to whether to provide for adjustments to reflect variations in the necessary costs of treatment among LTCHs.

Generally, LTCHs, as described in section 1886(d)(1)(B)(iv) of the Act, are distinguished from other inpatient hospital settings by an average length of stay greater than 25 days. Certain “special” cases that have stays of considerably less than the average length of stay and that receive significantly less than the full course of treatment for a specific LTC—DRG would be paid inappropriately if the hospital were to receive the full LTC—DRG payment. Further, because of the budget neutrality requirement of section 123(a)(1) of Public Law 106–113, “overpayment” for these cases would reduce payments for all other cases that warrant full payment based on the LTCH services delivered. We discuss the special cases below in terms of proposed definitions, policy rationale, and proposed payment methodology. The three proposed subsets are very short-stay discharges, short-stay outliers, and interrupted stays.

#### 1. Very Short-Stay Discharges

We are proposing, under § 412.527, to define a very short-stay discharge as a discharge that has a length of stay of 7 days or fewer (regardless of the LTC—DRG assignment), irrespective of the discharge designation (including cases where the patient expires). A very short-stay discharge often occurs when it is determined, following admission to a LTCH, that the beneficiary would receive more appropriate care in another setting, such as a patient who experiences an acute episode or requires more intensive rehabilitation therapy than is available at the LTCH. These patients may be discharged to another site of care and then subsequently readmitted to the LTCH following that stay if they require LTCH treatment (see the interrupted stay policy in section IV.B.3 of this preamble for further clarification regarding length of stay criteria), or they may be discharged and not subsequently readmitted because they no longer require LTCH treatment. Other circumstances that would warrant classification as a very short-stay discharge would involve patients who are either discharged to their home or who expire within the first 7 days of being admitted to a LTCH.

Since LTCHs are defined by statute as generally having an average length of stay greater than 25 days, we are proposing to make an adjustment for very short-stay discharges in order to make appropriate payment to cases that may not necessarily require the type of services intended to be provided at a LTCH. Further, we believe that providing a special payment for very short-stay discharges neither encourages hospitals to admit patients for whom they knowingly are unable to provide

complete treatment in order to maximize payment, nor severely penalizes providers that, in good faith, admit a patient and provide some services before realizing that the beneficiary would receive more appropriate treatment at another site of care.

In considering the appropriate upper day threshold for identifying very short-stay discharges, we found in our analysis that, from a clinical perspective, it takes about 3 days to evaluate the appropriateness of the admission and typically an additional 3 to 4 days for any treatment to begin to have any impact on the patient’s health status. Therefore, we believe that patient cases with 7 days or less treatment in a LTCH are different than the typical LTCH patient cases and generally the patients are not in the hospital long enough to clinically receive full LTCH treatment. We believe that establishing a special payment for these types of cases addresses the problem of an extremely short length of stay that is inherent in a discharge-based prospective payment system. Furthermore, because the rates are set to be budget neutral, if we did not propose to make this adjustment, providing a full prospective payment system payment for very short-stay cases would reduce payments for nonshort-stay LTCH cases.

We are proposing to pay a very short-stay discharge case under a LTC—DRG-specific per diem methodology. Analysis of payment-to-cost ratios indicates that the accuracy of the payments could be improved if we categorize very short-stay discharge cases into two categories based on the primary diagnosis—one for psychiatric

cases and one for all other types of cases. We believe it would be appropriate to separate very short-stay discharge cases into psychiatric and nonpsychiatric categories because our analysis shows that the resources used to treat these two types of patients during the first 7 days differ significantly. In our simulations, combining psychiatric very short-stay discharge cases with all other very short-stay discharge cases resulted in a considerable "overpayment" of the very short-stay discharge psychiatric cases and a substantial "underpayment" of all other (nonpsychiatric) very short-stay discharge cases. As shown in Table 4 above, the proposed relative weight of LTC-DRG 602 for very short-stay discharge psychiatric cases (0.0827) is almost half the proposed relative weight of LTC-DRG 601 (0.1546) for very short-stay discharge nonpsychiatric cases. This means that the average charge for cases with a stay of 7 days or less in nonpsychiatric LTC-DRGs is almost twice the average charge for cases with a stay of 7 days or less in psychiatric LTC-DRGs. Therefore, for payment of very short-stay discharge cases, we are proposing under § 412.527(c)(1), to categorize a discharge into either a very short-stay discharge psychiatric LTC-DRG or a very short-stay discharge nonpsychiatric LTC-DRG. Additional analysis of nonpsychiatric cases with a length of stay of 7 days or fewer indicates that there is not a significant difference in the resource use across other "categories" of LTCH very short-stay discharge cases and the equity of the payment system would not be improved. Thus, we do not believe further distinctions among very short-stay discharge nonpsychiatric cases would be necessary or appropriate.

The relative weight for each of these two very short-stay discharge LTC-DRGs would be based on the average charge for all very short-stay discharge psychiatric cases and all nonpsychiatric cases, respectively, relative to all other LTC-DRGs (excluding all very short-stay discharge cases). We computed the proposed relative weights for the very short-stay discharge psychiatric LTC-DRG and very short-stay discharge nonpsychiatric LTC-DRG by identifying all cases in which the length of stay is 7 days or fewer and categorizing those cases as either psychiatric or nonpsychiatric based on the primary diagnosis of the discharge. Very short-stay discharge psychiatric cases were identified based on the primary ICD-9-CM diagnosis code that would otherwise be classified in LTC-DRGs 424 through 432 in MDC 19 (Mental

Diseases and Disorders) or LTC-DRGs 433 through 437 in MDC 20 (Alcohol/Drug Use and Alcohol/Drug-Induced Organic Mental Disorders) in the absence of a very short stay discharge policy. The proposed relative weights for these two very short-stay discharge LTC-DRGs would be calculated in the same manner discussed previously, using the hospital-specific relative value methodology. Each very short-stay discharge LTC-DRG per diem amount would be determined by dividing the applicable Federal payment rate (Federal payment rate x LTC-DRG weight) by 7 days (proposed § 412.527(c)(2)).

## 2. Short-Stay Outliers

We believe that considerations similar to those underlying the proposed very short-stay discharge policy also apply to short-stay cases with a length of stay greater than 7 days. More specifically, we note that some Medicare patients may have slightly longer lengths of stay, but are still well below the average length of stay of greater than the 25-day threshold specified in the statute, reflecting the fact that these beneficiaries may not require the type of care generally provided in a LTCH or may require urgent treatment at another site of care. Therefore, we also are proposing a short-stay outlier policy that would encompass cases with a length of stay beyond the 7 days that are addressed by the proposed very short-stay discharge policy.

A short-stay outlier case may occur when a beneficiary receives less than the full course of treatment at the LTCH before being discharged. These patients may be discharged to another site of care and be readmitted to the LTCH if they require subsequent LTCH treatment (see the interrupted stay policy in section IV.B.3. of this preamble for further clarification regarding length of stay criteria), or they may be discharged and not readmitted because they no longer require LTCH treatment.

Furthermore, patients may expire early in their LTCH stay. As noted above, generally LTCHs are defined by statute as having an average length of stay of greater than 25 days. Therefore, we believe that a payment adjustment for short-stay outlier cases would result in more appropriate payments since these cases most likely would not receive a full course of treatment in such a short period of time and a full LTC-DRG payment may not always be appropriate. Payment-to-cost ratios for the cases described above show that if LTCHs receive a full LTC-DRG payment for those cases, they would be

significantly "overpaid" for the resources they have actually expended.

We also believe that providing a reduced payment for short-stay outlier cases neither encourages hospitals to admit patients for whom they knowingly are unable to provide complete treatment in order to maximize payment, nor severely penalizes providers that, in good faith, admit a patient and provide some services before realizing that the beneficiary would receive more appropriate treatment at another site of care or before the beneficiary is discharged to go home. Establishing a short-stay outlier payment for these types of cases addresses the incentives inherent in a discharge-based prospective payment system for treating patients with a short length of stay. One of the primary objectives of a prospective payment system is to provide incentives for hospitals to become more efficient and, in doing so, to ensure that they can still receive adequate and appropriate payments. Because the rates are set to be budget neutral, providing a full prospective payment system payment for those cases that do not actually require the full course of treatment would reduce payments for cases that warrant full payment based on the LTCH services furnished. Therefore, we believe that a short-stay outlier policy would permit more equitable payment.

In considering possible short-stay outlier policies, we sought to balance appropriate payments to shorter stay cases, which are generally less expensive than the average case in each LTC-DRG, and payments to inlier cases in each LTC-DRG. In the absence of a short-stay outlier policy, based on analysis of payment-to-cost ratios, the full LTC-DRG payment would "overpay" the short-stay cases and "underpay" the inlier cases. A short-stay outlier policy that results in payment-to-cost ratios that are at (or close to) 1.0 would ensure appropriate payments to both short-stay and inlier cases within a LTC-DRG because, on average, payments would closely match costs for these cases under this proposed prospective payment system.

With no short-stay outlier policy, we estimate that payment-to-cost ratios would be greater than 2.0 for cases with lengths of stays below the average length of stay for the LTC-DRG. We considered three alternative short-stay outlier policies in which payment would be based:

- The least of 100 percent of the cost of the case, 100 percent of the LTC-DRG specific per diem amount multiplied by the length of stay, or the full LTC-DRG



payment for cases with a length of stay between 8 days and the average length of stay of the LTC-DRG;

- The least of 150 percent of the cost of the case, 150 percent of the LTC-DRG specific per diem amount multiplied by the length of stay, or the full LTC-DRG payment for cases with a length of stay between 8 days and two-thirds of the average length of stay of the LTC-DRG; or

- The least of 200 percent of the cost of the case, 200 percent of the LTC-DRG specific per diem amount multiplied by the length of stay, or the full LTC-DRG payment for cases with a length of stay between 8 days and half of the average length of stay of the LTC-DRG.

In each of the three alternatives examined, the short-stay outlier day threshold corresponds to the day where the full LTC-DRG payment would be reached by paying the specified percentage of the per diem amount for the LTC-DRG. This would result in a gradual increase in payment as the length of stay increases without producing a "payment cliff", which would provide an incentive to discharge a patient one day later because there would be a significant increase in the payment. For example, in a LTC-DRG with an average length of stay of 24 days and a full LTC-DRG payment of \$24,000, the per diem amount would be \$1,000 per day (\$24,000/24 days). At 150 percent of the per diem amount (1.5 × \$1,000 = \$1,500 per day), the full LTC-DRG payment (\$24,000) would be reached on day 16 (16 days × \$1,500 per day = \$24,000), which is equal to two-thirds of the average length of stay for the LTC-DRG (2/3 × 24 days = 16 days). Thus, under the second alternative, the upper day threshold is two-thirds of the average length of stay and a case with a length of stay between 8 and 16 would be paid as a short-stay outlier in this example.

Our analysis of the three alternative short-stay outlier policies described above showed that a short-stay outlier policy that would pay the least of 100 percent of cost, 100 percent of the LTC-DRG per diem amount, or the full LTC-DRG payment with a length of stay between 8 days and the average length of stay for the LTC-DRG would result in an average payment-to-cost ratio of slightly less than 1.0 for cases identified as short-stay outliers and a payment-to-cost ratio of just over 1.0 for cases that exceeded the average length of stay. Such a short-stay outlier policy would slightly "underpay" most inlier cases while "overpaying", and thus reducing the incentives for efficiency in the delivery of care of, longer stay cases.

Our analysis also showed that a short-stay outlier policy that would pay the least of 200 percent of cost, 200 percent of the LTC-DRG per diem amount, or the full LTC-DRG payment for cases that stayed between 8 days and half of the average length of stay for the LTC-DRG would result in an average payment-to-cost ratio of greater than 1.5 for those cases identified as short-stay outliers. Such a short-stay outlier policy would result in significant overpayment to those cases identified as short-stay outliers.

Our analysis of a short-stay outlier policy that would pay the least of 150 percent of cost, 150 percent of the LTC-DRG per diem amount, or the full LTC-DRG payment for cases that stayed between 8 days and two-thirds of the average length of stay for the LTC-DRG showed that payment-to-cost ratios for both cases that would be identified as short-stay outliers and inlier cases (that are below the high-cost outlier threshold) would be at or slightly above 1.0. We believe that this alternative would most appropriately pay cases identified as short-stay outliers, inlier cases, and longer stay cases without an incentive to provide inefficient care.

Payment simulations showed that, of the LTCH cases in the FY 2000 MedPAR with a length of stay between 8 days and two-thirds of the average length of stay of the LTC-DRG under the proposed system, payment to 60.8 percent of those cases would be capped at 150 percent of cost. While we acknowledge that under any prospective payment system, hospitals have the opportunity to make a profit on discharges, particularly to help cover the expenses of their extraordinarily costly Medicare patients, we believe that a payment limited to 150 percent of costs or 150 percent of the LTC-DRG per diem payment amount would allow LTCHs to make a reasonable, but not excessive, profit for these short-stay patients.

Based on the analysis described above, we are proposing, under § 412.529, to define a short-stay outlier as a case that has a length of stay between 8 days and two-thirds of the arithmetic average length of stay for each LTC-DRG. We also are proposing to pay a short-stay outlier case defined in proposed § 412.529(a) the least of— (1) 150 percent of the LTC-DRG specific per diem based payment; (2) 150 percent of the cost of the case; or (3) the full LTC-DRG payment (proposed § 412.529(c)(1)).

The LTC-DRG specific per diem based payment would be determined using the proposed standard Federal payment rate (Federal payment rate × LTC-DRG weight) and the arithmetic

mean length of stay of the specific LTC-DRG (proposed § 412.529(c)(2)). The cost of a case would be determined using the hospital-specific cost-to-charge ratio and the Medicare allowable charges for the case (proposed § 412.529(c)(3)).

### 3. Interrupted Stay

We are proposing, under § 412.531, to define interrupted stay cases as those cases in which a LTCH patient is discharged to an inpatient acute care hospital, an IRF, or a SNF for treatment or services not available at the LTCH for a period that is within (less than or equal to) one standard deviation from the arithmetic average length of stay for the DRG assigned for the inpatient acute care hospital stay, one standard deviation from the arithmetic average length of stay for the CMG and the comorbidity tier assigned for the IRF stay, or within 45 days in a SNF (that is, one standard deviation from the average length of stay for all Medicare SNF cases), followed by readmittance to the same LTCH. In considering an appropriate interrupted stay threshold, we attempted to balance the payment incentives of both the LTCH and the acute care hospital, IRF, or SNF to which the LTCH patient is discharged before being readmitted to the LTCH. In order to assure that discharges from LTCHs are based on clinical considerations and not financial incentives, we are proposing that the proposed interrupted stay day threshold would only pay the LTCH for more than one discharge if the patient's length of stay at the acute care hospital, IRF, or SNF exceeds one standard deviation from the average length of stay for the DRG, the combination of the CMG and the comorbidity tier, or for all Medicare SNF cases, respectively. This would, therefore, make it more difficult for a LTCH to find a prospectively paid acute care hospital, IRF, or SNF that would admit a LTCH patient just to allow the LTCH to receive two separate LTC-DRG payments.

We believe that an interrupted stay day threshold of one standard deviation from the average length of stay for either the acute care hospital DRG, the IRF combination of the CMG and the comorbidity tier, or for all Medicare SNF cases provides the appropriate disincentive since cases that stay significantly longer than the average length of stay are more costly than the average case. Since the SNF prospective payment system is a per diem system, not a per discharge system, we are proposing the same threshold for all SNF cases regardless of the resource utilization group (RUG) classification.

We believe that the proposed interrupted stay threshold is appropriate because, in general, the average length of stay plus one standard deviation would capture the majority of the discharges that are similar to the average length of stay for the respective DRG, combination CMG and comorbidity tier, or for all Medicare SNF cases. In addition, this is consistent with the basis for our payment policy for new technologies under the hospital inpatient prospective payment system where the cost of a new technology must exceed one standard deviation beyond the mean standardized charge for all cases in the DRG to which the new technology is assigned in order to receive additional payments (see the September 7, 2001 final rule, 66 FR 46914). The counting of the days for the interruption of the stay would begin on the day of discharge from the proposed LTCH and would end on the day the patient is readmitted to the LTCH. For the purposes of payment under the proposed LTCH prospective payment system, a case that meets the proposed definition of an interrupted stay would be considered a single discharge from the LTCH, and, therefore, would receive only one LTC-DRG payment. Since the two LTCH stays would be considered as a single case for the purposes of payment under the LTCH prospective payment system, the second discharge from the LTCH would be covered under the single LTC-DRG payment. The acute care hospital, the IRF, or the SNF stay would be paid in accordance with the applicable payment policies for those providers.

We are proposing to make one discharge payment under the LTCH prospective payment system for an interrupted stay case as defined under proposed § 412.531(a), to reduce the incentives inherent in a discharged-based prospective payment system of “shifting” patients between Medicare-covered sites of care in order to maximize Medicare payments. This proposed policy is particularly appropriate for LTCHs since, as a group, these hospitals are considerably diverse and offer a broad range of services such that where some LTCHs may be able to handle certain acute conditions, others would need to transfer their patients to acute care hospitals. (See section I.E. of this preamble for a description of the universe of LTCHs.)

For instance, some LTCHs are equipped with operating rooms and intensive care units and are capable of performing minor surgeries. However, other LTCHs are unable to provide those services and would need to transfer the beneficiary to an acute care hospital.

Similarly, a patient who no longer requires hospital-level care, but is not ready to return to the community, could be transferred to a SNF. This incentive to “shift” patients between Medicare-covered sites of care in order to maximize Medicare payments is of a particular concern when the LTCH is physically located within the walls of another hospital. Often, the LTCH patient may not even be aware of a transfer to the other hospital or SNF because he or she will have only been moved down the hall or to another wing of the building. Moreover, our research reveals that hospitals-within-hospitals are the fastest growing type of LTCH. We also believe that the same incentives for inappropriate discharges and readmittance exist for satellite LTCHs that are located within acute care hospitals, described in § 412.22(h), as well as for distinct part SNFs located in acute care hospitals or co-located with LTCHs. (We address the particular issues of onsite discharges and readmittances in section IV.B.5. (proposed § 412.532(d)) in this proposed rule.)

Whether or not a LTCH patient who is discharged to an inpatient acute care hospital, an IRF, or a SNF and then returns to the same LTCH is treated as an interrupted stay (with one LTC-DRG payment) or as a new admission (with two separate LTC-DRG payments) would depend on the patient’s length of stay compared to the arithmetic average length of stay and the standard deviation for the hospital inpatient prospective payment system DRG, the IRF combination of the CMG and the comorbidity tier, or 45 days for all Medicare SNF cases. The arithmetic average length of stay and one standard deviation for each acute care hospital DRG and each IRF combination of the CMG and the comorbidity tier are shown below in Tables 5 and 6, respectively.

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGS

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
1	18
2	19
3	56
4	16
5	7
6	7
7	22
8	6
9	13
10	14

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGS—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
11	8
12	13
13	11
14	11
15	7
16	12
17	6
18	10
19	7
20	20
21	12
22	10
23	8
24	11
25	6
26	5
27	11
28	12
29	7
31	13
32	5
34	10
35	10
36	3
37	9
38	5
39	4
40	7
42	5
43	5
44	9
45	6
46	9
47	6
49	10
50	4
51	7
52	4
53	8
54	2
55	7
56	6
57	10
59	6
60	6
61	12
62	2
63	10
64	13
65	5
66	6
67	7
68	7
69	6
70	5
71	7
72	7
73	9
75	19
76	24
77	10
78	11
79	16
80	10
81	48
82	13
83	10

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
84	6
85	12
86	7
87	12
88	9
89	10
90	7
91	8
92	12
93	7
94	12
95	7
96	8
97	6
98	9
99	6
100	4
101	8
102	5
103	112
104	25
105	18
106	19
107	17
108	19
109	13
110	18
111	8
113	24
114	17
115	16
116	9
117	10
118	6
119	11
120	20
121	12
122	6
123	10
124	9
125	5
126	22
127	10
128	9
129	8
130	10
131	7
132	6
133	4
134	6
135	9
136	5
138	8
139	4
140	5
141	7
142	5
143	4
144	11
145	5
146	18
147	9
148	22
149	9
150	20
151	10
152	14

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
153	8
154	25
155	8
156	15
157	11
158	5
159	10
160	5
161	9
162	4
163	8
164	14
165	7
166	10
167	4
168	10
169	5
170	24
171	9
172	14
173	7
174	9
175	5
176	10
177	8
178	5
179	11
180	10
181	6
182	8
183	5
184	5
185	9
186	18
187	7
188	11
189	6
190	23
191	28
192	11
193	22
194	11
195	18
196	9
197	16
198	7
199	19
200	22
201	26
202	13
203	13
204	11
205	12
206	7
207	10
208	5
209	8
210	12
211	8
212	25
213	18
216	19
217	29
218	10
219	5
220	7
223	6

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
224	3
225	10
226	14
227	5
228	8
229	5
230	12
231	11
232	7
233	15
234	7
235	16
236	9
237	6
238	17
239	12
240	13
241	7
242	13
243	9
244	10
245	8
246	8
247	7
248	9
249	8
250	8
251	5
253	10
254	6
256	10
257	6
258	3
259	7
260	2
261	5
262	8
263	24
264	13
265	16
266	7
267	8
268	8
269	17
270	8
271	14
272	12
273	8
274	13
275	10
276	10
277	11
278	7
279	4
280	8
281	6
282	2
283	9
284	6
285	20
286	13
287	22
288	12
289	7
290	5
291	3
292	21

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
293	12
294	9
295	7
296	10
297	6
298	6
299	11
300	12
301	7
302	16
303	15
304	18
305	6
306	12
307	4
308	14
309	4
310	10
311	3
312	10
313	5
315	19
316	13
317	6
318	12
319	5
320	10
321	7
322	7
323	6
324	3
325	7
326	5
327	5
328	7
329	4
331	11
332	6
333	10
334	9
335	5
336	7
337	3
338	11
339	10
341	8
342	7
344	6
345	8
346	12
347	6
348	8
349	5
350	8
352	9
353	13
354	11
355	5
356	4
357	16
358	9
359	4
360	6
361	7
363	8
364	9
365	15

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
366	14
367	6
368	12
369	7
370	13
371	7
372	7
373	4
374	6
375	3
376	6
377	10
378	4
379	8
380	4
381	6
382	2
383	8
384	4
389	34
390	7
392	19
394	18
395	9
396	9
397	10
398	12
399	6
400	20
401	22
402	8
403	16
404	9
406	20
407	8
408	19
409	12
410	8
411	4
412	4
413	14
414	8
415	30
416	14
417	8
418	12
419	9
420	6
421	7
422	5
423	17
424	36
425	8
426	9
427	10
428	19
429	15
430	17
431	15
432	12
433	7
439	18
440	20
441	7
442	19
443	7
444	8

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
445	5
447	5
449	8
450	4
451	2
452	10
453	5
454	11
455	6
461	12
462	20
463	8
464	6
465	6
466	9
467	7
468	26
470	88
471	10
473	28
475	22
476	20
477	18
478	15
479	7
480	44
481	37
482	26
483	69
484	25
485	19
486	24
487	14
488	34
489	18
490	11
491	6
492	32
493	11
494	4
495	28
496	18
497	12
498	6
499	9
500	5
501	20
502	12
503	8
504	56
505	9
506	33
507	16
508	16
509	9
510	15
511	11
512	24
513	18
514	16
515	14
516	9
517	6
518	8
519	11
520	4
521	12

TABLE 5.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR ACUTE CARE HOSPITAL DRGs—Continued

Hospital inpatient prospective payment system DRG	Average length of stay plus one standard deviation
522 .....	17
523 .....	8

\*Arithmetic average length of stay and standard deviation based on data used to develop the hospital inpatient prospective payment system FY 2002 DRG relative weights (see the August 1, 2001 final rule, 66 FR 40054).

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
0101** .....	1	11
0101** .....	2	10
0101 .....	3	8
0101 .....	None	13
0102** .....	1	17
0102 .....	2	18
0102 .....	3	16
0102 .....	9	15
0103** .....	1	19
0103** .....	2	18
0103 .....	3	17
0103 .....	None	18
0104 .....	1	25
0104 .....	2	18
0104 .....	3	18
0104 .....	None	19
0105 .....	1	24
0105 .....	2	25
0105 .....	3	22
0105 .....	None	23
0106 .....	1	26
0106 .....	2	26
0106 .....	3	27
0106 .....	None	27
0107 .....	1	25
0107 .....	2	30
0107 .....	3	30
0107 .....	None	30
0108** .....	1	35
0108 .....	2	44
0108 .....	3	33
0108 .....	None	33
0109 .....	1	36
0109 .....	2	35
0109 .....	3	31
0109 .....	None	35
0110** .....	1	39
0110 .....	2	35
0110 .....	3	40
0110 .....	None	39
0111** .....	1	40
0111 .....	2	38
0111 .....	3	35
0111 .....	None	39
0112 .....	1	66

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
0112 .....	2	52
0112 .....	3	45
0112 .....	None	44
0113 .....	1	46
0113 .....	2	41
0113 .....	3	38
0113 .....	None	40
0114 .....	1	56
0114 .....	2	51
0114 .....	3	48
0114 .....	None	48
0201** .....	1	19
0201 .....	2	22
0201 .....	3	21
0201 .....	None	17
0202** .....	1	27
0202 .....	2	24
0202 .....	3	26
0202 .....	None	25
0203 .....	1	27
0203 .....	2	27
0203 .....	3	30
0203 .....	None	27
0204** .....	1	35
0204 .....	2	34
0204 .....	3	33
0204 .....	None	33
0205 .....	1	65
0205 .....	2	56
0205 .....	3	52
0205 .....	None	48
0301** .....	1	21
0301 .....	2	22
0301 .....	3	19
0301 .....	None	20
0302** .....	1	27
0302 .....	2	25
0302 .....	3	27
0302 .....	None	25
0303 .....	1	33
0303 .....	2	35
0303 .....	3	33
0303 .....	None	32
0304 .....	1	63
0304 .....	2	50
0304 .....	3	53
0304 .....	None	47
0401** .....	1	22
0401 .....	2	22
0401 .....	3	30
0401 .....	None	30
0402** .....	1	30
0402 .....	2	27
0402 .....	3	33
0402 .....	None	31
0403** .....	1	51
0403 .....	2	55
0403 .....	3	50
0403 .....	None	52
0404 .....	1	87
0404 .....	2	64
0404 .....	3	101
0404 .....	None	66
0501** .....	1	18

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
0501 .....	2	21
0501 .....	3	15
0501 .....	None	16
0502** .....	1	18
0502 .....	2	26
0502 .....	3	13
0502 .....	None	18
0503** .....	1	25
0503 .....	2	26
0503 .....	3	23
0503 .....	None	22
0504** .....	1	33
0504 .....	2	31
0504 .....	3	37
0504 .....	None	29
0505 .....	1	46
0505 .....	2	48
0505 .....	3	44
0505 .....	None	45
0601** .....	1	20
0601 .....	2	21
0601 .....	3	17
0601 .....	None	19
0602 .....	1	19
0602 .....	2	22
0602 .....	3	21
0602 .....	None	23
0603 .....	1	33
0603 .....	2	27
0603 .....	3	27
0603 .....	None	27
0604 .....	1	49
0604 .....	2	36
0604 .....	3	40
0604 .....	None	36
0701** .....	1	18
0701 .....	2	18
0701 .....	3	19
0701 .....	None	17
0702** .....	1	22
0702 .....	2	22
0702 .....	3	23
0702 .....	None	20
0703** .....	1	25
0703 .....	2	26
0703 .....	3	25
0703 .....	None	24
0704 .....	1	19
0704 .....	2	29
0704 .....	3	26
0704 .....	None	26
0705 .....	1	29
0705 .....	2	32
0705 .....	3	32
0705 .....	None	31
0801** .....	1	13
0801 .....	2	13
0801 .....	3	12
0801 .....	None	12
0802** .....	1	14
0802 .....	2	15
0802 .....	3	13
0802 .....	None	13
0803 .....	1	13

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
0803	2	16
0803	3	19
0803	None	15
0804	1	21
0804	2	20
0804	3	21
0804	None	18
0805**	1	22
0805	2	24
0805	3	21
0805	None	20
0806**	1	30
0806	2	30
0806	3	28
0806	None	27
0901**	1	17
0901	2	17
0901	3	17
0901	None	16
0902**	1	21
0902	2	22
0902	3	20
0902	None	20
0903**	1	26
0903	2	27
0903	3	27
0903	None	24
0904**	1	35
0904	2	36
0904	3	35
0904	None	33
1001**	1	19
1001	2	23
1001	3	18
1001	None	21
1002**	1	22
1002	2	22
1002	3	21
1002	None	23
1003**	1	26
1003	2	27
1003	3	25
1003	None	27
1004**	1	29
1004	2	30
1004	3	28
1004	None	28
1005	1	30
1005	2	37
1005	3	38
1005	None	35
1101**	1	24
1101	2	17
1101	3	19
1101	None	18
1102**	1	33
1102	2	26
1102	3	26
1102	None	28
1103**	1	43
1103	2	33
1103	3	33
1103	None	39
1201**	1	16

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
1201	2	14
1201	3	16
1201	None	14
1202**	1	22
1202	2	16
1202	3	20
1202	None	20
1203**	1	23
1203	2	20
1203	3	20
1203	None	20
1204**	1	29
1204	2	26
1204	3	24
1204	None	25
1205**	1	36
1205	2	32
1205	3	31
1205	None	30
1301**	1	19
1301	2	21
1301	3	21
1301	None	17
1302**	1	22
1302	2	21
1302	3	21
1302	None	20
1303**	1	27
1303	2	25
1303	3	24
1303	None	26
1304**	1	39
1304	2	39
1304	3	46
1304	None	36
1401	1	25
1401	2	17
1401	3	15
1401	None	16
1402	1	19
1402	2	21
1402	3	20
1402	None	20
1403	1	31
1403	2	28
1403	3	23
1403	None	24
1404	1	44
1404	2	36
1404	3	32
1404	None	31
1501**	1	20
1501	2	18
1501	3	20
1501	None	20
1502**	1	23
1502	2	26
1502	3	19
1502	None	23
1503**	1	28
1503	2	29
1503	3	25
1503	None	27
1504**	1	46

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
1504	2	44
1504	3	49
1504	None	42
1601**	1	22
1601	2	21
1601	3	20
1601	None	20
1602**	1	31
1602	2	30
1602	3	31
1602	None	27
1701**	1	20
1701	2	19
1701	3	15
1701	None	21
1702**	1	29
1702	2	29
1702	3	30
1702	None	26
1703	1	48
1703	2	45
1703	3	41
1703	None	37
1801**	1	17
1801**	2	17
1801**	3	17
1801	None	15
1802**	1	26
1802**	2	26
1802**	3	26
1802	None	26
1803**	1	33
1803	2	37
1803	3	31
1803	None	33
1804**	1	58
1804	2	45
1804**	3	56
1804	None	56
1901**	1	22
1901**	2	22
1901	3	25
1901	None	22
1902**	1	39
1902	2	39
1902	3	39
1902	None	36
1903**	1	54
1903	2	47
1903	3	42
1903	None	59
2001	1	20
2001	2	20
2001	3	18
2001	None	18
2002	1	21
2002	2	23
2002	3	21
2002	None	22
2003	1	29
2003	2	27
2003	3	27
2003	None	27
2004	1	47

TABLE 6.—ARITHMETIC AVERAGE LENGTH OF STAY AND ONE STANDARD DEVIATION FOR IRF COMBINATION OF CMG AND COMORBIDITY TIERS—Continued

IRF prospective payment system CMG	Comorbidity tier	Average length of stay plus one standard deviation**
2004 .....	2	33
2004 .....	3	32
2004 .....	None	34
2005 .....	1	50
2005 .....	2	39
2005 .....	3	38
2005 .....	None	37
2101** .....	1	26
2101** .....	2	25
2101** .....	3	22
2101 .....	None	24
2102** .....	1	44
2102 .....	2	41
2102 .....	3	39
2102 .....	None	48
5001 .....	None	3
5101 .....	None	11
5102 .....	None	31
5103 .....	None	12
5104 .....	None	43

\* Arithmetic average length of stay and standard deviation based on data used to develop the IRF PPS relative weights for the combination CMG and comorbidity tiers in the August 7, 2001 final rule (66 FR 41394).

\*\* Standard deviation for this combination CMG comorbidity tiers is unavailable; the lowest standard deviation for the CMG was used to determine the average length of stay plus one standard deviation.

If the LTCH patient who was discharged to an acute care hospital or an IRF has a length of stay in the acute care hospital or the IRF that exceeds one standard deviation from the average length of stay of the hospital inpatient DRG or the combination of the CMG and the comorbidity tier, respectively, then the subsequent admission to the same LTCH would be treated as a new LTCH stay rather than being considered as an interrupted stay, even if the second discharge is determined to fall into the same LTC-DRG as the original stay in the LTCH. Similarly, a patient returning to the LTCH following a stay in a SNF of longer than 45 days (more than one standard deviation from the average length of stay for all Medicare SNF cases) would be paid as a new stay for the LTCH. Thus, under this circumstance, the beneficiary would be deemed to have had two separate stays at the LTCH, resulting in two separate payments under the LTCH prospective payment system.

An interrupted stay could occur during a regular inlier case (length of stay greater than two-thirds the average length of stay for the LTC-DRG). A very

short-stay discharge or a short-stay outlier (as explained in sections IV.B.1 and IV.B.2., respectively, of this proposed rule) could also become an interrupted stay if the beneficiary is discharged to an acute care hospital, an IRF, or a SNF. Whether or not the beneficiary's stay would remain in either of these categories would depend upon the total length of stay in the LTCH. Upon the initial discharge to the acute care hospital, the IRF, or the SNF, the LTCH "day count" would stop. For an interrupted stay case, this count would be resumed upon readmission to the LTCH until the beneficiary's final discharge (home, another site of care, or death). Thus, the period of absence (number of days) that the beneficiary is a patient in the acute care hospital, the IRF, or the SNF during a LTCH interrupted stay would not be included in determining the length of stay of the LTCH stay.

If the total number of days at the LTCH, from the initial admission to the final discharge, still falls into either the very short-stay discharge or short-stay outlier payment category, the LTCH would receive payment according to the proposed very short-stay discharge policy described in section IV.B.1. of this preamble or the proposed short-stay outlier policy described in section IV.B.2. of this preamble, respectively. If, on the other hand, the total number of days in the LTCH exceeds two-thirds of the average length of stay of the LTC-DRG (the proposed short-stay outlier criteria), one full LTC-DRG payment would be made for the case. Moreover, all applicable payment policies, including outliers and transfers for the acute care hospital inpatient prospective payment system and the IRF prospective payment system would still apply under this proposed policy.

The following are examples of possible ways in which these proposed policies would interact:

*Example 1:* A beneficiary stays in the LTCH for 5 days and is discharged to an inpatient acute care hospital and the length of stay at the acute care hospital is more than the sum of the average length of stay of the DRG under the hospital inpatient prospective payment system and one standard deviation before being discharged back to the LTCH. Medicare hospital payments for this beneficiary would be as follows:

- One very short-stay discharge LTCH prospective payment system payment to the LTCH for the first (5-day length of stay) LTCH discharge.
- Payment to the acute care hospital under the hospital inpatient prospective payment system for the acute care stay.
- A separate LTCH prospective payment system payment either as a very short-stay discharge (see proposed § 412.527), a short-

stay outlier (see proposed § 412.529) or regular stay, depending on the second LTCH length of stay. This case would not be an interrupted stay because the acute care hospital stay was for more days than one standard deviation from the average length of stay of the DRG under the acute care hospital inpatient prospective payment system.

*Example 2:* A beneficiary stays in the LTCH for 5 days and is discharged to an inpatient acute care hospital and the length of stay at the acute care hospital is a number of days that is less than or equal to the sum of the average length of stay of the acute care hospital inpatient DRG and one standard deviation before being discharged back to the LTCH. The beneficiary remains in the LTCH for an additional 9 days after readmission to the LTCH following the acute care hospital stay. This case would be treated as an interrupted stay and Medicare hospital payments for this beneficiary would be as follows:

- Payment to the acute care hospital under the hospital inpatient prospective payment system for the DRG for the acute care hospital stay.

- The stay was interrupted because the acute care hospital stay was within one standard deviation from the average length of stay of the acute care hospital inpatient DRG. Therefore, a single payment would be made to the LTCH under the proposed LTCH prospective payment system. This payment would be a short-stay outlier payment (under proposed § 412.529) if the total LTCH length of stay (14 days) is less than two-thirds the average length of stay of the LTC-DRG.

*Example 3:* A beneficiary stays in the LTCH for 5 days and is discharged to an IRF and the length of stay at the IRF is less than or equal to the sum of the average length of stay of the IRF combination of the CMG and the comorbidity tier and one standard deviation before being discharged back to the LTCH. The beneficiary remained in the LTCH for an additional 12 days, so that the combined 17 days is greater than two-thirds of the average length of stay for the LTC-DRG after readmission to the LTCH following the IRF stay. This case would be an interrupted stay and Medicare hospital payments for this beneficiary would be as follows:

- Payment to the IRF under the IRF prospective payment system for the combination of the CMG and the comorbidity tier for the IRF stay; and
- Since the stay was interrupted because the IRF stay was within one standard deviation from the average length of stay of the IRF combination of the CMG and the comorbidity tier, a single payment would be made under LTCH prospective payment system. This payment would be a full LTC-DRG payment because the total LTCH length of stay is greater than two-thirds of the average length of stay of the LTC-DRG.

In Example 2 and Example 3, upon return to the LTCH following the discharge from the acute care hospital or the IRF, the day count would be resumed at day 6 of the LTCH stay. If the beneficiary was then discharged on day 6 or 7, the stay would be paid as a very short-stay discharge (see

proposed § 412.527); if the beneficiary was discharged within two-thirds of the average length of stay for the LTC-DRG, the stay would be paid as a short-stay outlier (see proposed § 412.529); and if the beneficiary was discharged beyond the short-stay threshold (two-thirds of the average length of stay for the LTC-DRG), the case would be paid for the full LTC-DRG.

While the interrupted stay policy proposed under § 412.531 is based in part on clinical considerations, we realize that it may be somewhat administratively burdensome for the LTCH to determine the DRG for the acute care hospital stay or the combination of the CMG and the comorbidity tier for the IRF stay in order to determine whether or not a beneficiary that is discharged to an acute care hospital, an IRF, or a SNF and then returns to the LTCH would be an interrupted stay (with a single LTCH prospective payment system payment) or a new admission (with two separate LTCH prospective payment system payments). Therefore, we are considering treating all patients who are discharged to either an acute care hospital or an IRF and admitted back to the LTCH within a fixed period of time (as we have proposed for SNFs), regardless of the DRG of the patient in the acute care hospital or the combination of the CMG and the comorbidity tier of the patient in the IRF, as an interrupted stay. We believe that 9 days for acute care hospitals and 27 days for IRFs would be an appropriate threshold to identify interrupted stay cases because, in both cases, the proposed thresholds are one standard deviation from the average length of stay of all patients in those respective settings. We are aware that, under such a policy, less clinically complex brief acute care hospital and IRF stays would be included and would become an interrupted stay if the beneficiary returns to a LTCH. However, those types of cases would be offset by stays that require more intense and lengthy care. We are in the process of further analyzing Medicare claims data for LTCH beneficiaries who are discharged to an acute care hospital or an IRF and return to the LTCH following that stay to determine if an interrupted stay threshold of a fixed number of days is the more appropriate policy. We specifically solicit comments on the appropriate period of absence for such an interrupted stay threshold. We also are interested in receiving comments regarding the inclusion of discharges to psychiatric hospitals or units in our proposed interrupted stay policy.

#### 4. Other Special Cases

Under other Medicare prospective payment systems, specifically for inpatient acute care hospitals and for IRFs, there are separate policies for other types of special cases such as transfer cases and patients who expire. We believe the proposed very short-stay discharge policy (under proposed § 412.527), the proposed short-stay outlier policy (under proposed § 412.529), and the proposed interrupted stay policy (under proposed § 412.531) would adequately address these circumstances. For instance, a case with a stay that is less than two-thirds the average length of stay of the LTC-DRG would be paid under the proposed short-stay outlier policy (or the very short-stay discharge policy if the length of stay is 7 days or fewer) regardless of whether or not the patient is transferred upon discharge to his or her home or to another setting where Medicare would make additional payments, or whether the patient expired. Moreover, if a beneficiary's stay at the LTCH is at least two-thirds the average length of stay of the LTC-DRG, a full LTC-DRG payment would be made regardless of the destination following discharge. Therefore, we are not proposing a separate policy for cases that are transferred (except for those that are encompassed by the proposed interrupted stay policy) or for patients who expire.

Currently, under the hospital inpatient prospective payment system, discharges in 10 DRGs are considered to be transfers if the patients are discharged to another Medicare post-acute site of care, such as a LTCH, under section 1886(d)(5)(J)(ii) of the Act, implemented in regulations at § 412.4. The rationale behind this amendment was Congressional concern that Medicare may, in some cases, be "overpaying hospitals for patients who are transferred to a post-acute care setting after a very short acute care hospital stay." (Conference Agreement, H.R. Conf. Rept. No. 105-217, 105th Cong., 1st Sess., at 740 (1997).) In such a scenario, Medicare would also have to pay the post-acute care provider for care that theoretically could have been provided at the acute care hospital. Section 1886(d)(5)(J)(iv) of the Act authorizes the Secretary to expand the post-acute care transfer policy to additional DRGs. From the standpoint of LTCHs, the impact of expanding the hospital inpatient prospective payment system post-acute care transfer policy could be significant for the LTCH prospective payment system since this policy could affect behavior at acute

care hospitals. If additional discharges would be paid as transfers, these patients may be kept longer at acute care hospitals in order to avoid a reduced payment for the transfer and then have a shorter length of stay during the subsequent stay at the LTCH. Presently, approximately 70 percent of LTCH Medicare patients are admitted following discharge from an acute care hospital. We are presently exploring whether to propose an expansion of the 10-DRG policy in the FY 2003 hospital inpatient prospective payment system proposed rule.

#### 5. Onsite Discharges and Readmittances

As we explained above, we do not believe that a separate policy governing transfers of Medicare patients between LTCHs and acute care hospitals is necessary at this time. However, we are proposing a policy that would address transfers between LTCHs and distinct-part SNFs, acute care hospitals, rehabilitation facilities, or psychiatric facilities when the LTCH and any of these other providers are co-located because of the potential for inappropriate shifting of patients among these providers without clinical justification to maximize Medicare payment. This situation may occur when a distinct-part SNF is part of a LTCH or when the LTCH is located within an acute care hospital or an IRF as either a "hospital-within-a-hospital" (as defined in § 412.22(e)) or a "satellite facility" (as defined in § 412.22(h)) and a distinct-part SNF (as defined in section 1819(a) of the Act) is also part of the same acute care hospital or IRF. (Section I.E.9. of this proposed rule describes findings from Urban's research on the admission and discharge patterns between LTCHs and SNFs.)

Similarly, a long-term care "hospital-within-a-hospital" or satellite facility may be co-located with a psychiatric or rehabilitation hospital that is also a hospital within the same acute care hospital or is a satellite facility situated in the same acute care hospital (§§ 412.25 and 412.27), or may be co-located in an acute care hospital with a psychiatric unit (§ 412.27) or a satellite psychiatric or rehabilitation unit (§ 412.25(e)).

We believe that a per discharge system, such as the prospective payment system for LTCHs, could provide inappropriate incentives to prematurely discharge patients to one of these other onsite providers once their lengths of stay at the LTCH exceeded the thresholds established by the short-stay discharge and outlier policies described in section IV.B. of this proposed rule. These discharges would



be based on payment considerations rather than on a clinical basis as an extension of the normal progression of appropriate patient care. If the long-term care hospital-within-a-hospital inappropriately discharges Medicare patients to the distinct-part SNF, or the onsite IRF, psychiatric facility, or acute care hospital without providing a complete episode of hospital-level care, Medicare would make inappropriate payments to the long-term care hospital-within-a-hospital, since payments under the proposed prospective payment system would have been calculated based on a complete episode of such care. This type of a case could then be followed by a readmission to the LTCH from the onsite provider for an additional LTC-DRG payment. (In the case of a discharge from a LTCH to an offsite acute care hospital, an IRF, or a SNF with a subsequent return to the LTCH, payments would also be considered under the interrupted stay policy set forth at section IV.B.3. of this proposed rule and at proposed § 412.531.)

In determining an appropriate response to onsite discharges and readmittances, we are proposing a policy consistent with our policy described in the July 30, 1999 **Federal Register** (64 FR 41535) that addresses inappropriate discharges of patients between an acute care hospital inpatient prospective payment system excluded hospital-within-a-hospital (such as a LTCH) to the host acute care hospital, that culminated in a readmission to the hospital-within-a-hospital. In that context, we expressed the same concern noted above—that these types of moves were occurring for financial rather than clinical reasons. In order to discourage these practices, we implemented regulations at § 413.40(a)(3) to specify how to calculate the cost per discharge under the excluded hospital payment provisions. Under those regulations, during a cost reporting period, if the hospital-within-a-hospital discharges more than 5 percent of its inpatients to the acute care hospital where it is located, and those patients are readmitted to the excluded hospital, Medicare considers each patient's entire stay as one discharge for purposes of calculating the cost per discharge of the excluded hospital. In determining whether a patient has previously been discharged and then readmitted, we consider all prior discharges, even if the discharge occurs late in one cost reporting period and the readmission occurs in the next cost reporting period. Only when the excluded hospital's number of these cases in a particular

cost reporting year exceeds 5 percent of the total number of its discharges are the first discharges not counted for payment purposes. (If the 5-percent threshold is not triggered, all discharges are counted separately.)

With the implementation of the per discharge prospective payment system for LTCHs, we are proposing to adopt a similar policy to address inappropriate discharges and readmittances between LTCHs and other onsite providers by establishing a threshold beyond which the original patient stay and the readmission would be paid as one discharge (proposed § 412.532). By paying only one discharge, we would discourage those transfers that would be based on payment considerations instead of on a clinical basis. Generally, if a LTCH readmits more than 5 percent of its Medicare patients who are discharged to an onsite SNF, IRF, or psychiatric facility, or to an onsite acute care hospital, only one LTC-DRG payment would be made to the LTCH for each discharge and readmittance during the LTCH's cost reporting period. Therefore, payment for the entire stay would be paid either as one full LTC-DRG payment, a very short-stay discharge, or a short-stay outlier, depending on the duration of the entire LTCH stay.

In applying the 5-percent threshold, we are proposing to apply one threshold for discharges and readmittances with a co-located acute care hospital, consistent with the policy that has been in place under § 413.40(a)(3) for acute care hospitals and excluded hospitals described above. We also are proposing a separate 5-percent threshold for all discharges and readmittances with co-located SNFs, IRFs, and psychiatric facilities. In the case of a LTCH that is co-located with an acute care hospital, an IRF, or a SNF, the onsite discharge and readmittance policies that we are proposing would apply in addition to the proposed interrupted stay policy that we are proposing in section IV.B.3 of this proposed rule and at proposed § 412.531. This means that even if a discharged LTCH patient who was readmitted to the LTCH following a stay in an acute care hospital of greater than one standard deviation from the average length of stay of the specific hospital inpatient prospective payment system DRG, if the facilities share a common location and the 5-percent threshold were exceeded, the subsequent discharges from the LTCH would not represent a separate hospitalization for payment purposes. Similarly, if the LTCH has exceeded its 5-percent threshold for all discharges to an onsite IRF, SNF, or psychiatric hospital or unit

with readmittances to the LTCH, the subsequent discharges would not be treated as a separate discharge for Medicare payment purposes, notwithstanding provisions of the proposed interrupted stay policy with regard to lengths of stay at an IRF or a SNF (see proposed §§ 412.531(b)(5)(ii) and (b)(5)(iii)). (As under the proposed interrupted stay policy, payment to an acute care hospital under the hospital inpatient prospective payment system, to an IRF under the IRF prospective payment system, and to a SNF under the SNF prospective payment system, would not be affected. Payments to the psychiatric facility also would not be affected.)

We are aware that situations could arise where, under sound clinical judgement, a patient who no longer required LTCH-level of care could be discharged to a SNF and then experience a setback necessitating rehospitalization. However, it is likely that, in such a scenario, in most cases the patient would be subsequently admitted to an acute care hospital rather than readmitted to the LTCH located within the acute care hospital. In addition, if the patient is being treated by a LTCH that also specializes in treating psychiatric or rehabilitation patients, it is unlikely that the patient who, for some medical reason, needed to be transferred to an onsite psychiatric or rehabilitation hospital or unit, would need to be readmitted to the LTCH. We believe that the 5-percent thresholds for discharges to onsite acute care hospitals and for discharges to onsite IRFs, SNFs, and psychiatric facilities followed by readmission to the LTCH provide adequate flexibility for those rare circumstances where such actions would be clinically preferable.

We believe that the combination of a discharge-based payment system that inherently contains financial incentives for shifting patients to another site of care and the close proximity of other sites of care such as other onsite hospitals-within-hospitals, satellites, and distinct-part SNFs, necessitates this type of policy. If we implement this policy in the final rule, we would monitor such discharges and analyze data and compare practice patterns before and after the implementation of the prospective payment system and, if warranted, may consider extending it to offsite providers.

#### 6. Additional Issues for Onsite Facilities

As we prepare to implement a proposed prospective payment system for LTCHs, we are reevaluating certain existing policies for hospitals-within-hospitals and satellite facilities that

were established under the TEFRA payment system for excluded hospitals.

Existing regulations at § 412.22(e) specify exclusion criteria based on ownership and control for hospitals-within-hospitals and their host hospitals (59 FR 45330, September 1, 1994). We were concerned about possible manipulation of Medicare payments by a single entity that owns or controls an acute care hospital and a co-located LTCH. We believed that such a situation could lead to premature patient discharges from the acute care hospital to the co-located LTCH, resulting in two Medicare payments to the controlling entity for one episode of care. Under this circumstance, the LTCH would, in fact, function as an excluded unit of an acute care hospital, a situation inconsistent with section 1886(d)(1)(B) of the Act, which allows excluded rehabilitation and psychiatric units in acute care hospitals but not long-term care units. Through the proposed interrupted stay and proposed onsite discharge and readmittance policies set forth in sections IV.B.3. and IV.B.5., respectively, of this proposed rule, which limit potential inappropriate Medicare payments, we believe that we have addressed some of the concerns that originally led us to establish the rules in § 412.22(e). Accordingly, we are soliciting comments on any possible changes to CMS payment policy regarding ownership and control for hospitals-within-hospitals.

The second area that we are soliciting comments, in light of the forthcoming proposed LTCH prospective payment system, is our policy regarding LTCHs that have established satellite facilities. In § 412.22(h)(1), we define a satellite as “a part of a hospital that provides inpatient services in a building also used by another hospital, or in one or more entire buildings located on the same campus as buildings used by another hospital.” Satellite arrangements exist when an existing hospital that is excluded from the hospital inpatient prospective payment system and that is either a freestanding hospital or a hospital-within-a-hospital under § 412.22(e), shares space in a building or on a campus occupied by another hospital in order to establish an additional location for the excluded hospital. The July 30, 1999 **Federal Register** (64 FR 41532 through 41534) includes a detailed discussion of our policies regarding Medicare payments for satellite facilities of hospitals excluded from the hospital inpatient prospective payment system. We will consider the possibility of revisiting the policies we established for these satellites. In accordance with section

1886(b) of the Act, as amended by sections 4414 and 4416 of Public Law 105–33, we established two different target limits on payments to excluded hospitals, depending upon when the facilities were established. The target amount limit for excluded hospitals or units established before October 1, 1997 was set at the 75th percentile of the target amounts of similarly classified hospitals, as specified in § 413.40(c)(4)(iii), for cost reporting periods ending during FY 1996 as updated to the applicable cost reporting period. For excluded hospitals and units established on or after October 1, 1997, under section 4416 of Public Law 105–33, the payment amount for the hospital’s first two 12-month cost reporting periods, as specified at § 413.40(f)(2)(ii), may not exceed 110 percent of the national median of target amounts of similarly classified hospitals for cost reporting periods ending during FY 1996, updated to the first cost reporting period in which the hospital receives payment.

Because we were concerned that a number of pre-1997 excluded hospitals, governed by § 413.40(c)(4)(iii), would seek to create satellite arrangements in order to avoid the effect of the lower payment caps that would apply to new hospitals, under § 413.40(f)(2)(ii), we established rules regarding the exclusion of and payments to satellites of existing facilities. If the number of beds in the hospital or unit (including both the base hospital or unit and the satellite location) exceeds the number of State-licensed and Medicare-certified beds in the hospital or unit on the last day of the hospital’s or unit’s last cost reporting period beginning before October 1, 1997, then the facility would be paid under the inpatient DRG system. Therefore, while an excluded hospital or unit could “transfer” bed capacity from a base facility to a satellite, if it increased total bed capacity beyond the level it had in the most recent cost reporting period before October 1, 1997 (64 FR 41532–4153, July 30, 1999), then the hospital would not be paid as a hospital excluded from the hospital inpatient prospective payment system. No similar limitation, however, was imposed with respect to the number of total beds in excluded hospitals and units and satellites of these facilities established after October 1, 1997, since these facilities were already subject to the lower payment limits of section 4416 of Public Law 105–33, and would, therefore, not benefit from the higher cap by creating a satellite.

Section 123 of Public Law 106–113 confers broad authority on the Secretary regarding the implementation of the

proposed prospective payment system for LTCHs, and as described in section IV.G. of this proposed rule, we are proposing to transition this proposed prospective payment system over 5 years. During this time, payments to LTCHs would gradually change from hospital-specific cost-based payments to a per-discharge LTC–DRG-based prospective payment system. In addition, IRFs also will be transitioned to 100 percent payment starting with cost reporting periods beginning during FY 2003. We would consider whether to propose elimination of the bed-number criteria in § 412.22(h)(2)(i) for pre-1997 hospitals, once the applicable prospective payment system is fully phased-in, since all LTCHs would be paid based on 100 percent of the proposed LTCH prospective payment system by FY 2007 and the payment provisions under the TEFRA system at that time would no longer exist for this class of hospitals or for IRFs for cost reporting periods beginning during FY 2003. (This policy change, lifting of bed-number criteria for hospitals under prospective payment systems, that we are considering to propose, would not apply to hospitals that continue to be paid under the TEFRA system. Accordingly, during the 5-year phase-in, the policies in § 412.22(h)(2)(i) would continue to apply to LTCH satellites.

#### 7. Monitoring System

In this proposed rule, we are proposing various policies that we believe would provide equitable payment for stays that reflect less than the full course of treatment and reduce the incentives for inappropriate admissions, transfers, or premature discharges of patients that are present in a discharge-based prospective payment system. We also would be collecting and interpreting data on changes in average lengths of stay under the proposed prospective payment system for specific LTC–DRGs and the impact of these changes on the Medicare program.

We propose to develop a monitoring system that would assist us in evaluating the LTCH prospective payment system. If our data indicate that changes might be warranted, we may revisit these issues and consider revising these proposed policies in the future.

#### C. Payment Adjustments

As indicated earlier, the Secretary generally has broad authority under section 123 of Public Law 106–113 in developing the prospective payment system for LTCHs. Thus, the Secretary generally has broad authority in determining whether (and how) to make

adjustments to the prospective payments to LTCHs. Section 307 of Public Law 106–554 directs the Secretary to “examine” appropriate adjustments to the prospective payments to LTCHs, including certain specific adjustments, but under that section the Secretary continues to have discretion as to whether to provide for adjustments.

In determining whether to propose specific payment adjustments under the prospective payment system for LTCHs, we conducted extensive regression analyses of the relationship between LTCH costs (including both operating and capital-related costs per case) and several factors that may affect costs such as the percent of Medicaid patients treated, the percent of Supplemental Security Income (SSI) patients treated, geographic location, and medical education programs. The appropriateness of potential payment adjustments is based on both cost effects estimated by regression analysis and other factors, including simulated payments that we discuss in section IV.E. of this proposed rule.

Our analyses are based on data from 222 LTCHs for which cost and case-mix data were available. We estimated costs for each case by multiplying hospital-specific cost-to-charge ratios by the LTCH’s charges for that case. Cost-to-charge ratios were obtained from FY 1998 or FY 1999 cost report data, or both, available in the HCRIS minimum data set and Medicare claims data (charges) available in the MedPAR file. Because the universe of LTCHs has grown relatively rapidly over the last several years, in order to maximize the number of LTCHs in the database, we used the most recent cost report data available for each LTCH. If we had both FY 1998 and FY 1999 cost report data, we used the most complete cost reporting period (that is, the cost reporting period with the greater number of months). If we used FY 1998 cost report data because FY 1999 data were either unavailable (due to the time lag in cost report settlement) or incomplete, we updated the FY 1998 data for inflation using the FY 1999 excluded hospital market basket increase (2.4 percent) as published in the July 31, 1998 hospital inpatient prospective payment system FY 1999 final rule (63 FR 40954). As indicated in Appendix A of this proposed rule, we are proposing to use the excluded hospital market basket with a capital component to update payment rates. The excluded hospital market basket is currently used to update LTCHs’ target amounts for inflation under the TEFRA system. We believe that proposing to

continue use of the excluded hospital market basket to update LTCHs’ costs for inflation is appropriate because the excluded hospital market basket measures price increases of the services furnished by excluded hospitals, including LTCHs. We believe that there is insufficient data to develop a proposed market basket based only on LTCH costs at this time.

In computing hospital-specific cost-to-charge ratios, we matched the costs for which we had the most recent and complete cost reporting period data to the claims in the MedPAR file for each month in that cost reporting period. For example, for a LTCH with a 12-month FY 1999 cost reporting period beginning on July 1, we used MedPAR data from July 1999 through June 2000 to compute a FY 1999 cost-to-charge ratio. The cost per case for each hospital is calculated by summing all costs and dividing by the number of corresponding cases.

Multivariate regression analysis is the standard statistical technique for examining cost variation that was used to analyze potential payment adjustments for LTCHs. We looked at two standard models—(1) a double log regression explanatory model to examine the impact of all relevant factors that might potentially affect a LTCH’s cost per case; and (2) a payment model that examines the impacts of those factors that were determined to affect costs and, therefore, were used to determine payment rates. In multivariate regression, the estimated average cost per case (the dependent variable) at the LTCH can be explained or predicted by several independent variables, including the case-mix index, the wage index for the LTCH, and a vector of additional explanatory variables that may affect a LTCH’s cost per case, such as a teaching program or the proportion of low-income patients. The case-mix index is the average of the LTC–DRG weights, derived by the hospital-specific relative value method, for each LTCH. Short-stay outlier cases are weighted based on the ratio of the length of stay for the short-stay case to the average length of stay for nonshort-stay cases in that LTC–DRG. We simulated payments using an estimated budget neutral payment rate and the regression coefficients as proxies for proposed payment system adjustments. Then we calculated payment-to-cost ratios for different classes of hospitals for specific combinations of payment policies.

We examined payment variables applicable to the hospital inpatient and IRF prospective payment systems, including the disproportionate share patient percentage, both the resident-to-

average daily census ratio and the resident-to-bed ratio teaching variables, and variables that account for location in a rural or large urban area. A discussion of the major payment variables and our findings appears below.

#### 1. Area Wage Adjustment

Section 307(b) of Public Law 106–554 requires that we examine the appropriateness of an area wage adjustment. Such an adjustment would account for area differences in hospital wage levels and would be made by adjusting the LTCH prospective payment system payment rate by a factor that would reflect the relative hospital wage level in the geographic area of the hospital as compared to the national average hospital wage level. At this time, we are not proposing an area wage adjustment for payments to LTCHs because the regression analysis indicated that a wage adjustment would not increase accuracy of payments. While we are not proposing to make an area wage adjustment in this proposed rule, we are specifically soliciting comments on whether an area wage adjustment is appropriate.

Under the acute care hospital inpatient prospective payment system, a wage index is applied to the labor-related share of the operating standardized amount to adjust for local cost variation. The hospital inpatient prospective payment system wage index is used also to make an area wage adjustment under the IRF prospective payment system, the SNF prospective payment system, the home health prospective payment system, and the outpatient hospital prospective payment system.

We began our analysis of the appropriateness of an area wage adjustment for LTCHs by evaluating the labor-related share from the excluded hospital with capital market basket. (This is the same market basket that is used in the IRF prospective payment system.) Currently, under the TEFRA cost-based reimbursement system, the excluded hospital market basket is used to update LTCHs’ target amounts, which are used to determine payments to LTCHs for inpatient operating costs. Since we are proposing a single standard Federal rate under the proposed LTCH prospective payment system (see section IV.D. of this proposed rule), we are proposing to use a market basket with a capital component. A further explanation of the excluded hospital with capital market basket can be found in Appendix A of this proposed rule.

The labor-related share is the relative importance of wages, fringe benefits, professional fees, postal services, labor-intensive services, and a portion of the capital share for FY 2003. We determine a labor-related share of the excluded hospital with capital market basket by first estimating the portion related to operating costs. The excluded hospital with capital market basket is based on available cost data for facilities excluded from the acute care hospital inpatient prospective payment system, including long-term care, rehabilitation, psychiatric, cancer, and children's hospitals.

Using the excluded hospital with capital market basket, we determined that the labor-related share of operating costs would be 69.428 percent for FY 2003, which is calculated as the sum of the relative importance for wages and salaries (50.381 percent), employee benefits (11.525), professional fees (2.059), postal services (0.244), and all other labor intensive services (5.219).

The labor-related share of capital costs in the market basket needs to be considered as well. We are proposing to use the portion of capital attributed to labor, which is estimated to be 46 percent by CMS' Office of the Actuary. This is the same percentage used for both the hospital inpatient capital prospective payment system and the IRF prospective payment system. For FY 2003, we estimate the relative importance for capital to be 7.552 percent of the excluded hospital with capital market basket. We multiply 46 percent by 7.552 percent to determine that the labor-related share for capital costs for FY 2003 would be 3.474 percent.

We then add the 3.474 percent for capital costs to the 69.428 percent for operating costs to determine the total labor-related share based on the excluded hospital with capital market basket. Thus, when we examined an adjustment to account for area differences in hospital wage levels, we used a labor-related share of 72.902 percent for the proposed LTCH prospective payment system. Specifically, we examined the appropriateness of accounting for differences in area wage levels by multiplying the labor-related portion of the unadjusted Federal payment by the FY 2002 inpatient acute care hospital wage index, without taking into account geographic reclassification under sections 1886(d)(8) and (d)(10) of the Act. (This methodology is the methodology used under the IRF prospective payment system and the SNF prospective payment system.) Wage data to compute LTCH-specific

wage indices are currently not available. However, LTCHs and other post-acute care facilities (for example, IRFs, SNFs, and HHAs) generally compete in the same local labor market for the same types of employees as inpatient acute care hospitals.

To validate the labor-related share calculated from the market basket, we analyzed the results of the wage index coefficient derived from regression analysis. In the regression, we standardized each LTCH's cost per case by the various factors, such as case-mix, bed size, number of cases, length of stay, and occupancy. The wage index coefficient allows us to approximate the labor-related portion of cost per case. Since the labor-related share derived from the market basket is the proportion of costs that have been identified as being influenced by the local labor amount, we would expect this coefficient to be statistically significant and near our market basket measure. The double-log regression analysis generated a wage index coefficient, which approximates the labor-related portion of cost per case, that is not statistically significant and is not near the market basket measure (72.902 percent) since it is only 19.91 percent. This suggests that the wage adjustment we examined would be only a small and unreliable predictor of LTCHs' costs.

Since the statistical analysis did not show a significant relationship between LTCHs' costs and their geographic location, we do not believe that at this point it would be appropriate to include a proposed adjustment for area wages. Furthermore, without applying the wage adjustment to the proposed standard Federal rate for LTCHs to account for the difference in area wage levels, the r-squared value (a statistical measure of how much variation in resource use among cases is explained by the system) of the proposed system taken as a whole is 0.82086. However, by applying the wage adjustment to the labor-related share of the proposed standard Federal rate for LTCHs to account for area differences in hospital wage levels, the r-squared value is reduced to 0.8017 for the proposed system as a whole (that is, including case-mix index and outlier policies). This means that not making a wage index adjustment would provide a 2.3 percent increase in the ability of the proposed payment system to predict costs. Furthermore, our regression analysis indicates that including a wage index adjustment would inappropriately redistribute payments to LTCHs by shifting money to LTCHs that are located in an area within a higher wage index but in fact have lower costs. Therefore, at this time we are not

proposing an adjustment to account for area differences in LTCH wage levels. However, we will revisit the appropriateness of an adjustment to account for area differences in LTCH wage levels in developing the final rule.

## 2. Adjustment for Geographic Reclassification

In accordance with section 307(b) of Public Law 106-554, we also examined the appropriateness of applying an adjustment for geographic reclassification to payments under the LTCH prospective payment system, where hospitals could request reclassification from one geographic location to another for the purpose of using the other area's wage index value, Federal payment rates, or both. Such an adjustment is made under the acute care hospital inpatient prospective payment system in accordance with section 1886(d)(10) of the Act. The adjustment would treat a hospital located in one geographic area as being located in another geographic area, if certain conditions are met, because its costs and wages are more similar to those hospitals located in the other geographic area. As explained below, at this time, we are not proposing an adjustment for geographic reclassification in the prospective payment system for LTCHs.

Our data identified 14 rural LTCHs, but our analysis supported neither a proposed adjustment to account for differences in area wage levels nor a proposed adjustment for LTCHs located in rural areas or large urban areas because the regression analysis indicated that a wage adjustment would not increase the accuracy of payments. Therefore, under the proposed LTCH prospective payment system, all LTCHs would be treated the same for the purposes of payment, regardless of location. Since there would be no purpose for LTCHs to reclassify to another area, at this time we are not proposing an adjustment for geographic reclassification in the proposed prospective payment system for LTCHs.

We plan to review the above proposed policy determinations in developing the final rule based on the most recent available data. At that time, we also would revisit the appropriateness of an adjustment for geographic reclassification. It is important to note, however, that the Medicare Geographic Classification Review Board (MGCRB) currently has authority only over acute care (section 1886(d) of the Act) hospitals and there is presently no analogous determination process for hospitals that have been excluded from the acute care hospital inpatient prospective payment system. Under the

TEFRA system, prospective payment system-excluded hospitals and units, including LTCHs, are not required to fill out information related to wage-related costs on the Medicare cost report (that is, Worksheet S-3). Therefore, if a wage adjustment is ultimately implemented as part of the LTCH prospective payment system and it is determined that it is appropriate to make geographic reclassification adjustments, we would need to establish instructions for data collection on LTCH wage-related costs in order to determine an appropriate geographic reclassification adjustment for LTCHs. It would also be necessary to

develop an application process and determination procedures.

### 3. Adjustment for Disproportionate Share of Low-Income Patients

Section 307(b) of Public Law 106-554 requires us to examine the appropriateness of an adjustment for hospitals serving a disproportionate share (DSH) of low-income patients, consistent with section 1886(d)(5)(F) of the Act, which establishes this adjustment for inpatient acute care hospitals. In assessing the appropriateness of a similar adjustment for LTCHs serving low-income patients, as specified in section 1886(d)(5)(F) of the Act, we focused our analysis on the

relationship between serving low-income patients and LTCHs' cost per case. Based on the results of our analysis described below, at this time we are not proposing an adjustment for the treatment of a disproportionate share of low-income patients.

Under section 1886(d)(5)(F) of the Act, in calculating Medicare payments for inpatient services at acute care hospitals, the disproportionate share patient percentage takes into account both the percentage of Medicare patients who receive SSI and the percentage of Medicaid patients who are not entitled to Medicare. The DSH patient percentage is defined as:

$$\text{DSH Patient Percent} = \frac{\text{Medicare SSI Days}}{\text{Total Medicare Days}} + \frac{\text{Medicaid, Non-Medicare Days}}{\text{Total Patient Days}}$$

Based on this formula, an inpatient acute care hospital qualifies for a DSH adjustment under section 1886(d)(5)(F)(v) of the Act (as amended by section 211(a) of Public Law 106-554) if the hospital has a DSH patient percentage greater than or equal to 15 percent. The calculation of the DSH payment adjustments under that section is as follows:

- Hospitals (urban and rural) with fewer than 100 beds and whose DSH patient percentage is equal to or greater than 15 percent and less than 19.3 percent receive the DSH payment adjustment determined using the following formula:

$$(\text{DSH patient percentage} - 15) (.65) + 2.5.$$

- Hospitals (urban or rural) with fewer than 100 beds and whose DSH patient percentage is equal to or greater than 19.3 percent receive a flat add-on of 5.25 percent.

- Rural hospitals with greater than 500 beds and whose DSH patient percentage is equal to or greater than 15 percent and less than 20.2 percent receive the DSH payment adjustment using the following formula:

$$(\text{DSH patient percentage} - 15) (.65) + 2.5.$$

- Rural hospitals with greater than 500 beds and whose DSH patient percentage is equal to or greater than 20.2 percent receive the DSH payment adjustment using the following formula: (DSH patient percentage - 20.2) (.825) + 5.88.

We analyzed the results of applying a DSH adjustment, in accordance with the criteria at section 1886(d)(5)(F) of the Act described above, on LTCHs. In

modeling payments, because the proposed LTCH prospective payment system must be budget neutral in accordance with section 123(a) of Public Law 106-113, the proposed inclusion of such a DSH policy would result in a 3.31 percent decrease to the base payment rate. Furthermore, the inclusion of such a DSH policy would result in a 3.79 percent decrease in the r-squared value (a statistical measure of how much variation in resource use among cases is explained by the system). Accordingly, we found that including a DSH adjustment that is consistent with section 1886(d)(5)(F) of the Act would reduce the explanatory power of the proposed LTCH prospective payment system, or the ability of the proposed payment system model to predict cost per case, while lowering the base payment rate. Thus, at this time we are not proposing a DSH adjustment consistent with section 1886(d)(5)(F) of the Act.

We also evaluated an alternative adjustment, using regression analysis, that takes into account both the percentage of Medicare patients who are receiving SSI (SSI percent) and the percentage of Medicaid patients who are not entitled to Medicare (Medicare percent) without the other criteria specified in section 1886(d)(5)(F) of the Act. This analysis was made to determine if there is any relationship between these two variables and cost per case. The results of this analysis showed that the regression coefficients for both the percentage of Medicare patients who are receiving SSI and the percentage of Medicaid patients who are not entitled to Medicare would be statistically significant at the 99-percent

level. However, the positive relationship between cost per case and the percentage of LTCH Medicare patients who are receiving SSI would be offset by a negative relationship between cost per case and the percentage of LTCH Medicaid patients who are not entitled to Medicare. This implies that while costs per discharge would appear to increase (slightly) as the percentage of LTCH Medicare SSI patients increases, costs per discharge would decline (slightly) as the percentage of LTCH Medicaid, non-Medicare patients increased. Therefore, at this time we are not proposing an adjustment for the treatment of a disproportionate share of low-income patients based on a LTCH's combined SSI percentage and Medicaid percentage.

Finally, we examined an adjustment for the treatment of low-income patients based solely on a LTCH's SSI ratio (the percentage of Medicare patients who are receiving SSI). The SSI ratio is calculated by dividing Medicare SSI days by total patient days. While the regression coefficient would be positive, it was not very large (0.04), which means that for every 1-percent increase in the SSI percent, a 0.04-percent increase in cost per case would be observed. Thus, at best, an empirically based adjustment based on the SSI percent would be very small. The positive regression coefficient for the SSI percentage is significantly influenced by the large SSI percentages of only a few LTCHs. Accordingly, we do not believe it is appropriate to propose an adjustment based on a LTCH's SSI percentage. Because section 123(a) of Public Law 106-113 requires that the LTCH prospective payment

system be budget neutral, applying such an adjustment would result in a 2.98-percent reduction in the proposed base payment rate for all LTCHs that is based on a small positive regression coefficient that is due mostly to a relatively small number of LTCHs with a large SSI percentage.

Because the analyses above do not indicate an increase in the accuracy of payments based on the adjustments examined for the treatment of a disproportionate share of low-income patients, we are not proposing an adjustment at this time. We will revisit the appropriateness of a DSH adjustment in developing the final rule based on the most recent data available.

4. Adjustment for Indirect Teaching Costs

In accordance with the directive of section 307(b) of Public Law 106–554 to examine “appropriate adjustments” to payments under the LTCH prospective payment system, we also examined the appropriateness of applying an adjustment for indirect teaching costs to payments under the proposed LTCH prospective payment system. Based on the analysis described below, at this time we are not proposing an adjustment for indirect teaching costs.

There are presently 14 LTCHs with teaching programs. LTCHs with major teaching programs tend to be older, larger (greater than 125 beds) hospitals, located in large urban areas, and have a higher proportion of low-income patients but with a lower case-mix index. Based on a double log regression, we found that the indirect teaching cost variable would be negative and not significant. We looked at different specifications for the teaching variable. We used a resident-to-bed ratio as the coefficient for the teaching variable in the regression that is currently used to measure teaching intensity under the acute care hospital inpatient prospective payment system for operating costs. We also used a ratio of resident to average daily census (defined as total inpatient days divided by the number of days in the cost reporting period) that is currently used under the acute care hospital inpatient prospective payment system for capital-related costs, as a measure of teaching intensity. We based this analysis on the estimated number of full-time equivalent (FTE) residents assigned to the inpatient area of the LTCH. In all our payment regressions, we determined that the teaching variable would not be significant. This means that there is no empirical evidence to show that LTCHs’ cost per case would vary with teaching costs. Therefore, at this time we are not

proposing an adjustment for indirect teaching costs. We will revisit the appropriateness of an adjustment for the costs of indirect medical education in developing the final rule based on the most recent available data.

5. Cost-of-Living Adjustment (COLA) for Alaska and Hawaii

In accordance with the directive of section 307(b) of Public Law 106–554 to examine “appropriate adjustments” to payments under the LTCH prospective payment system, we also examined the appropriateness of applying a cost-of-living adjustment (COLA) under the proposed LTCH prospective payment system for LTCHs located in Alaska and Hawaii.

There is currently one LTCH in Hawaii and no LTCHs in Alaska. In the absence of a COLA, we performed simulations, which indicate that the facility in Hawaii might experience a payment to cost ratio of 0.89 percent. Therefore, we are proposing a COLA for LTCHs in Hawaii and Alaska to account for the higher costs incurred in those states. The IRF proposed rule (November 3, 2000, 65 FR 66357) indicated that based on payment simulations, without a COLA, the one IRF located in Alaska may have a loss and the one IRF for which data were available, would have a gain. Due to the small number of cases, analysis of the simulation results were inconclusive regarding whether a cost-of-living adjustment would improve payment equity for these facilities. Accordingly, we did not include a COLA adjustment for those hospitals in the prospective payment system for IRFs. (65 FR 66357, November 3, 2000). We believe it appropriate, however, to propose a COLA for LTCHs based on the higher costs found in Hawaii. In general, the COLA would account for the higher costs in the LTCH and would eliminate the projected loss that the LTCH in Hawaii would experience absent the COLA. Furthermore this policy is consistent with the COLA made to account for the higher costs in acute care hospitals in Alaska and Hawaii under both the operating prospective payment system and the capital prospective payment system. We are proposing to make a COLA, under proposed § 412.525(b), to payments for LTCHs located in Alaska and Hawaii by multiplying the standard Federal payment rate by the appropriate factor listed in the table below. These factors are obtained from the U.S. Office of Personnel Management.

COST-OF-LIVING ADJUSTMENT FACTORS FOR ALASKA AND HAWAII HOSPITALS

Alaska:	
All areas .....	1.25
Hawaii:	
Honolulu County .....	1.25
Hawaii County .....	1.165
Kauai County .....	1.2325
Maui County .....	1.2375
Kalawao County .....	1.2375

6. Adjustment for High-Cost Outliers

In accordance with the directive of section 307(b) of Public Law 106–554, we also examined the appropriateness of an adjustment for additional payments for outlier cases. These are cases that have extraordinarily high costs relative to the costs of most discharges classified in the same LTC–DRG. Providing additional payments for outliers could strongly improve the accuracy of the LTCH prospective payment system in determining resource costs at the patient and hospital level. These additional payments would reduce the financial losses that would otherwise be caused by treating patients who require more costly care and, therefore, would reduce the incentives to underserve these patients.

We considered various outlier policy options. Specifically, we examined outlier policies under which outlier payments would be projected to be 5 percent, 8 percent, or 10 percent of total prospective system payments. We examined the impact of setting the outlier target percentage at 5 percent because that percentage is consistent with the range of targets provided under section 1886(d)(5)(A)(iv) of the Act for the hospital inpatient prospective payment system. We also considered an outlier target of 10 percent because that percentage was recommended in an industry study commissioned by NALTH. In addition, we considered an outlier target of 8 percent to analyze the impact of setting the outlier target at some percentage between 5 and 10 percent.

We also examined marginal cost factors, or the change in total cost with one unit of change in output, of 55 and 80 percent. We examined an 80-percent marginal cost factor for outlier payments because it is the same as the factor used under both the hospital inpatient prospective payment system and the IRF prospective payment system. We examined a 55-percent marginal cost factor in order to analyze the impact that a lower marginal cost factor would have on outlier payments and payments for all other cases.

As discussed in further detail in the June 4, 1992 hospital inpatient prospective payment system proposed rule (57 FR 23640), a study performed by RAND Corporation indicated that the marginal cost of care is usually less than the average cost because later days of a stay have considerably lower costs than the earlier days of the stay.

In order to determine the most appropriate outlier policy, we analyzed the extent to which the various options would reduce financial risk, reduce incentives to underserve costly beneficiaries, and improve the overall fairness of the system. We believe an outlier target of 8 percent would allow us to achieve a balance of the above stated goals. Our regression analysis showed that additional increments of outlier payments over 8 percent would reduce financial risk, but by successively smaller amounts. Since outlier payments are included in budget neutrality calculations, outlier payments would be funded by prospectively reducing the nonoutlier prospective payment system payment rates by the proportion of projected outlier payments to projected total prospective payment system payments in the absence of outlier payments; the higher the outlier target, the greater the (prospective) reduction to the base payment rate. We are proposing to provide outlier payments and to set outlier numerical criteria prospectively before the beginning of each Federal fiscal year so that outlier payments are projected to equal 8 percent of total payments under the proposed LTCH prospective payment system. Based on regression analysis and payment simulations, we believe this option optimizes the extent to which we would be able to protect vulnerable hospitals, while still providing adequate payment for all other cases that are not outlier cases.

We are proposing, under proposed § 412.525(a), to make an outlier payment for any discharges where the estimated cost would exceed the proposed adjusted LTCH prospective payment system payment for the proposed LTC-DRG plus a fixed-loss amount. The fixed-loss amount is the amount used to limit the loss that a hospital would incur under an outlier policy. This results in Medicare and the LTCH sharing financial risk in the treatment of extraordinarily costly cases. The LTCH's loss is limited to the fixed-loss amount and the percentage of costs above the marginal cost factor. The estimated cost of a case would be calculated by multiplying the overall hospital cost-to-charge ratio by the Medicare allowable covered charge.

Our analysis of payment-to-cost ratios for outlier cases showed that a marginal cost factor of 80 percent appropriately addresses outlier cases that are significantly more expensive than nonoutlier cases. This factor would ensure that there is a balance between the need to protect LTCHs financially while encouraging them to treat expensive patients and maintaining the incentives of a prospective payment system to improve the efficient delivery of care. Based on this analysis and consistent with the marginal cost factor used under the IRF prospective payment system and under section 1886(d) of the Act for inpatient acute care hospitals, we are proposing to pay outlier cases 80 percent of the difference between the estimated cost of the case and the outlier threshold (the sum of the adjusted Federal prospective payment for the LTC-DRG and the fixed-loss amount). The proposed fixed-loss amount would be calculated by simulating aggregate payments with and without an outlier policy, using FY 2000 MedPAR claims data and the best available cost report data in an iterative process to determine a fixed-loss threshold that would result in outlier payments being equal to 8 percent of total payments. As discussed in section IV.D. of this proposed rule, for FY 2003 we proposing a fixed-loss amount of \$29,852. Therefore, for FY 2003, we are proposing to pay an outlier case 80 percent of the difference between the estimated cost of the case and the outlier threshold (the sum of the adjusted Federal prospective payment for the LTC-DRG prospective payment system payment plus \$29,852).

#### *D. Calculation of the Proposed Standard Federal Payment Rate*

##### **1. Overview of the Development of the Proposed Standard Payment Rate**

Section 123(a)(1) of Public Law 106-113 requires that the prospective payment system for LTCHs maintain budget neutrality. Therefore, we are proposing to calculate the standard Federal rate by setting total estimated prospective payment system payments equal to estimated payments that would have been made under the TEFRA methodology if the proposed prospective payment system for LTCH were not implemented as described in this proposed rule. In accordance with section 307(a)(2) of the BIPA, the increases to the hospital-specific target amounts and cap on the target amounts for LTCHs for FY 2002 provided for by section 307(a)(1) of the BIPA and the enhanced bonus payments for LTCHs for FY 2001 and FY 2002 provided for

by section 122 of the BBRA were not taken into account in the development of the proposed prospective payment system for LTCHs.

The proposed methodology for determining the standard Federal payment rate under the proposed LTCH prospective payment system is described in further detail below.

##### **2. Development of the Proposed Standard Federal Payment Rate**

###### **a. Data Sources**

The data sources that we used to calculate the proposed standard Federal payment rate include cost report data from FYs 1996 through 1999 and FY 2000 Medicare claims data from the June 2001 update of the MedPAR since these data were the most recently available complete data for LTCHs. We used data from 222 LTCHs to calculate the proposed standard Federal payment rate. We updated the cost report data for each LTCH to the midpoint of FY 2003 using an inflation factor based on the historical relationship of each hospital's costs and their target amounts as described in section IV.D.2.b. of this proposed rule. The FY 1996 cost report data were used to determine each LTCH's update for FY 1999, and the FY 1997 cost report data were used to determine the update for FY 2000. The FY 1998 cost report data were used to determine the update for FY 2001, and the FY 1999 cost report data were used to determine the update for FY 2002. We were unable to calculate a proposed payment under the current payment system for some LTCHs because cost report data were unavailable. We will attempt to obtain the most recent payment amounts for these hospitals through their Medicare fiscal intermediary and we will consider using these data to construct the standard Federal payment rates for the final rule. We will also examine the extent that certain LTCHs (new LTCHs, for example) are not included in the data used to determine the proposed standard Federal payment rate and consider the appropriateness of an adjustment to better reflect total estimated payments for LTCHs.

In determining the proposed prospective payment rates for LTCHs, we had significant concerns about the integrity of some of the cost report data in HCRIS. Specifically, we were concerned about data from cost reports submitted by a hospital chain that is the owner of approximately 20 percent of LTCHs nationwide that arose from a "qui tam" action filed by the U.S. Department of Justice (DOJ) in July 1999. This action alleged, among other

claims, that the hospitals inflated both cost and charge data on Medicare hospital cost reports filed from 1994 through 1999. On March 16, 2001, the hospital chain agreed to pay approximately \$339 million to settle claims arising from 11 separate actions. Based upon audits and projections performed by Medicare's fiscal intermediary under the direction of our Office of Financial Management, the Medicare LTCH action was allocated \$178 million of this settlement.

Under the terms of the agreement, Medicare cost reports from the years in question were not reopened and audited. However, the fiscal intermediary was able to estimate the effect on the Medicare cost reports for 1995, 1996, and 1997. Then a random sample of Medicare cost reports from 1998 and 1999 were reviewed to verify the projected impact for those years and a settlement figure was determined for FY 1995 through FY 1999. Therefore, in order to avoid the negative impact those providers' data may otherwise have on the integrity of the data, we are basing our proposed standard Federal rate on a factor determined by CMS' Office of the Actuary to adjust the costs reported in those affected FY 1998 and FY 1999 cost reports. This factor was derived by determining the ratio of the portion of the settlement amount described above attributable to each LTCH to the Medicare payments received by each affected LTCH during the period covered by the settlement.

b. Update the Latest Cost Report Data to the Midpoint of FY 2003

Consistent with the methodology used under the IRF prospective payment system (at § 412.624(c)), we are proposing, at § 412.523(c)(2), to update each LTCH's cost per discharge to the midpoint of FY 2003, using the weighted average of the applicable percentage increases to the TEFRA target amounts for FYs 1999 through 2002 (in accordance with § 413.40(c)(3)(vii)) and the full market basket percentage increase for FY 2003. For FYs 1999 through 2002, we would determine the appropriate update factor for each hospital by using the methodology described below:

- For hospitals with costs that equal or exceed their target amounts by 10 percent or more for the most recent cost reporting period for which information is available, the update factor would be the market basket percentage increase.
- For hospitals that exceed their target amounts by less than 10 percent, the update factor would be equal to the market basket minus 0.25 percentage points for each percentage point by

which operating costs are less than 10 percent over the target (but in no case less than 0).

- For hospitals that are at or below their target amounts, but exceed two-thirds of the target amounts, the update factor would be the market basket minus 2.5 percentage points (but in no case less than 0).
- For hospitals that do not exceed two-thirds of their target amounts, the update factor would be 0 percent.

For FY 2003, we propose to use the most recent estimate of the percentage increase projected by the excluded hospital market basket index.

c. Estimate Total Payments Under the Current (TEFRA) Payment System

We would estimate payments for inpatient operating services under the TEFRA system using the following methodology:

*Step 1: Determine each LTCH's hospital-specific target amount.* The hospital-specific target amount for a LTCH is calculated based on the hospital's allowable inpatient operating cost per discharge for the hospital's base period, excluding capital-related, nonphysician anesthetist, and medical education costs. This target amount would then be updated using a rate-of-increase percentage as described in § 413.40(b)(3). For FYs 1998 through 2002, there are two national caps on the payment amounts for LTCHs. Under § 413.40(c)(4)(iii), a LTCH's hospital-specific target is the lower of its net allowable base year costs per discharge increased by the applicable update factors or the cap for the applicable cost reporting period. In determining each LTCH's hospital-specific target amount, we would use the FY 2002 cap amounts published in the August 1, 2001 **Federal Register** (66 FR 39915–39916), adjusted in accordance with section 307(a)(2) of Public Law 106–554 by removing the 2-percent increase in the cap for existing LTCHs required by section 307(a)(1) of Public Law 106–554. For existing hospitals (that is, LTCHs paid as an excluded hospital before October 1, 1997), the applicable cap amount for FY 2002 is \$30,783 for the labor-related share adjusted by the applicable geographic wage index and added to \$12,238 for the nonlabor-related share. For "new" hospitals (that is, LTCHs first paid as an excluded hospital on or after October 1, 1997), the cap amount applicable for FY 2002 is \$16,701 for the labor-related share adjusted by the applicable geographic wage index and added to \$6,640 for the nonlabor-related share. These capped amounts would then be inflated to the midpoint of FY

2003 by applying the excluded hospital operating market basket.

As explained above, we note that, in accordance with section 307(a)(2) of the BIPA, in estimating total payments to LTCHs under the current payment system, the increase to the hospital target amounts and caps on the target amounts for LTCHs effective from October 1, 2001 through September 30, 2002, provided for under section 307(a)(1) of the BIPA were not to be taken into account.

*Step 2: Determine each LTCH's payment amount for inpatient operating services.* Under the TEFRA system, a LTCH's payment amount for inpatient operating services is the lower of—

- The hospital-specific target amount (subject to the application of the cap as determined in Step 1) times the number of Medicare discharges (the ceiling); or
- The hospital average inpatient operating cost per case times the number of Medicare discharges.

In addition, under the TEFRA system, payments may include a bonus or relief payment, as follows:

- For LTCHs whose net inpatient operating costs are lower than or equal to the ceiling, payment would be determined based on the lower of either the net inpatient operating costs plus 15 percent of the difference between the inpatient operating costs and the ceiling or the net inpatient operating costs plus 2 percent of the ceiling.
- For LTCHs whose net inpatient operating costs are greater than the ceiling but less than 110 percent of the ceiling, payment would be the ceiling.
- For LTCHs whose net inpatient operating costs are greater than 110 percent of the ceiling, payment would be the ceiling plus the lower of 50 percent of the difference between the 110 percent of the ceiling and the net inpatient operating costs or 10 percent of the ceiling.

Further, under the TEFRA system, excluded hospitals and units, including LTCHs, may be eligible for continuous improvement bonus payments as described under § 413.40(d)(4). As explained above, in accordance with section 307(a)(2) of Public Law 106–554, the enhancement of continuous improvement bonus payments for LTCHs, effective for cost reporting periods beginning on or after October 1, 2000 and before September 30, 2002, and provided for under section 122 of Public Law 106–113, were not to be taken into account in estimating total payments to LTCHs under the current TEFRA system.

*Step 3: Determine each LTCH's payment for capital-related costs.* Under the TEFRA system, in accordance with



section 1886(g) of the Act, Medicare allowable capital costs are paid on a reasonable cost basis. Thus, each LTCH's payment for capital-related costs would be taken directly from the cost report and updated for inflation using the excluded hospital market basket, consistent with the methodology used under the IRF prospective payment system.

*Step 4: Determine each LTCH's average total (operating and capital) payment per case under the current (TEFRA) payment system.* Once estimated payments for inpatient operating costs are determined (including bonus and relief payments, as appropriate), we would add the operating payments and capital payments together to determine each LTCH's estimated total payments under the current (TEFRA) payment system. We would then divide each LTCH's estimated total TEFRA payments by the corresponding number of Medicare discharges from the cost report to determine what each LTCH's average total payment per case would be under the current (TEFRA) payment system.

*Step 5: Determine a case weighted average payment under the current (TEFRA) payment system.* We would determine each LTCH's average payment under the current (TEFRA) system weighted for its number of cases in the June 2001 update of the FY 2000 MedPAR by multiplying its average total payment per case from step 4 by its number of cases in the FY 2000 MedPAR.

*Step 6: Estimate total (MedPAR) weighted payments under the current (TEFRA) payment system.* We would estimate total weighted payments under the current (TEFRA) payment system by summing each LTCH's (MedPAR) weighted payments under the current (TEFRA) payment system (from step 5). In addition, we adjusted the estimated total weighted payments to reflect the estimated portion of additional outlier payments under proposed § 412.525(a). (This is consistent with not including outlier payments in estimating payments under the proposed prospective payment system in Step e. below.) This total would be the numerator in the calculation of a budget neutrality adjustment.

d. Calculate the Average Weighted Payment per Discharge Amount

Once estimated total payments under the current payment system are calculated, we would calculate an average per discharge payment amount weighted by the number of Medicare discharges under the current payment system. This would be done by first

determining the average payment per discharge amount under the current payment system for each LTCH. Cost report data would be used to calculate each LTCH's average payment per discharge by dividing the number of discharges into the total payments. As explained above in section IV.D.2.a. of this proposed rule, the LTCH's payment per discharge would be adjusted consistent with the terms of the DOJ settlement agreement.

Next, we would determine the weighted average per discharge payment amount by multiplying each LTCH's average payment per discharge amount from the cost report by the number of discharges from the Medicare claims data in the FY 2000 MedPAR file. Then we would add the amounts for all LTCHs and divide by the total number of discharges from the Medicare claims in MedPAR to derive a weighted average payment per discharge.

e. Estimate Payments Under the Proposed Prospective Payment System Without a Budget Neutrality Adjustment

Payments under the proposed payment system would then be estimated without a budget neutrality adjustment. To do this, we would multiply each LTCH's case-mix index adjusted for short-stay outliers (*see* section IV.B.2. of this proposed rule), the number of discharges from the Medicare claims in MedPAR adjusted for short-stay outliers (*see* section IV.B.2. of this proposed rule) and the weighted average per discharge payment amount computed above. For purposes of this calculation, we would estimate payments for each LTCH as if it were paid based on 100 percent of the proposed standard Federal rate in FY 2003 rather than the proposed transition blend methodology described in section IV.G. of this proposed rule. Total payments for each LTCH would then be summed for all LTCHs. This total would be the denominator in the calculation of the budget neutral adjustment.

f. Determine the Budget Neutrality Adjustment

The budget neutrality adjustment would be calculated by dividing total adjusted payments under the current payment system (the total amount calculated in section IV.D.2.c. of this preamble) by estimated payments under the proposed prospective payment system, without a budget neutrality adjustment (the total amount calculated in section IV.D.2.e. of this preamble).

g. Determine the Standard Federal Payment Rate

The resulting budget neutrality adjustment (determined in section IV.D.2.f. of this preamble) would then be multiplied by the average weighted per discharge payment amount under the current payment system and we would adjust the result further to include a behavioral offset. As previously stated, to calculate the proposed standard Federal payment rate, we estimated what would have been paid under the current payment system. However, we expect that as a result of the implementation of the new prospective payment system, LTCHs may experience usage patterns that are significantly different from their current usage patterns. Since there is a fixed payment based on diagnosis in a per discharge prospective payment system regardless of the length of stay (except for additional outlier payments), there would be an incentive to discharge a patient (to home or to another site of care) as early in the stay as possible in order to minimize cost and maximize profit). As a result, discharges may occur earlier in the LTCH stay. This would result in lower payments under the current payment system for this care which must be taken into account when computing the budget neutral payment rate. Furthermore, as explained in sections IV.A.2. and G. of this proposed rule, we expect the LTCH's coding practice of LTCHs to improve once the proposed prospective payment system is implemented, which has a significant potential of resulting in a case-mix that would be higher than what would be used to determine the budget neutral standard Federal rate.

As was the case when the hospital inpatient prospective payment system was implemented, improved coding could result in a higher case-mix because hospitals would code secondary diagnoses more completely and accurately, now that these diagnoses would factor into the LTC-DRG assignment and, ultimately, their payment. The inclusion of appropriate secondary diagnoses could result in the case being grouped into a higher weighted LTC-DRG. This is especially true for LTCHs since they generally treat more medically complex patients who are more likely to have many secondary diagnoses. Thus, if the same cases that were used to develop the proposed standard Federal rate are grouped into higher weighted LTC-DRGs as a result of improved coding, this higher case-mix would result in higher payments under the proposed payment system for this care. This effect must also be taken

into account when computing the budget neutral standard Federal rate. Accounting for these effects through an adjustment is commonly known as a behavioral offset.

The proposed standard Federal payment rate with a behavioral offset is \$27,649.02. This proposed dollar amount includes a 0.27 percent (that is, twenty-seven hundredths of one percent) reduction for the behavioral offset in the proposed standard Federal payment rate otherwise calculated under the methodology described above. Consistent with the assumptions made under the IRF prospective payment system, in determining this proposed behavioral offset adjustment, we assumed that the LTCHs would regain 15 percent of potential losses and augment payment increases by 5 percent through transfers occurring at or beyond the mean length of stay associated with the LTC-DRG at any point.

For FY 2003, we are proposing to establish a fixed-loss outlier threshold (as described previously in section IV.C.6. of this proposed rule) equal to the proposed standard Federal prospective payment rate for the LTC-DRG plus \$29,852. In setting this proposed fixed-loss amount of \$29,852, we project that FY 2003 outlier payments would equal 8 percent of LTC-DRG payments under the proposed LTCH prospective payment system in accordance with proposed § 412.523.

**h. Determine a Budget Neutrality Offset To Account for the Proposed Transition Methodology**

Section 123(a)(1) of the BBRA requires that the LTCH prospective payment system maintain budget neutrality. As discussed in further detail in section IV.G. of this proposed rule, we are proposing a 5-year transition period from cost-based TEFRA reimbursement to prospective payment, during which a LTCH would be paid an increasing percentage of the proposed LTCH prospective payment system rate and a decreasing percentage of its TEFRA rate for each discharge. Furthermore, we are proposing to allow a LTCH to elect to be paid based on 100 percent of the proposed standard Federal rate in lieu of the blend methodology. Based on a comparison of the estimated FY 2003 payments to each LTCH based on 100 percent of the proposed standard Federal rate and the proposed transition blend methodology, we project that approximately 58 percent of LTCHs would elect to be paid based on 100 percent of the proposed standard Federal rate since they would receive higher payments than under the proposed transition blend methodology.

We project that the remaining 42 percent of LTCHs will choose to be paid based on the transition blend methodology (80 percent of TEFRA; and 20 percent of the prospective payment system) in FY 2003 since they would receive higher payments than if they were paid based on 100 percent of the Federal rate.

Since the proposed standard Federal rate (\$27,649.02) determined under section IV.D.2.g. of this proposed rule was calculated as if all LTCHs would be paid based on 100 percent of the proposed standard Federal rate in FY 2003, in order to maintain budget neutrality, we are proposing to reduce all LTCH Medicare payments during the transition period by a factor that is equal to 1 minus the ratio of the estimated TEFRA reasonable cost-based payments that would have been made if the LTCH prospective payment system had not been implemented, to the projected total Medicare program payments that would be made under the proposed transition methodology and the option to elect payment based on 100 percent of the Federal rate.

We project that the full effect of the proposed 5-year transition period and the election option would result in a cost to the Medicare program of \$230 million as follows:

Fiscal year	Estimated cost (in millions)
2003 .....	\$50
2004 .....	80
2005 .....	60
2006 .....	30
2007 .....	10

Thus, in order to maintain budget neutrality, we propose to apply a 5.1 percent reduction (0.949) to all LTCHs payments in FY 2003 to account for the estimated cost of \$50 million for FY 2003. Furthermore, in order to maintain budget neutrality, we would propose a budget neutrality offset for each of the remaining years of the transition period in a notice of proposed rulemaking to account for the estimated costs for the respective fiscal year.

Based on the data available at this time, we would propose the following offsets to LTCH payments during the transition period: 3.9 percent (0.961) in FY 2004; 2.6 percent (0.974) in FY 2005; and 1.3 percent (0.987) in FY 2006. No budget neutrality offset would be necessary in the 5th year of the transition period (FY 2007) because under the proposed transition methodology, all LTCHs would be paid based on 100 percent of the standard Federal rate and zero percent of

payments under TEFRA. These estimates are based on the inflation factors and projected Medicare spending for LTCHs discussed in section VI.B.6. of this proposed rule, and that an estimated 58 percent of LTCHs will elect to be paid based on 100 percent of the standard Federal rate rather than the transition blend.

Consistent with the statutory requirement for budget neutrality, we intend for estimated aggregate payments under the LTCH prospective payment system to equal the estimated aggregate payments that would be made if LTCH prospective payment system were not implemented. Our methodology for estimating payments for purposes of the budget neutrality calculations uses the best available data and necessarily reflects assumptions. When the LTCH prospective payment system is implemented, we would monitor payment data and evaluate the ultimate accuracy of the assumptions used to calculate the budget neutrality calculations (for example, inflation factors, intensity of services provided, or behavioral response to the implementation of the LTCH prospective payment system, as discussed in section IV.D of this proposed rule). To the extent these assumptions significantly differ from actual experience, the aggregate amount of actual payments may turn out to be significantly higher or lower than the estimates on which the budget neutrality calculations are based. Section 123 of Public Law 106-113 and section 307 of Public Law 106-554 provide the Secretary extremely broad authority in developing the LTCH prospective payment system, including the authority for appropriate adjustments. Pursuant to this broad authority, under § 412.523(d)(3), we are proposing a possible one-time prospective adjustment to the LTCH prospective payment system rates by October 1, 2006, so that the effect of any significant difference between actual payments and estimated payments for the first year of the LTCH prospective payment system is not perpetuated in the prospective payment system rates for future years. (We note that in other contexts (for example, outlier payments under the hospital inpatient prospective payment system) differences between estimated payments and actual payments for a given year are not built into the prospective payment system rates for subsequent years. Moreover, the statutory ratesetting scheme under the LTCH prospective payment system is very different than in other contexts.)

We estimate that total Medicare program payments for LTCH services over the next 5 years would be:

Fiscal year	Estimated payments (\$ in billions)
2003 .....	\$1.80
2004 .....	1.91
2005 .....	2.02
2006 .....	2.14
2007 .....	2.26

These estimates are based on the assumption that the proposed LTCH inflation factor (the excluded hospital market basket) would be 3.6 percent for FYs 2003 through 2005, 3.5 percent for FY 2006, and 3.4 percent for FY 2007, that 58 percent of LTCHs would elect to be paid based on 100 percent of the proposed standard Federal rate rather than the proposed transition blend, and that there would be an increase in Medicare beneficiary enrollment of 2.2 percent in FY 2003, 2.3 percent in FYs 2004 and 2005, 2.4 percent in FY 2006, and 2.3 percent in FY 2007.

#### *E. Development of the Proposed Federal Prospective Payments*

Once the proposed relative weights for each LTC-DRG and the proposed standard Federal payment rate are calculated, the proposed Federal prospective payments can be determined. Under proposed § 412.523(c)(4), a LTC-DRG payment would be calculated by multiplying the proposed standard Federal payment rate by the appropriate proposed LTC-DRG relative weight. The equation would be as follows:

$$\text{Federal Prospective Payment} = \text{LTC-DRG Relative Weight} * \text{Standard Federal Payment Rate}$$

#### *F. Computing the Proposed Adjusted Federal Prospective Payments*

The proposed Federal prospective payments described in section IV.E. of this preamble would be adjusted to account for the higher costs of hospitals in Alaska and Hawaii by multiplying the proposed Federal prospective payment rate by the appropriate proposed adjustment factor shown in the table in section IV.C.5. of this proposed rule.

#### *G. Transition Period*

Under the broad authority conferred to the Secretary by section 123 of Public Law 106-113 for development of a prospective payment system for LTCHs, we are proposing, under § 412.533, a 5-year transition period from reasonable cost-based reimbursement under the TEFRA system to a prospective payment

based on industry-wide average operating and capital-related costs. Under the average pricing system being proposed, payment would not be based on the experience of an individual hospital. We believe that a 5-year phase-in would provide LTCHs time to adjust their operations and capital financing to the new payment system, which would be based on prospectively determined Federal payment rates.

Moreover, capital renovation and expansion plans of certain LTCHs may not be amenable to short-term adjustment due to the commitment of capital funds involved. We believe that a 5-year transition period with an increasing percentage of prospective payments should afford LTCHs an opportunity to increase their efficiency in the delivery of operating services and reserve additional payments to finance their capital expenditures.

We further believe that the 5-year phase-in of the proposed LTCH prospective payment system would allow LTCH personnel to develop proficiency with the LTC-DRG coding system, resulting in improvement in the quality of the data used for generating our annual determination of relative weights and payment rates. Our analysis conducted during the development of the proposed LTCH prospective payment system revealed that most patients in LTCHs have several diagnosis codes on their Medicare claims indicating multiple CCs, although further review of individual case studies indicated that in some instances all of the diagnoses were not reported. Since payments to LTCHs under the current TEFRA system are based on reasonable costs, not diagnosis codes, past coding by LTCHs may not have accurately reflected the patient's diagnoses. Further evidence of incomplete coding is shown by the pairs of LTC-DRGs where the "without CC" LTC-DRG had a higher average charge than the corresponding with CC LTC-DRG. As described in more detail in section III. of this proposed rule, since the LTC-DRGs "with CCs" require more coded information, we believe this phenomenon indicates incomplete coding and that over the 5-year phase-in of the LTC-DRG-based LTCH prospective payment system, this problem would be resolved.

The proposed 5-year transition period would enable us to collect Medicare claims and cost data that would be produced based on new program instructions to providers and fiscal intermediaries, and subject to program integrity monitoring. This gradual phase-in would provide a stable fiscal base for LTCHs, as we analyze data that

may lead to our revisiting and perhaps revising specific policy decisions for the proposed LTCH prospective payment system.

We are proposing that the transition period for all hospitals subject to the proposed LTCH prospective payment system would begin with the hospital's first cost reporting period beginning on or after October 1, 2002 and extend through the hospital's last cost reporting period beginning before October 1, 2007. During the 5-year transition period, we are proposing that a LTCH's total payment under the prospective payment system would be based on two payment percentages—one based on reasonable cost-based (TEFRA) payments, and the other based on the standard Federal prospective payment rate. The proposed blend percentages are as follows:

Cost reporting periods beginning on or after	Federal rate percentage	TEFRA rate percentage
October 1, 2002	20	80
October 1, 2003	40	60
October 1, 2004	60	40
October 1, 2005	80	20
October 1, 2006	100	0

For a cost reporting period beginning on or after October 1, 2002, and before October 1, 2003, the total payment for a LTCH would consist of 80 percent of the amount calculated under the current (TEFRA) payment system for that specific LTCH and 20 percent of the proposed Federal prospective rate. The percentage of payment based on the proposed LTCH prospective payment system Federal rate would increase by 20 percentage points each year, while the TEFRA rate percentage would decrease by 20 percentage points each year, for the next 4 fiscal years. For cost reporting periods beginning on or after October 1, 2006, Medicare payment to LTCHs would be determined entirely under the proposed Federal prospective payment system methodology. The TEFRA rate percentage is a LTCH specific amount that is based on the amount that the LTCH would have been paid (under TEFRA) if the prospective payment system were not implemented.

Medicare fiscal intermediaries would continue to compute the LTCH TEFRA payment amount according to § 412.22(b) of the regulations and sections 1886(d) and (g) of the Act. We note that several TEFRA provisions that currently are in effect would no longer be effective for cost reporting periods beginning in FY 2003. For instance, the caps on the target amounts for "existing" LTCHs provided for under

section 4414 of the BBA (see § 413.40(c)(4)(iii)) for FYs 1998 through 2002 would no longer be applicable for cost reporting periods beginning in FY 2003. For purposes of the LTCH prospective payment system, a LTCH's target amount for FY 2003 would be determined by updating its FY 2002 target amount (subject to the cap). In addition, the 15-percent reduction to payments to LTCHs for capital-related costs provided for under section 4412 of the BBA (§ 413.40(j)) is applicable for portions of cost reporting periods occurring in FYs 1998 through FY 2002. This reduction would no longer be applicable for cost reporting periods beginning in FY 2003. Therefore, the TEFRA portion of a LTCH's payment for capital-related costs during the LTCH prospective payment system transition period would be based on 100 percent of its Medicare allowable capital costs.

In implementing the proposed prospective payment system for LTCHs, one of our goals is to transition hospitals to full prospective payments as soon as appropriate. Therefore, we are proposing, under § 412.533(b), to allow a LTCH to elect payment based on 100 percent of the Federal rate at the start of any of its cost reporting periods during the 5-year transition period rather than incrementally shifting from cost-based payments to prospective payments. However, once a LTCH elects to be paid based on 100 percent of the Federal rate, it would not be able to revert to the proposed transition blend.

The purpose of the transition period is to allow for a smooth transition from cost-based reimbursement to prospective payment. We believe that it is appropriate not to allow a LTCH to revert back to the blended transition methodology once it elects payment based on 100 percent of the Federal rate, because allowing LTCHs to switch back to a payment based on the transition blend from a payment based on 100 percent of the Federal rate would be administratively burdensome to our fiscal intermediaries.

Consistent with transition methodology policies under the IRF prospective payment system, we are proposing that, in order to elect payment based on 100 percent of the Federal rate, a LTCH must notify the fiscal intermediary of the election no later than 30 days before the beginning of the cost reporting period in the applicable fiscal year beginning on or after October 1, 2003 and before October 1, 2007 (proposed § 412.533(b)). The request by the LTCH to make the election would be made in writing to the Medicare fiscal intermediary. The intermediary would have to receive the

request on or before the 30th day before the applicable cost reporting period begins, regardless of any postmarks or anticipated delivery dates. Requests received, postmarked, or delivered by other means after the 30th day before the cost reporting period begins would not be approved. If the 30th day before the cost reporting period begins falls on a day that the postal service or other delivery sources are not open for business, the LTCH would be responsible for allowing sufficient time for the delivery of the request before the deadline. If a LTCH's request is not received or not approved, payment would be based on the transition period rates.

#### H. Payments to New LTCHs

For the purposes of the proposed LTCH prospective payment system, we are proposing under § 412.23(e)(4) to define a new LTCH as a provider of inpatient hospital services that (1) meets the proposed revised qualifying criteria (described in section II.B.1. and in proposed § 412.23(e)(1) of this proposed rule); and (2) under present or previous ownership (or both), has not received payment as a LTCH for discharges prior to October 1, 2002 (the effective date of the proposed prospective payment system for LTCHs).

We are proposing, under § 412.533(c), that new LTCHs would be paid based on 100 percent of the Federal rate starting with their first cost reporting period beginning on or after October 1, 2002. Thus, these new LTCHs would not participate in the 5-year transition from cost-based reimbursement to prospective payment (see section IV.G. of this proposed rule), as would other LTCHs.

The proposed transition period described in section IV.G. of this proposed rule is intended to provide existing LTCHs time to adjust to payment under the new proposed system. Since these new LTCHs would not have received payment for the delivery of LTCH services prior to the effective date of the LTCH prospective payment system, we do not believe that new LTCHs require a transition period in order to make adjustments to their operations and capital financing, as would existing LTCHs.

These new LTCHs should not be confused with those LTCHs first paid under the TEFRA payment system for discharges occurring on or after October 1, 1997, described in section 1886(b)(7)(A) of the Act, added by section 4416 of Public Law 105-33. In accordance with § 413.40(f)(2)(ii), for cost reporting periods beginning on or after October 1, 2001, the payment amount for a "new" (post-FY 1998)

LTCH is the lower of the hospital's net inpatient operating cost per case or 110 percent of the national median target amount payment limit for hospitals in the same class for cost reporting periods ending during FY 1996, updated to the applicable cost reporting period (see 62 FR 46019, August 29, 1997). A LTCH's second cost reporting period is subject to the same payment limit as the first cost reporting period. The target amount for the LTCH beginning with its third 12-month cost reporting period, as set forth in § 413.40(c)(4)(v), is its payment amount for the preceding cost reporting period updated to the third cost reporting period. Under the proposed prospective payment system for LTCHs, those "new" LTCHs would be paid under the proposed transition methodology described in section IV.G. of this proposed rule.

For example, a new LTCH that first began receiving payment as a LTCH on October 1, 2001, would be subject to the 110 percent of the median target amount payment limit for LTCHs (in accordance with § 413.40(f)(2)(ii)) for both its FY 2002 and FY 2003 cost reporting periods. For its cost reporting period beginning on October 1, 2002 (the first cost reporting period under which the LTCH would be subject to the proposed prospective payment system), under the proposed transition methodology the LTCH's TEFRA portion of its payment for operating costs (80 percent) would be limited by the 110 percent of the median target amount payment limit for LTCHs under § 413.40(f)(2)(ii). For its cost reporting period beginning on October 1, 2003, under the proposed transition methodology that LTCH's TEFRA portion of its payment for operating costs (60 percent) would be limited by its target amount as determined under § 413.40(c)(4)(v). However, where a new LTCH first begins to receive payment as a LTCH on or after October 1, 2002, the LTCH would not be subject to the 5-year transition period under proposed § 412.533. The LTCH would be paid based on 100 percent of the proposed LTCH prospective payment system Federal rate beginning with its first cost reporting period.

#### I. Method of Payment

As discussed earlier, we are proposing that a beneficiary would be classified into a proposed LTC-DRG based on the principal diagnosis, up to eight additional (secondary) diagnoses, and up to six procedures performed during the stay, as well as age, sex, and discharge status of the patient. The LTC-DRG would be used to determine the Federal prospective payment that

the LTCH would receive for the Medicare-covered Part A services the LTCH furnished during the Medicare beneficiary's stay. We are proposing, under § 412.541(a), that the payment would be based on the submission of the discharge bill since section 123(a) of Public Law 106-113 requires that the LTCH prospective payment system be a per discharge based system. The discharge bill would provide data to allow for reclassifying the stay from payment at the full LTC-DRG rate into one of the proposed very short-stay discharge LTC-DRGs (under proposed § 412.527), or to determine the payment for a case as a proposed short-stay outlier (under proposed § 412.529) or as a proposed interrupted stay (under proposed § 412.531), or to determine if the case would qualify for an outlier payment (under proposed § 412.525(a)).

Accordingly, the ICD-9-CM codes and other information proposed to be used to determine if an adjustment to the full LTC-DRG payment is necessary (for example, length of stay or interrupted stay status) would be recorded by the LTCH on the beneficiary's discharge bill and submitted to the Medicare fiscal intermediary for processing. The payment made would represent payment in full, under proposed § 412.521(b), for inpatient operating and capital-related costs, but not the costs of an approved medical education program, bad debts, blood clotting factors, anesthesia services by hospital-employed nonphysician anesthetists or obtained under arrangement, or the costs of photocopying and mailing medical records requested by a PRO, which are costs paid outside the proposed LTCH prospective payment system.

Under the current payment system, a LTCH may elect to be paid using the periodic interim payment (PIP) method described in § 413.64(h), and may be eligible to receive accelerated payments as described in § 413.64(g). With the implementation of a prospective payment system for LTCHs, at this time (under proposed § 412.541) we are proposing to continue this existing administrative policy of allowing PIP under § 413.64(h) and accelerated payments under § 413.64(g) for qualified LTCHs. For those LTCHs that will be paid during the 5-year transition based on the blended transition methodology in § 412.533 for cost reporting periods beginning on or after October 1, 2002 and before October 1, 2006, the PIP amount would be based on the transition formula. For those LTCHs that are paid based on 100 percent of the standard Federal rate, the PIP amount

would be based on the estimated prospective payment for the year rather than on the estimated cost reimbursement. Excluded from the PIP amounts would be outlier payments that are paid upon submission of a discharge bill. In addition, Part A costs that are not paid for under the proposed LTCH prospective payment system, including Medicare costs of an approved medical education program, bad debts, blood clotting factors, anesthesia services by hospital-employed nonphysician anesthetists or obtained under arrangement, and the costs of photocopying and mailing medical records requested by a PRO would be subject to the interim payment provisions at § 413.64.

#### V. Provisions of the Proposed Rule

We are proposing to establish a new subpart O under 42 CFR part 412, to implement the provisions of the proposed prospective payment system for LTCHs as discussed in detail throughout the preamble to this proposed rule.

In addition, we are proposing to make additional policy changes and conforming changes to the following sections of the regulations under 42 CFR parts 412, 413, and 476 as discussed throughout this preamble: §§ 412.1, 412.20, 412.22, 412.23, 412.116, 431.1, 413.40, 413.64, and 476.71.

#### VI. Regulatory Impact Analysis

##### A. Introduction

We have examined the impact of this proposed rule as required by Executive Order 12866. We also have examined the impacts of this rule under the criteria of the Regulatory Flexibility Act (RFA) (Pub. L. 96-354), section 1102(b) of the Act, the Unfunded Mandate Reform Act of 1995 (UMRA) (Pub. L. 104-4), and Executive Order 13132 (Federalism).

##### 1. Executive Order 12866

Executive Order 12866 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 rules that constitute significant regulatory action, including rules that have an economic effect of \$100 million or more annually (major rules). We have determined that this proposed rule would not be a major rule within the meaning of Executive Order 12866

because the redistributive effects do not constitute a shift of \$100 million in any one year. Because the proposed LTCH prospective payment system must be budget neutral in accordance with section 123(a)(1) of Public Law 106-113, we estimate that there will be no budgetary impact for the Medicare program.

##### 2. Regulatory Flexibility Act (RFA)

The RFA requires agencies to analyze options for regulatory relief of small businesses in issuing a proposed rule. For purposes of the RFA, small entities include small businesses, nonprofit organizations, and government agencies. Most hospitals and most other providers and suppliers are small entities, either by nonprofit status or by having revenues of \$25 million or less annually. For purposes of the RFA, all hospitals are considered small entities. Medicare fiscal intermediaries are not considered to be small entities. Individuals and States are not included in the definition of a small entity.

##### 3. Impact on Rural Hospitals

Section 1102(b) of the Act requires us to prepare a regulatory impact analysis if a proposed rule 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. For purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital that is located outside of an MSA and has fewer than 100 beds. Section VI.B. of this proposed rule contains our estimated impact of this proposed rule on the hospitals classified as located in rural areas that have fewer than 100 beds for which we had cost report data available.

##### 4. Unfunded Mandate

Section 202 of the UMRA requires that agencies assess anticipated costs and benefits before issuing any proposed rule or any final rule preceded by a proposed rule that may result in expenditures in any one year by State, local, or tribal governments, in the aggregate, or by the private sector, of \$110 million or more. This proposed rule would not mandate any requirements for State, local, or tribal governments nor would it affect private sector costs.

##### 5. Federalism

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.

We have examined this proposed rule under the criteria set forth in Executive Order 13132 and have determined that this proposed rule would not have any negative impact on the rights, rules, and responsibilities of State, local, or tribal governments.

### B. Anticipated Effects

We discuss the impact of this proposed rule below in terms of its fiscal impact on the Federal Medicare budget and on LTCHs.

#### 1. Budgetary Impact

Section 123(a)(1) of Public Law 106-113 requires us to set the payment rates contained in this proposed rule such that total payments under the LTCH prospective payment system are projected to equal the amount that would have been paid if this prospective payment system had not been implemented. However, the proposed standard Federal rate (\$27,649.02) was calculated as if all LTCHs would be paid based on 100 percent of the standard Federal rate in FY 2003. As discussed in section IV.D.2.h. of the preamble, we are proposing a budget neutrality offset to payments (in addition to the budget neutrality adjustment reflected in the proposed standard Federal rate) to account for the monetary effect of the proposed 5-year transition period and the proposed policy to permit LTCHs to elect to be paid based on 100 percent of the standard Federal rate rather than a blend of Federal rate payments and reasonable-cost based payments during the transition. The amount of the offset is equal to 1 minus the ratio of the estimated TEFRA reasonable cost-based payments that would have been made if the LTCH prospective payment system had not been implemented, to the projected total Medicare program payments that would be made under the proposed transition methodology and the option to elect payment based on 100 percent of the Federal rate. Thus, in accordance with section 123(a)(1) Public Law 106-113, there would be no budgetary impact to the Medicare program by implementation of the proposed LTCH prospective payment system.

#### 2. Impacts on Providers

In order to understand the impact of the proposed new prospective payment system on different categories of LTCHs, it is necessary to estimate payments that would be made under the current (TEFRA) payment methodology (current payments) and payments under the

proposed prospective payment system (proposed prospective payments). We also evaluated the ratio of estimated prospective payments to estimated costs for each category of LTCHs.

Hospital groups were based on characteristics provided in OSCAR data and 1999 cost report data from HCRIS. Hospitals with incomplete characteristics were grouped into the "unknown" category. Hospital groups include:

- Location: Large Urban/Other Urban/Rural
- Participation Date
- Ownership Control
- Census Region
- Bed Size

To estimate the impacts among the various categories of providers, it is imperative that current payments and proposed prospective payments contain similar inputs. More specifically, we estimated proposed prospective payments only for those providers that we are able to calculate current payment. For example, if we did not have FYs 1996 through 1999 cost data for a LTCH, we were unable to determine an update to the LTCH's target amount as described in section IV.D.2.b. of this proposed rule to estimate payment under the TEFRA system.

As previously stated in section IV.C. of this preamble, we have both case-mix and cost data for 222 LTCHs. All 222 providers that had covered Medicare claims in FY 2000 were used to analyze the appropriateness of various adjustments to the proposed standard Federal unadjusted payment rate. However, for the impact analyses shown in the following tables, we simulate payments for 211 LTCHs. The methodology used to update payment data to the midpoint of FY 2003 was based on the use of historical cost report data to determine the relationship between the LTCH's costs and target amount. Thus, the number of providers reflects only those providers for which we had cost report data available from FYs 1996, 1997, 1998, and 1999 (see discussion in section IV.D.2. of this proposed rule).

These impacts reflect the estimated losses/gains among the various classifications of providers for FY 2003. Proposed prospective payments were based on the proposed standard Federal rate of \$27,649.02 and the hospital's estimated case-mix based on FY 2000 claims data. These hospital payments were compared to the hospital's payments based on its cost from the cost report inflated to FY 2003 and subject to the updated per discharge target amount.

#### 3. Calculation of Current Payments

To calculate current costs, cost report data are trended forward from the midpoint of the cost reporting period to the midpoint of FY 2003 using the methodology set forth in section IV.D.2.b. of this preamble. To estimate current payments, we determined payments for operating costs for each LTCH in accordance with the methodology in section 1886(b) of the Act. Further, we compute payments for capital-related costs consistent with section 1886(g)(4) of the Act. To determine each LTCH's average per discharge payment amount under the current payment system, operating and capital-related payments are added together, and then the total payment is divided by the number of Medicare discharges from the cost reports. Total payments for each LTCH are then computed by multiplying the number of discharges from the FY 2000 MedPAR claims by the average per discharge payment amount.

#### 4. Calculation of Proposed Prospective Payments

To estimate payments under the proposed prospective payment system, we multiply each LTCH's case-mix index by the LTCH's number of Medicare discharges and the proposed standard Federal rate. As noted in section IV.C. of this proposed rule, we are proposing to not make adjustments for area wage differences (wage index), geographic reclassification, indirect medical education costs, or a disproportionate share of low-income patients.

Next, we calculated payments using the proposed transition blend percentages for FY 2003 (80 percent of current cost-based (TEFRA) payments and 20 percent of payments under the proposed LTCH prospective payment system) and compared that estimated blended payment to the LTCH's estimated payment if it would elect payment based on 100 percent of the Federal rate (see section IV.G. of this proposed rule). If a LTCH would be paid more based on 100 percent of the Federal rate, we assumed that it would elect to bypass the proposed transition methodology and transition immediately to prospective payments.

Then we applied the proposed 5.1 percent reduction to payment to account for the effect of the proposed 5-year transition methodology and election of payment based on 100 percent of the Federal rate on Medicare program payments to each LTCH's estimated payments under the proposed prospective payment system (see section

IV.D.2.h. of this proposed rule). The impact based on our projection of whether a LTCH would be paid based on the proposed transition blend methodology or would elect payment based on 100 percent of the Federal rate for cost reporting periods beginning during FY 2003 is shown below in Table 1. We also show in Table 2 below the impact if the LTCH prospective payment system were fully implemented in FY 2003, that is, as if there were an immediate transition to fully Federal prospective payments under the LTCH prospective payment

system for FY 2003. Accordingly, the proposed 5.1 percent reduction to account for the proposed 5-year transition methodology on LTCHs' Medicare program payments was not applied to LTCHs' estimated payments under the proposed prospective payment system. Furthermore, beginning with cost reporting periods beginning during FY 2007, the proposed 5-year transition period would have ended, and all LTCHs would be paid based on 100 percent of the proposed standard Federal rate. All payment

simulations reflect data trended to the midpoint FY 2003.

Tables 1 and 2 below illustrate the aggregate impact of the proposed payment system among various classifications of LTCHs. The first column, LTCH Classification, identifies the type of LTCH. The second column lists the number of LTCHs of each classification type; the third column identifies the number of long-term care cases; and the fourth column is the ratio of proposed prospective payments to current payments.

TABLE 1.—PROJECTED IMPACT REFLECTING 20 PERCENT OF PROPOSED PROSPECTIVE PAYMENTS AND 80 PERCENT OF CURRENT (TEFRA) PAYMENTS AND OPTION TO ELECT PAYMENT BASED ON 100 PERCENT OF THE FEDERAL RATE

LTCH classification	Number of LTCHs	Number of long-term care cases	New payment to current payment ratio
All Providers <sup>1</sup> .....	211	70,732	1.0010
BY LOCATION:			
Rural .....	10	2,112	1.1826
Urban .....	201	68,620	0.9972
Large Urban .....	128	50,486	0.9977
Other Urban .....	73	18,134	0.9955
BY PARTICIPATION DATE:			
After Oct 1993 .....	125	39,171	0.9819
Before Oct 1983 .....	31	10,980	1.0498
Oct 1983–Sept 1993 .....	51	20,103	1.0209
Unknown .....	4	478	1.0208
BY OWNERSHIP CONTROL:			
Voluntary .....	54	19,920	0.9874
Proprietary .....	131	46,739	1.0010
Government .....	26	4,073	1.0837
BY CENSUS REGION:			
New England .....	18	9,587	1.0283
Middle Atlantic .....	13	5,777	1.0209
South Atlantic .....	25	6,215	1.0294
East North Central .....	33	8,070	1.0489
East South Central .....	11	2,826	1.0330
West North Central .....	12	3,266	1.0808
West South Central .....	71	27,345	0.9543
Mountain .....	15	2,423	1.0277
Pacific .....	13	5,223	1.0024
By Bed Size:			
0–24 Beds .....	25	3,571	0.9886
25–49 Beds .....	84	19,426	1.0172
50–74 Beds .....	20	6,324	0.9688
75–124 Beds .....	29	12,362	0.9994
125–199 Beds .....	23	13,191	0.9869
200+ Beds .....	30	15,858	1.0100

<sup>1</sup> These estimated impacts of the proposed budget neutral LTCH prospective payment system are subject to rounding. Therefore, the impact on all providers is not exactly equal to 1.0000.

TABLE 2.—PROJECTED IMPACT REFLECTING THE FULLY PHASED-IN PROPOSED PROSPECTIVE PAYMENTS

LTCH classification	Number of LTCHs	Number of long-term care cases	New payment to current payment ratio
All Providers <sup>1</sup> .....	211	70,732	0.9977
BY LOCATION:			
Rural .....	10	2,112	1.2327
Urban .....	201	68,620	0.9927
Large Urban .....	128	50,486	0.9918
Other Urban .....	73	18,134	0.9955
BY PARTICIPATION DATE:			
After Oct 1993 .....	125	39,171	0.9675
Before Oct 1983 .....	31	10,980	1.0763
Oct 1983–Sept 1993 .....	51	20,103	1.0286

TABLE 2.—PROJECTED IMPACT REFLECTING THE FULLY PHASED-IN PROPOSED PROSPECTIVE PAYMENTS—Continued

LTCH classification	Number of LTCHs	Number of long-term care cases	New payment to current payment ratio
Unknown .....	4	478	1.0403
<b>BY OWNERSHIP CONTROL:</b>			
Voluntary .....	54	19,920	0.9846
Proprietary .....	131	46,739	0.9956
Government .....	26	4,073	1.1130
<b>BY CENSUS REGION:</b>			
New England .....	18	9,587	1.0593
Middle Atlantic .....	13	5,777	1.0247
South Atlantic .....	25	6,215	1.0497
East North Central .....	33	8,070	1.0732
East South Central .....	11	2,826	1.0614
West North Central .....	12	3,266	1.1076
West South Central .....	71	27,345	0.9234
Mountain .....	15	2,423	1.0178
Pacific .....	13	5,223	0.9902
<b>BY BED SIZE:</b>			
25–49 Beds .....	25	3,571	0.9845
50–74 Beds .....	84	19,426	1.0317
75–124 Beds .....	20	6,324	0.9170
125–199 Beds .....	29	12,362	0.9886
200+ Beds .....	23	13,191	0.9842
	30	15,858	1.0116

<sup>1</sup> These estimated impacts of the proposed budget neutral LTCH prospective payment system are subject to rounding. Therefore, the impact on all providers is not exactly equal to 1.0000.

5. Results

We have prepared the following summary of the impact (as shown in Table 1) of the LTCH prospective payment system set forth in this proposed rule.

a. Location

The majority of LTCHs are in urban areas. Only 4.7 percent of the LTCHs are identified as being located in a rural area, and approximately less than 3 percent of all long-term care cases are treated in these rural hospitals. Impact analysis shows that the new payment to current payment ratio is estimated to be 1.1826 for rural LTCHs, and 0.9972 for urban LTCHs. There is only a small difference in payment between large urban LTCHs and other urban LTCHs. About 71.4 percent of the LTCH cases are in LTCHs located in large urban areas. Large urban LTCHs have a new payment to current payment ratio of 0.9977, while other urban LTCHs have a new payment to current payment ratio of 0.9955.

b. Participation Date

LTCHs are grouped by participation date into three categories: (1) Before October 1983; (2) between October 1983 and September 1993; and (3) after October 1993. We did not have sufficient OSCAR data on four LTCHs, which we labeled as an “Unknown” category. The majority, approximately 55 percent, of the long-term care cases are in hospitals that began participating after October 1993 and have a new

payment to current payment ratio of 0.9816 (see Table 1) and approximately 15 percent of the cases are in LTCHs that began participating in Medicare before October 1983 with a new payment to current payment ratio of 1.0498.

c. Ownership Control

LTCHs are grouped into three categories based on ownership control type: (1) Voluntary; (2) proprietary; and (3) government. We expect that government LTCHs would gain the most from the proposed payment system with an estimated new payment to current payment ratio of 1.0837, although only approximately 11.5 percent of LTCHs are government run. Voluntary and proprietary LTCHs have a new payment to current payment ratio of 0.9874 and 1.0010, respectively.

d. Census Region

Of the nine census regions, we expect that LTCHs in the West North Central Region will have the highest new payment to current payment ratio (1.0808). We expect only LTCHs in the West South Central will have a new payment to current payment ratio of less than 1.0 (0.9543).

e. Bed Size

LTCHs were grouped into six categories based on bed size: 0–24 beds, 25–49 beds, 50–74 beds, 75–124 beds, 125–199 beds, and 200+ beds. The majority of LTCHs were in bed size categories where the new payment to

current payment ratio is estimated to be greater than 0.98. LTCHs with beds between 25–49 or over 200 beds have a new payment to current payment ratio greater than 1.0 (1.0172 and 1.0100, respectively). LTCHs with between 50–74 beds have the lowest estimated new payment to current payment ratio (0.9688).

6. Effect on the Medicare Program

Based on actuarial projections resulting from our experience with other prospective payment systems, we estimate that Medicare spending (total Medicare program payments) for LTCH services over the next 5 years would be:

Fiscal year	Estimated payments (\$ in million)
2003 .....	\$1,800
2004 .....	1,910
2005 .....	2,020
2006 .....	2,140
2007 .....	2,260

These estimates are based on the current estimate of increase in the excluded hospital with capital market basket of 3.6 percent for FYs 2003 through 2005, 3.5 percent for FY 2006, and 3.4 percent for FY 2007. We estimate that there would be an increase in Medicare beneficiary enrollment of 2.2 percent in FY 2003, 2.3 percent in FYs 2004, 2005, and 2007, and 2.4 percent in FY 2006, and an estimated increase in the total number of LTCHs.



Consistent with the statutory requirement for budget neutrality, we intend for estimated aggregate payments under the LTCH prospective payment system to equal the estimated aggregate payments that would be made if LTCH prospective payment system were not implemented. Our methodology for estimating payments for purposes of the budget neutrality calculations uses the best available data and necessarily reflects assumptions. When the LTCH prospective payment system is implemented, we would monitor payment data and evaluate the ultimate accuracy of the assumptions used to calculate the budget neutrality calculations (for example, inflation factors, intensity of services provided, or behavioral response to the implementation of the LTCH prospective payment system, as discussed in section IV.D of this proposed rule). To the extent these assumptions significantly differ from actual experience, the aggregate amount of actual payments may turn out to be significantly higher or lower than the estimates on which the budget neutrality calculations are based. Section 123 of Public Law 106–113 and section 307 of Public Law 106–554 provide the Secretary extremely broad authority in developing the LTCH prospective payment system, including the authority for appropriate adjustments. In accordance with this broad authority, we plan to discuss in a future proposed rule a possible one-time prospective adjustment to the LTCH prospective payment system rates so that the effect of the difference between actual payments and estimated payments for the first year of LTCH prospective payment system is not perpetuated in the prospective payment system rates for future years. (We note that in other contexts (for example, outlier payments under the hospital inpatient prospective payment system) differences between estimated payments and actual payments for a given year are not built into the prospective payment system rates for subsequent years. Moreover, the statutory ratesetting scheme under the LTCH prospective payment system is very different than in other contexts.)

#### 7. Effect on Medicare Beneficiaries

Under the proposed LTCH prospective payment system, hospitals would receive payment based on the average resources consumed by patients for each diagnosis. We do not expect any changes in the quality of care or access to services for Medicare beneficiaries under the proposed LTCH prospective payment system, but we

expect that paying prospectively for LTCH services would enhance the efficiency of the Medicare program.

#### 8. Computer Hardware and Software

We do not anticipate that hospitals would incur additional systems operating costs in order to effectively participate in the prospective payment system for LTCHs. We believe that LTCHs possess the computer hardware capability to handle the LTC–DRGs, computerization, data transmission, and GROUPER software requirements. Our belief is based upon indications that approximately 99 percent of hospital inpatient claims currently are submitted electronically. Moreover, LTCHs have the option of purchasing data collection software that can be used to support other clinical or operational needs (for example, care planning, quality assurance, or billing) or other regulatory requirements for reporting patient information.

#### C. Alternatives Considered

Section 123 of Public Law 106–113 specifies that the case-mix adjusted prospective payment system must be a per discharge system based on DRGs, and section 307(b) of Public Law 106–554 directs the Secretary to examine the “feasibility and the impact of basing payment under such a system on the use of existing (or refined) hospital diagnosis-related groups (DRGs) that have been modified to account for different resource use of LTCH patients as well as the use of the most recently available hospital discharge data.” Section 307(b) further requires the Secretary to “examine” appropriate adjustments to the system such as adjustments to DRG weights, area wage adjustments, geographic reclassification, outliers, updates, and a disproportionate share adjustment consistent with section 1886(d)(5)(F) of the Act. Generally, the statute confers broad authority on the Secretary in designing the key elements of the system. Our considerations of the patient classification systems in detail in section I.G. of this proposed rule. Our evaluation of alternative features and adjustment factors for the LTCH prospective payment system are set forth in section IV. We are soliciting public comments regarding our proposed policies and system design and will consider them as we formulate our final rule for the prospective payment system for LTCHs.

#### D. Executive Order 12866

In accordance with the provisions of Executive Order 12866, this proposed

rule was reviewed by the Office of Management and Budget.

#### VII. Collection of Information Requirements

Under the Paperwork Reduction Act of 1995, 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 Paperwork Reduction Act of 1995 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.

We are soliciting public comments on each of these issues for the following proposed sections that contain information collection requirements:

*Proposed §§ 412.116(a)(4) and 412.541(b) and (e) Method of Payment: Periodic Interim Payments and Accelerated Payments*

Under proposed § 412.116(a)(4), for cost reporting periods beginning on or after October 1, 2002, payments to a LTCH for inpatient hospital services under the prospective payment system would be made as described in proposed § 412.541. Proposed § 412.541(b) provides that a LTCH may receive periodic interim payments for Part A services, subject to the provisions of § 413.64(h). Section 413.64(h) specifies that the request for periodic interim payments must be made to the fiscal intermediary. Proposed § 412.541(e) states that, upon request, an accelerated payment may be made to a LTCH that is not receiving a periodic interim payment if the LTCH is experiencing financial difficulties.

We estimate that the burden associated with this provision is the time it takes a LTCH to prepare and submit its request for periodic interim payments or accelerated payments. We estimate that approximately three LTCHs would request periodic interim payments under the prospective payment system and that it would take each hospital 1 hour to prepare and make the request. We estimate that approximately two LTCHs would

request accelerated payments and that it would take them approximately 30 minutes each to prepare and submit their written request, for a total estimated annual burden of 1 hour.

Both of these proposed sections of the regulations are exempt from the PRA since the two requirements would affect less than 10 LTCHs per year (see 5 CFR Part 1320.3(c)(4)).

*Proposed § 412.508(b)(1) and (b)(2):  
Content of Physician Acknowledgement  
Statement and Completion of  
Acknowledgement*

Proposed § 412.508(b) provides that a physician must complete an acknowledgement statement that each patient's principal and secondary diagnoses and major procedures performed are documented by the physician's entries in the patient's medical record. Proposed § 412.508(b)(1) specifies that when a claim is submitted, the hospital must have a signed and dated acknowledgement from the attending physician that the physician has received notice of the required acknowledgement of entries in the patient's medical record and that anyone who misrepresents, falsifies, or conceals essential information required for payment of Federal funds may be subject to fine, imprisonment, or civil penalty under applicable laws. Proposed § 412.508(b)(2) specifies that the acknowledgement must be completed by the physician at the time the physician is granted admitting privileges at the hospital or before or at the time the physician admits his or her first patient.

The burden associated with these information collection requirements is the time required for the physician to complete the acknowledgement statements.

These information collection requirements are currently approved under OMB approval number 0938-0359 through February 28, 2002. (We note that these requirements are currently in the reapproval process with OMB.)

*Proposed § 412.511 Reporting and  
Recordkeeping Requirements*

Under proposed § 412.511, a LTCH subject to the proposed prospective payment system described in this proposed rule must meet the recordkeeping and cost reporting requirements of §§ 413.20 and 413.24. While §§ 413.20 and 413.24 are subject to the PRA, the burden associated with these requirements is currently captured in approved collection 0938-0758, with a current expiration date of 3/31/2002.

This collection is currently at OMB awaiting re-approval.

*Proposed § 412.533(b) Transition  
Payments: Election Not To Be Paid  
Under the Transitional Period  
Methodology*

Under proposed § 412.533(b), a LTCH may elect to be paid based on 100 percent of the Federal prospective payment rate at the start of any of its cost reporting periods during a 5-year transition period beginning on or after October 1, 2002, and before October 1, 2007, without regard to the transitional percentages. Proposed § 412.533(b)(1) specifies that the request to make the election must be made in writing to the Medicare intermediary by the LTCH and received no later than 30 days before the beginning of the cost reporting period for each applicable fiscal year beginning on or after October 1, 2003 and before October 1, 2007.

We estimate that 135 LTCHs would make a request under this section to elect to receive the full Federal rate and that it would take each LTCH approximately 15 minutes each to prepare and submit their written request, for a total estimated annual burden of 34 hours.

If you comment on these information collection requirements, please mail copies directly to the following addresses:

Centers for Medicare & Medicaid  
Services, Office of Information  
Services, Security and Standards  
Group, Division of CMS Enterprise  
Standards, Room N2-14-26, 7500  
Security Boulevard, Baltimore,  
Maryland 21244-1850. Attn: Dawn  
Willinghan CMS-1177-P; and  
Office of Information and Regulatory  
Affairs, Office of Management and  
Budget, Room 3001, New Executive  
Office Building, Washington, DC  
20503, Attn: Allison Herron Eydt,  
CMS Desk Officer.

We have submitted the information collection requirements under §§ 412.508(b), 412.116, 412.533, and 412.541 to the Office of Management and Budget (OMB) for review under the authority of PRA. We also have submitted a copy of this proposed rule to OMB for its review of the information collection requirements. These requirements would not be effective until approved by OMB.

**VIII. Response to Comments**

Because of the large number of items of correspondence we normally receive on **Federal Register** documents published for comment, we are not able to acknowledge or respond to them

individually. Comments on the provisions of this proposed rule will be considered if we receive them by the date specified in the **DATES** section of this preamble.

**List of Subjects**

*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 476*

Health care, Health professional, Health record, Peer Review Organizations (PRO), Penalties, Privacy, Reporting and recordkeeping requirements.

42 CFR Chapter IV would be amended as set forth below:

**PART 412—PROSPECTIVE PAYMENT  
SYSTEMS FOR INPATIENT HOSPITAL  
SERVICES**

A. Part 412 is amended as follows:

1. The authority citation for part 412 continues to read as follows:

**Authority:** Secs. 1102 and 1871 of the Social Security Act (42 U.S.C. 1302 and 1395hh).

**Subpart A—General Provisions**

2. Section § 412.1 is amended by:

- a. Adding a new paragraph (a)(3);
- b. Redesignating paragraph (b)(12) as paragraph (b)(13); and
- c. Adding a new paragraph (b)(12).

**§ 412.1 Scope of part.**

(a) *Purpose.* \* \* \*

(3) This part implements section 123 of Public Law 106-113, which provides for the establishment of a prospective payment system for the costs of inpatient hospital services furnished to Medicare beneficiaries by long-term care hospitals described in section 1886(d)(1)(B)(iv) of the Act, for cost reporting periods beginning on or after October 1, 2002. This part also reflects the provisions of section 307 of Public Law 106-554, which state that the Secretary shall examine and may provide for appropriate adjustments to the long-term care hospital prospective payment system, including adjustments to diagnosis-related group (DRG) weights, area wage adjustments, geographic reclassification, outlier adjustments, updates, and disproportionate share adjustments

consistent with section 1886(d)(5)(F) of the Act.

(b) *Summary of content.* \* \* \*

(12) Subpart O of this part describes the prospective payment system specified in paragraph (a)(3) of this section for long-term care hospitals and sets forth the general methodology for paying for the operating and capital-related costs of inpatient hospital services furnished by long-term care hospitals, effective with cost reporting periods beginning on or after October 1, 2002.

\* \* \* \* \*

**Subpart B—Hospital Services Subject to and Excluded from the Prospective Payment Systems for Inpatient Operating Costs and Inpatient Capital-Related Costs**

3. Section 412.20 is amended by:

- a. Revising paragraph (a).
- b. Redesignating paragraph (c) as paragraph (d).
- c. Adding a new paragraph (c).

**§ 412.20 Hospital services subject to the prospective payment systems.**

(a) Except for services described in paragraphs (b), (c), and (d) of this section, all covered inpatient hospital services furnished to beneficiaries during subject cost reporting periods are paid under the prospective payment systems specified in § 412.1(a)(1).

\* \* \* \* \*

(c) Effective for cost reporting periods beginning on or after October 1, 2002, covered inpatient hospital services furnished to Medicare beneficiaries by a long-term care hospital that meets the conditions for payment of §§ 412.505 through 412.511 are paid under the prospective payment system described in subpart O of this part.

\* \* \* \* \*

4. Section 412.22 is amended by revising paragraph (b) to read as follows:

**§ 412.22 Excluded hospitals and hospital units: General rules.**

\* \* \* \* \*

(b) *Cost reimbursement.* Except for those hospitals specified in paragraph (c) of this section and §§ 412.20(b) and (c), all excluded hospitals (and excluded hospital units, as described in §§ 412.23 through 412.29) are reimbursed under the cost reimbursement rules set forth in part 413 of this subchapter, and are subject to the ceiling on the rate of hospital cost increases described in § 413.40 of this subchapter.

\* \* \* \* \*

5. Section 412.23 is amended by revising paragraph (e) to read as follows:

**§ 412.23 Excluded hospitals: Classifications.**

\* \* \* \* \*

(e) *Long-term care hospitals.* A long-term care hospital must meet the requirements of paragraph (e)(1) and (e)(2) of this section and, where applicable, the additional requirements of § 412.22(e), to be excluded from the prospective payment systems specified in § 412.1(a)(1) and to be paid under the prospective payment system specified in § 412.1(a)(3) and in Subpart O of this part.

(1) *Provider agreements.* The hospital must have a provider agreement under Part 489 of this chapter to participate as a hospital; and

(2) *Average length of stay.* (i) The hospital must have an average Medicare inpatient length of stay of greater than 25 days as calculated under paragraph (e)(3) of this section; or

(ii) For cost reporting periods beginning on or after August 5, 1997, a hospital that was first excluded from the prospective payment system under this section in 1986 meets the length of stay criterion if it has an average inpatient length of stay for all patients, including both Medicare and non-Medicare inpatients, of greater than 20 days and demonstrates that at least 80 percent of its annual Medicare inpatient discharges in the 12-month cost reporting period ending in fiscal year 1997 have a principal diagnosis that reflects a finding of neoplastic disease as defined in paragraph (f)(1)(iv) of this section.

(3) *Calculation of average length of stay.* The average Medicare inpatient length of stay is calculated—

(i) By dividing the number of total Medicare inpatient days (less leave or pass days) by the number of total Medicare discharges for the hospital's most recent complete cost reporting period;

(ii) If a change in the hospital's Medicare average length of stay is indicated, by the same method for the immediately preceding 6-month period; or

(iii) If a hospital has undergone a change of ownership (as described in § 489.18 of this chapter) at the start of a cost reporting period or at any time within the preceding 6 months, the hospital may be excluded from the prospective payment system as a long-term care hospital for a cost reporting period if, for the 6 months immediately preceding the start of the period (including time before the change of ownership), the hospital has the required Medicare average length of stay, continuously operated as a hospital, and continuously participated as a hospital in Medicare.

(4) *Definition of new long-term care hospital.* For purposes of payment under the long-term care hospital prospective payment system under Subpart O of this part, a new long-term care hospital is a provider of inpatient hospital services that meets the qualifying criteria in paragraphs (e)(1) and (e)(2) of this section and, under present or previous ownership (or both), has not received payment as a long-term care hospital for discharges occurring prior to October 1, 2002.

\* \* \* \* \*

**Subpart H—Payments to Hospitals Under the Prospective Payment Systems**

6. In § 412.116, the heading of paragraph (a) is revised and a new paragraph (a)(4) is added to read as follows:

**§ 412.116 Method of payment.**

(a) *General rules.* \* \* \*

(4) For cost reporting periods beginning on or after October 1, 2002, payments for inpatient hospital services furnished by a long-term care hospital that meets the conditions for payment of §§ 412.505 through 412.511 are made as described in § 412.521.

\* \* \* \* \*

7. A new subpart O is added to read as follows:

**Subpart O—Prospective Payment System for Long-Term Care Hospitals**

- Sec.
- 412.500 Basis and scope of subpart.
  - 412.503 Definitions.
  - 412.505 Conditions for payment under the prospective payment system for long-term care hospitals.
  - 412.507 Limitation on charges to beneficiaries.
  - 412.508 Medical review requirements.
  - 412.509 Furnishing of inpatient hospital services directly or under arrangement.
  - 412.511 Reporting and recordkeeping requirements.
  - 412.513 Patient classification system.
  - 412.515 LTC-DRG weighting factors.
  - 412.517 Revision of LTC-DRG group classifications and weighting factors.
  - 412.521 Basis of payment.
  - 412.523 Methodology for calculating the Federal prospective payment rates.
  - 412.525 Adjustments to the Federal prospective payment.
  - 412.527 Special payment provisions for very short-stay discharges.
  - 412.529 Special payment provisions for short-stay outliers.
  - 412.531 Special payment provisions when an interruption of a stay occurs in a long-term care hospital.
  - 412.532 Special payment provisions for patients who are transferred to onsite providers and readmitted to a long-term care hospital.
  - 412.533 Transition payments.

412.535 Publication of the Federal prospective payment rates.

412.541 Method of payment under the long-term care hospital prospective payment system.

### Subpart O—Prospective Payment System for Long-Term Care Hospitals

#### § 412.500 Basis and scope of subpart.

(a) *Basis.* This subpart implements section 123 of Public Law 106–113, which provides for the implementation of a prospective payment system for long-term care hospitals described in section 1886(d)(1)(B)(iv) of the Act. This subpart also reflects the provisions of section 307 of Public Law 106–554, which state that the Secretary shall examine and may provide for appropriate adjustments to that system, including adjustments to DRG weights, area wage adjustments, geographic reclassification, outliers, updates, and disproportionate share adjustments consistent with section 1886(d)(5)(F) of the Act.

(b) *Scope.* This subpart sets forth the framework for the prospective payment system for long-term care hospitals, including the methodology used for the development of payment rates and associated adjustments and related rules. Under this system, for cost reporting periods beginning on or after October 1, 2002, payment for the operating and capital-related costs of inpatient hospital services furnished by long-term care hospitals is made on the basis of prospectively determined rates and applied on a per discharge basis.

#### § 412.503 Definitions.

As used in this subpart—

*CMS* stands for the Centers for Medicare & Medicaid Services.

*Discharge.* A Medicare patient in a long-term care hospital is considered discharged when—

- (1) The patient is formally released;
- (2) The patient stops receiving Medicare-covered long-term care services; or
- (3) The patient dies in the long-term care facility.

*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.

*Outlier payment* means an additional payment beyond the standard Federal prospective payment for cases with unusually high costs.

*PRO* stands for the Utilization and Quality Control Peer Review Organization.

#### § 412.505 Conditions for payment under the prospective payment system for long-term care hospitals.

(a) *Long-term care hospitals subject to the prospective payment system.* To be eligible to receive payment under the prospective payment system specified in this subpart, a long-term care hospital must meet the criteria to be classified as a long-term care hospital set forth in § 412.23(e) for exclusion from the inpatient hospital prospective payment systems specified in § 412.1(a)(1). This condition is subject to the special payment provisions of § 412.22(c), the provisions on change in hospital status of § 412.22(d), the provisions related to hospitals-within-hospitals under § 412.22(e), and the provisions related to satellite facilities under § 412.22(h).

(b) *General requirements.* (1) Effective for cost reporting periods beginning on or after October 1, 2002, a long-term care hospital must meet the conditions for payment of this section and §§ 412.507 through 412.511 to receive payment under the prospective payment system described in this subpart for inpatient hospital services furnished to Medicare beneficiaries.

(2) If a long-term care hospital fails to comply fully with these conditions for payment with respect to inpatient hospital services furnished to one or more Medicare beneficiaries, CMS may withhold (in full or in part) or reduce Medicare payment to the hospital.

#### § 412.507 Limitation on charges to beneficiaries.

(a) *Prohibited charges.* Except as provided in paragraph (b) of this section, a long-term care hospital may not charge a beneficiary for any services for which payment is made by Medicare, even if the hospital's costs of furnishing services to that beneficiary are greater than the amount the hospital is paid under the prospective payment system.

(b) *Permitted charges.* A long-term care hospital that receives payment under this subpart for a covered hospital stay (that is, a stay that includes at least one covered day) may charge the Medicare beneficiary or other person only for the applicable deductible and coinsurance amounts under §§ 409.82, 409.83, and 409.87 of this subchapter, and for items and services as specified under § 489.20(a) of this chapter.

#### § 412.508 Medical review requirements.

(a) *Admission and quality review.* A long-term care hospital must have an agreement with a PRO to have the PRO review, on an ongoing basis, the following:

(1) The medical necessity, reasonableness, and appropriateness of hospital admissions and discharges.

(2) The medical necessity, reasonableness, and appropriateness of inpatient hospital care for which additional payment is sought under the outlier provisions of §§ 412.523(d)(1) and 412.525(a).

(3) The validity of the hospital's diagnostic and procedural information.

(4) The completeness, adequacy, and quality of the services furnished in the hospital.

(5) Other medical or other practices with respect to beneficiaries or billing for services furnished to beneficiaries.

(b) *Physician acknowledgement.*

Because payment under the long-term care hospital prospective payment system is based in part on each patient's principal and secondary diagnoses and major procedures performed, as evidenced by the physician's entries in the patient's medical record, physicians must complete an acknowledgement statement to this effect.

(1) *Content of physician acknowledgement statement.* When a claim is submitted, the hospital must have on file a signed and dated acknowledgement from the attending physician that the physician has received the following notice:

Notice to Physicians: Medicare payment to hospitals is based in part on each patient's principal and secondary diagnoses and the major procedures performed on the patient, as attested to by the patient's attending physician by virtue of his or her signature in the medical record. Anyone who misrepresents, falsifies, or conceals essential information required for payment of Federal funds, may be subject to fine, imprisonment, or civil penalty under applicable Federal laws.

(2) *Completion of acknowledgement.*

The acknowledgement must be completed by the physician at the time that the physician is granted admitting privileges at the hospital, or before or at the time the physician admits his or her first patient. Existing acknowledgements signed by physicians already on staff remain in effect as long as the physician has admitting privileges at the hospital.

(c) *Denial of payment as a result of admissions and quality review.* (1) If CMS determines, on the basis of information supplied by a PRO that a hospital has misrepresented admissions, discharges, or billing information, or has taken an action that results in the unnecessary admission of an individual entitled to benefits under Part A, unnecessary multiple admissions of an individual, or other inappropriate medical or other practices with respect to beneficiaries or billing for services

furnished to beneficiaries, CMS may, as appropriate—

(i) Deny payment (in whole or in part) under Part A with respect to inpatient hospital services provided for an unnecessary admission or subsequent readmission of an individual; or

(ii) Require the hospital to take other corrective action necessary to prevent or correct the inappropriate practice.

(2) When payment with respect to admission of an individual patient is denied by a PRO under paragraph (c)(1) of this section, and liability is not waived in accordance with §§ 411.400 through 411.402 of this chapter, notice and appeals are provided under procedures established by CMS to implement the provisions of section 1155 of the Act, Right to Hearing and Judicial Review.

(3) A determination under paragraph (c)(1) of this section, if it is related to a pattern of inappropriate admissions and billing practices that has the effect of circumventing the prospective payment system, is referred to the Department's Office of Inspector General for handling in accordance with § 1001.301 of this title.

**§ 412.509 Furnishing of inpatient hospital services directly or under arrangement.**

(a) Subject to the provisions of § 412.521(b), the applicable payments made under this subpart are payment in full for all inpatient hospital services, as defined in § 409.10 of this chapter. Inpatient hospital services do not include the following:

(1) Physicians' services that meet the requirements of § 415.102(a) of this subchapter for payment on a fee schedule basis.

(2) Physician assistant services, as defined in section 1861(s)(2)(K)(i) of the Act.

(3) Nurse practitioners and clinical nurse specialist services, as defined in section 1861(s)(2)(K)(ii) of the Act.

(4) Certified nurse midwife services, as defined in section 1861(gg) of the Act.

(5) Qualified psychologist services, as defined in section 1861(ii) of the Act.

(6) Services of an anesthetist, as defined in § 410.69 of this subchapter.

(b) Medicare does not pay any provider or supplier other than the long-term care hospital for services furnished to a Medicare beneficiary who is an inpatient of the hospital except for services described in paragraphs (a)(1) through (a)(6) of this section.

(c) The long-term care hospital must furnish all necessary covered services to the Medicare beneficiary who is an inpatient of the hospital either directly or under arrangements (as defined in § 409.3 of this subchapter).

**§ 412.511 Reporting and recordkeeping requirements.**

A long-term care hospital participating in the prospective payment system under this subpart must meet the recordkeeping and cost reporting requirements of §§ 413.20 and 413.24 of this subchapter.

**§ 412.513 Patient classification system.**

(a) *Classification methodology.* CMS classifies specific inpatient hospital discharges from long-term care hospitals by long-term care diagnosis-related groups (LTC-DRGs) to ensure that each hospital discharge is appropriately assigned based on essential data abstracted from the inpatient bill for that discharge.

(b) *Assignment of discharges to LTC-DRGs.* (1) The classification of a particular discharge is based, as appropriate, on the patient's age, sex, principal diagnosis (that is, the diagnosis established after study to be chiefly responsible for causing the patient's admission to the hospital), secondary diagnoses, procedures performed, and the patient's discharge status.

(2) Each discharge from a long-term care hospital is assigned to only one LTC-DRG (related, except as provided in paragraph (b)(3) of this section, to the patient's principal diagnosis), regardless of the number of conditions treated or services furnished during the patient's stay.

(3) When the discharge data submitted by a hospital show a surgical procedure unrelated to a patient's principal diagnosis, the bill is returned to the hospital for validation and reverification. The LTC-DRG classification system provides a LTC-DRG, and an appropriate weighting factor, for those cases for which none of the surgical procedures performed are related to the principal diagnosis.

(c) *Review of LTC-DRG assignment.* (1) A hospital has 60 days after the date of the notice of the initial assignment of a discharge to a LTC-DRG to request a review of that assignment. The hospital may submit additional information as a part of its request.

(2) The intermediary reviews that hospital's request and any additional information and decides whether a change in the LTC-DRG assignment is appropriate. If the intermediary decides that a different LTC-DRG should be assigned, the case will be reviewed by the appropriate PRO as specified in § 476.71(c)(2) of this chapter.

(3) Following the 60-day period described in paragraph (c)(1) of this section, the hospital may not submit additional information with respect to

the DRG assignment or otherwise revise its claim.

**§ 412.515 LTC-DRG weighting factors.**

(a) *General.* For each LTC-DRG, CMS assigns an appropriate weight that reflects the estimated relative cost of hospital resources used within that group compared to discharges classified within other groups.

(b) *Very short-stay discharges.* CMS determines a weighting factor or factors for discharges of Medicare patients from a long-term care hospital after a very short stay in accordance with § 412.527.

**§ 412.517 Revision of LTC-DRG group classifications and weighting factors.**

CMS adjusts the classifications and weighting factors annually to reflect changes in—

- (a) Treatment patterns;
- (b) Technology;
- (c) Number of discharges; and
- (d) Other factors affecting the relative use of hospital resources.

**§ 412.521 Basis of payment.**

(a) *Method of payment.* (1) Under the prospective payment system, long-term care hospitals receive a predetermined payment amount per discharge for inpatient services furnished to Medicare beneficiaries.

(2) The amount of payment under the prospective payment system is based on the Federal payment rate established in accordance with § 412.523, including adjustments described in § 412.525, and, if applicable during a transition period, on a blend of the Federal payment rate and the cost-based reimbursement rate described in § 412.533.

(b) *Payment in full.* (1) The payment made under this subpart represents payment in full (subject to applicable deductibles and coinsurance described in subpart G of part 409 of this subchapter) for inpatient operating costs as described in § 412.2(c) and capital-related costs described in subpart G of part 413 of this subchapter associated with furnishing Medicare covered services in long-term care hospitals.

(2) In addition to payment based on prospective payment rates, long-term care hospitals may receive payments separate from payments under the prospective payment system for the following:

(i) The costs of approved medical education programs described in §§ 413.85 and 413.86 of this subchapter.

(ii) Bad debts of Medicare beneficiaries, as provided in § 413.80 of this subchapter.

(iii) A payment amount per unit for blood clotting factor provided to Medicare inpatients who have hemophilia.

(iv) Anesthesia services furnished by hospital employed nonphysician anesthetists or obtained under arrangements, as specified in § 412.113(c)(2).

(v) The costs of photocopying and mailing medical records requested by a PRO, in accordance with § 476.78(c) of this chapter.

(c) *Payment by workers' compensation, automobile medical, no-fault or liability insurance or an employer group health plan primary to Medicare.* If workers' compensation, automobile medical, no-fault, or liability insurance or an employer group health plan that is primary to Medicare pays in full or in part, payment is determined in accordance with the guidelines specified in § 412.120(b).

(d) *Effect of change of ownership on payments under the prospective payment system.* When a hospital's ownership changes, as described in § 489.18 of this chapter, the following rules apply:

(1) Payment for the operating and capital-related costs of inpatient hospital services for each patient, including outlier payments as provided in § 412.525 and payments for hemophilia clotting factor costs as provided in paragraph (b)(2)(iii) of this section, are made to the entity that is the legal owner on the date of discharge. Payments are not prorated between the buyer and seller.

(i) The owner on the date of discharge is entitled to submit a bill for all inpatient hospital services furnished to a beneficiary regardless of when the beneficiary's coverage began or ended during a stay, or of how long the stay lasted.

(ii) Each bill submitted must include all information necessary for the intermediary to compute the payment amount, whether or not some of that information is attributable to a period during which a different party legally owned the hospital.

(2) Other payments for approved medical education programs, bad debts, anesthesia services furnished by hospital employed nonphysician anesthetists, and costs of photocopying and mailing medical records to the PRO as provided for under paragraphs (b)(2)(i), (ii), (iv), and (v) of this section are made to each owner or operator of the hospital (buyer and seller) in accordance with the principles of reasonable cost reimbursement.

**§ 412.523 Methodology for calculating the Federal prospective payment rates.**

(a) *Data used.* To calculate the initial prospective payment rates for inpatient

hospital services furnished by long-term care hospitals, CMS uses—

(1) The best Medicare data available; and

(2) A rate of increase factor to adjust for the most recent estimate of increases in the prices of an appropriate market basket of goods and services included in covered inpatient long-term care hospital services.

(b) *Determining the average costs per discharge for FY 2003.* CMS determines the average inpatient operating and capital-related costs per discharge for which payment is made to each inpatient long-term care hospital using the available data under paragraph (a)(1) of this section. The cost per discharge is adjusted to FY 2003 by a rate of increase factor, described in paragraph (a)(2) of this section, under the update methodology described in section 1886(b)(3)(B)(ii) of the Act for each year.

(c) *Determining the Federal prospective payment rates.*

(1) *General.* The Federal prospective payment rates will be established using a standard payment amount referred to as the standard Federal rate. The standard Federal rate is a standardized payment amount based on average costs from a base year that reflects the combined aggregate effects of the weighting factors and other adjustments.

(2) *Update the cost per discharge.* CMS applies the increase factor described in paragraph (a)(2) of this section to each hospital's cost per discharge determined under paragraph (b) of this section to compute the cost per discharge for FY 2003. Based on the updated cost per discharge, CMS estimates the payments that would have been made to each hospital for FY 2003 under Part 413 of this chapter without regard to the prospective payment system implemented under this subpart.

(3) *Computation of the standard Federal rate.* The standard Federal rate is computed as follows:

(i) *For FY 2003.* Based on the updated costs per discharge and estimated payments for FY 2003 determined in paragraph (c)(2) of this section, CMS computes a standard Federal rate for FY 2003 that reflects, as appropriate, the adjustments described in paragraph (d) of this section.

(ii) *For fiscal years after FY 2003.* The standard Federal rate for fiscal years after FY 2003 will be the standard Federal rate for the previous fiscal year, updated by the increase factor described in paragraph (a)(2) of this section, and adjusted as appropriate as described in paragraph (d) of this section.

(4) *Determining the Federal prospective payment rate for each LTC-DRG.* The Federal prospective payment

rate for each LTC-DRG is the product of the weighting factors described in § 412.515 and the standard Federal rate described in paragraph (c)(3) of this section.

(d) *Adjustments to the standard Federal rate.* The standard Federal rate described in paragraph (c)(3) of this section will be adjusted for—

(1) *Outlier payments.* CMS adjusts the standard Federal rate by a reduction factor of 8 percent, the estimated proportion of outlier payments under the long-term care hospital prospective payment system, as described in § 412.525(a).

(2) *Budget neutrality.* CMS adjusts the Federal prospective payment rates for FY 2003 so that aggregate payments under the prospective payment system are estimated to equal the amount that would have been made to long-term care hospitals under Part 413 of this subchapter without regard to the prospective payment system implemented under this subpart.

(3) The Secretary will review payments under this prospective payment system and will make a one-time prospective adjustment to the LTCH prospective payment system rates by October 1, 2006 so that the effect of any significant difference between actual payments and estimated payments for the first year of the LTCH prospective payment system is not perpetuated in the prospective payment rates for future years.

(e) *Calculation of the adjusted Federal prospective payment.* For each discharge, a long-term care hospital's Federal prospective payment is computed on the basis of the Federal prospective payment rate multiplied by the relative weight of the LTC-DRG assigned for that discharge. A hospital's Federal prospective payment rate will be adjusted, as appropriate, to account for outliers and other factors as specified in § 412.525.

**§ 412.525 Adjustments to the Federal prospective payment.**

(a) *Adjustments for high-cost outliers.* CMS provides for an additional payment to a long-term care hospital if its estimated costs for a patient exceeds the adjusted LTC-DRG plus a fixed-loss amount. For each fiscal year, CMS determines a fix-loss amount that is the maximum loss that a hospital can incur under the prospective payment system for a case with unusually high costs before the hospital will receive any additional payments. The additional payment equals 80 percent of the difference between the estimated cost of the patient case and the sum of the adjusted Federal prospective payment

for the LTC-DRG and the fixed-loss amount.

(b) *Adjustments for Alaska and Hawaii.* CMS adjusts the Federal prospective payment for the effects of a higher cost of living for hospitals located in Alaska and Hawaii.

(c) *Special payment provisions.* CMS adjusts the Federal prospective payment to account for—

- (1) Very short-stay discharges, as provided for in § 412.527;
- (2) Short-stay outliers, as provided for in § 412.529; and
- (3) Interruption of a stay, as provided for in § 412.531.

**§ 412.527 Special payment provision for very short-stay discharges.**

(a) *Very short-stay discharge defined.* A “very short-stay discharge” means a case that has a length of stay in a long-term care hospital of 7 days or fewer.

(b) *Adjustment to payment.* CMS adjusts the Federal prospective payment for very short-stay discharges, as defined in paragraph (a) of this section.

(c) *Method for determining payment.*

(1) Payment for a very short-stay discharge will be made on a per diem methodology according to the primary diagnosis of the discharge under either—

- (i) A LTC-DRG psychiatric category; or
- (ii) A LTC-DRG nonpsychiatric category.

(2) Each per diem amount is determined by dividing the Federal payment rate of the applicable LTC-DRG category specified in paragraph (c)(1)(i) or (c)(1)(ii) of this section (that is, Federal payment rate x the LTC-DRG weight) by seven.

**§ 412.529 Special payment provision for short-stay outliers.**

(a) *Short-stay outlier defined.* “Short-stay outlier” means a discharge with a length of stay in a long-term care hospital that is between 8 days and two-thirds of the arithmetic average length of stay for each LTC-DRG.

(b) *Adjustment to payment.* CMS adjusts the hospital’s Federal prospective payment to account for any case that is determined to be a short-stay outlier, as defined in paragraph (a) of this section, under the methodology specified in paragraph (c) of this section.

(c) *Method for determining the payment amount.* (1) The payment amount for a short-stay outlier is the least of the following amounts:

- (i) 150 percent of the LTC-DRG specific per diem amount determined under paragraph (c)(2) of this section multiplied by the length of stay of the discharge;

(ii) 150 percent of the cost of the case determined under paragraph (c)(3) of this section; or

(iii) The full Federal prospective payment for the LTC-DRG (the Federal payment rate x LTC-DRG weight).

(2) CMS calculates a per diem amount for short-stay outliers for each LTC-DRG by dividing the standard Federal payment rate (the Federal payment rate x LTC-DRG weight) by the arithmetic mean length of stay of the specific LTC-DRG.

(3) To determine the cost of a case, CMS uses the hospital-specific cost-to-charge ratio and the Medicare allowable charges for the case.

**§ 412.531 Special payment provisions when an interruption of a stay occurs in a long-term care hospital.**

(a) *Interruption of a stay defined.* “Interruption of a stay” means a stay at a long-term care hospital during which a Medicare inpatient is transferred upon discharge to an acute care hospital, an IRF, or a SNF for treatment or services that are not available in the long-term care hospital and returns to the same long-term care hospital within the applicable period specified in paragraphs (a)(1) through (a)(3) of this section.

(1) For a discharge to an acute care hospital, the applicable period is the number of days that is equal to one standard deviation beyond the average length of stay for the DRG assigned for the acute care inpatient hospital stay. The counting of those days begins on the day of discharge from the long-term care hospital and ends on the day the patient is readmitted to the long-term care hospital.

(2) For a discharge to an IRF, the applicable period is the number of days that is equal to one standard deviation beyond the average length of stay for the combination of the CMG and comorbidity tier for the IRF stay. The counting of those days begins on the day of discharge from the long-term care hospital and ends on the day that the patient is readmitted to the long-term care hospital.

(3) For a discharge to a SNF, the applicable period is 45 days, that is, the number of days that is equal to one standard deviation beyond the average length of stay for all Medicare SNF patients. The counting of those days begins on the day of discharge from the long-term care hospital and ends with the 45th day after the discharge.

(b) *Methods of determining payments.* (1) For purposes of determining a Federal prospective payment, any stay in a long-term care hospital that involves an interruption of the stay will

be paid as a single discharge from the long-term care hospital. The number of days that a beneficiary spends in an acute care hospital, an IRF, or a SNF during an interruption of stay at a long-term care hospital is not included in determining the length of stay of the patient at the long-term care hospital. CMS will make only one LTC-DRG payment for all portions of a long-term care stay that involves an interruption of a stay. In accordance with § 412.513(b), payment will be based on the patient’s LTC-DRG which would be determined by the principal diagnosis which is the condition established after study to be chiefly responsible for occasioning the first admission of the patient to the hospital for care.

(2) If the total number of days of a patient’s length of stay in a long-term care hospital prior to and following an interruption of a stay is 7 days or less, CMS will make a Federal prospective payment for a very short stay discharge in accordance with § 412.527(c).

(3) If the total number of days of a patient’s length of stay in a long-term care hospital prior to and following an interruption of a stay is between 8 days and two-thirds the average length of stay of the LTC-DRG, CMS will make a Federal prospective payment for a short-stay outlier in accordance with § 412.529(c).

(4) If the total number of days of a patient’s length of stay in a long-term care hospital prior to and following an interruption of a stay exceeds two-thirds of the average length of stay for the LTC-DRG, CMS will make one full Federal LTC-DRG prospective payment for the case. An additional payment will be made if the patient’s stay qualifies as a high-cost outlier, as set forth in § 412.525(a).

(5) Notwithstanding the provisions of paragraph (a) of this section, if a patient who has been discharged from a long-term care hospital to another facility and is readmitted to the long-term care hospital for additional treatment or services in the long-term care hospital following the stay at the other facility, the subsequent admission to the long-term care hospital is considered a new stay, even if the case is determined to fall into the same LTC-DRG, and the long-term care hospital will receive two separate Federal prospective payments if one of the following conditions are met:

(i) The patient has a length of stay in the acute care hospital that exceeds one standard deviation from the average length of stay for the inpatient hospital DRG;

(ii) The patient has a length of stay in the IRF that exceeds one standard

deviation from the average length of stay for the combination of CMG and the comorbidity tier; or

(iii) The patient has a length of stay in the SNF that exceeds 45 days (one standard deviation from the average length of stay for all Medicare SNF patients).

(c) *Payments to an acute care hospital, an IRF, or a SNF during an interruption of stay.* (1) Payment to the acute care hospital for the acute care hospital stay following discharge from the long-term care hospital will be paid in accordance with the acute care hospital inpatient prospective payment systems specified in § 412.1(a)(1).

(2) Payment to an IRF for the IRF stay following a discharge from the long-term care hospital will be paid in accordance with the IRF prospective payment system specified in § 412.624 of Subpart P of this part.

(3) Payment to a SNF for the SNF stay following a discharge from the long-term care hospital will be paid in accordance with the SNF prospective payment system specified in subpart J of Part 413 of this subchapter.

**§ 412.532 Special payment provisions for patients who are transferred to onsite providers and readmitted to a long-term care hospital.**

(a) The policies set forth in this section apply in the following situations:

(1) A long-term care hospital (including a satellite facility) that is co-located within an onsite acute care hospital, an onsite IRF, or an onsite psychiatric facility or unit that meets the definition of a hospital-within-a-hospital under § 412.22(e).

(2) A satellite facility, as defined in § 412.22(e), that is co-located with the long-term care hospital.

(3) A SNF, as defined in section 1819(a) of the Act, that is co-located with the long-term care hospital.

(b) If, during a cost reporting period, a long-term care hospital (including a satellite facility) discharges patients to an acute care hospital co-located with the long-term care hospital, as described in paragraph (a) of this section, and subsequently directly readmits more than 5 percent (that is, in excess of 5.0 percent) of the total number of its Medicare inpatients discharged from that acute care hospital, the discharge to the co-located acute care hospital and the readmission to the long-term care hospital will be treated as one discharge and one LTC-DRG payment will be made on the basis of the patient's initial principal diagnosis.

(c) If, during a cost reporting period, a long-term care hospital (including a

satellite facility) discharges patients to an onsite IRF, an onsite psychiatric hospital or unit, or an onsite SNF, as described in paragraph (a) of this section, and subsequently directly readmits more than 5 percent (that is, in excess of 5.0 percent) of the total number of its Medicare inpatients discharged from the onsite IRF, the onsite psychiatric hospital or unit, or the onsite SNF, a discharge to any of these providers and a readmission to the LTCH will be treated as one discharge and one LTC-DRG payment will be made on the basis of the patient's initial principal diagnosis.

(d) For purposes of calculating the payment per discharge, payment for the entire stay at the long-term care hospital will be paid as a full LTC-DRG payment under § 412.523, a very short-stay discharge under § 412.527, or a short-stay outlier under § 412.529, depending on the duration of the entire stay.

(e) If the long-term care hospital does not meet the 5-percent thresholds specified under paragraph (b) or (c) of this section for discharges to the specified onsite providers and readmissions to the long-term care hospital during a cost reporting period, payment under the long-term care prospective payment system will be made, where applicable, under the policies on interruption of a stay as specified in § 412.531.

(f) Payment to the onsite acute care hospital, the onsite IRF, the onsite psychiatric hospital or unit, and the onsite SNF for a beneficiary's stay in the specified onsite providers is subject to the applicable payment policies, including outliers and transfers, under the acute care hospital inpatient prospective payment system, the IRF prospective payment system, the SNF prospective payment system, or the excluded psychiatric hospital or unit cost-based reimbursement payment system, as appropriate.

(g) In determining whether a patient has previously been discharged and then admitted, all prior discharges are considered, even if the discharge occurs late in one cost reporting period and the readmission occurs late in next cost reporting period.

**§ 412.533 Transition payments.**

(a) *Duration of transition periods.* Except for a long-term care hospital that makes an election under paragraph (b) of this section or for a long-term care hospital that is defined as new under § 412.23(e)(4), for cost reporting periods beginning on or after October 1, 2002, and before October 1, 2006, a long-term care hospital receives a payment comprised of a blend of the adjusted

Federal prospective payment as determined under § 412.523, and the payment determined under the cost-based reimbursement rules under Part 413 of this subchapter.

(1) For cost reporting periods beginning on or after October 1, 2002 and before October 1, 2003, payment is based on 20 percent of the Federal prospective payment rate and 80 percent of the cost-based reimbursement rate.

(2) For cost reporting periods beginning on or after October 1, 2003 and before October 1, 2004, payment is based on 40 percent of the Federal prospective payment rate and 60 percent of the cost-based reimbursement rate.

(3) For cost reporting periods beginning on or after October 1, 2004 and before October 1, 2005, payment is based on 60 percent of the Federal prospective payment rate and 40 percent of the cost-based reimbursement rate.

(4) For cost reporting periods beginning on or after October 1, 2005 and before October 1, 2006, payment is based on 80 percent of the Federal prospective payment rate and 20 percent of the cost-based reimbursement rate.

(5) For cost reporting periods beginning on or after October 1, 2006, payment is based entirely on the adjusted Federal prospective payment rate.

(b) *Election not to be paid under the transition period methodology.* A long-term care hospital may elect to be paid based on 100 percent of the Federal prospective rate at the start of any of its cost reporting periods during the 5-year transition periods specified in paragraph (a) of this section. Once a long-term care hospital elects to be paid based on 100 percent of the Federal prospective payment rate, it may not revert to the transition blend.

(1) *General requirement.* A long-term care hospital must request the election under this paragraph (b) no later than 30 days before the beginning of the hospital's cost reporting period in each applicable fiscal year beginning on or after October 1, 2003 and before October 1, 2006.

(2) *Notification requirement to make election.* The request by the long-term care hospital to make the election under this paragraph (b) must be made in writing to the Medicare fiscal intermediary. The intermediary must receive the request on or before the 30th day before the applicable cost reporting period begins, regardless of any postmarks or anticipated delivery dates. Requests received, postmarked, or



delivered by other means after the 30th day before the cost reporting period begins will not be approved. If the 30th day before the cost reporting begins falls on a day that the postal service or other delivery sources are not open for business, the long-term care hospital is responsible for allowing sufficient time for the delivery of the request before the deadline. If a long-term care hospital's request is not received or not approved, payment will be based on the transition period rates specified in paragraphs (a)(1) through (a)(5) of this section.

(c) *Payments to new long-term care hospitals.* A new long-term care hospital, as defined in § 412.23(e)(4), will be paid based on 100 percent of the standard Federal rate, as described in § 412.523, with no transition payments, as described in § 412.533.

**§ 412.535 Publication of the Federal prospective payment rates.**

CMS publishes information pertaining to the long-term care hospital prospective payment system effective for each fiscal year in the **Federal Register**. This information includes the unadjusted Federal payment rates, the LTC-DRG classification system and associated weighting factors, and a description of the methodology and data used to calculate the payment rates. This information is published on or before August 1 prior to the beginning of each fiscal year.

**§ 412.541 Method of payment under the long-term care hospital prospective payment system.**

(a) *General rule.* Subject to the exceptions in paragraphs (b) and (c) of this section, long-term care hospitals receive payment under this subpart for inpatient operating costs and capital-related costs for each discharge only following submission of a discharge bill.

(b) *Periodic interim payments—(1) Criteria for receiving periodic interim payments.* (i) A long-term care hospital receiving payment under this subpart may receive periodic interim payments (PIP) for Part A services under the PIP method subject to the provisions of § 413.64(h) of this subchapter.

(ii) To be approved for PIP, the long-term care hospital must meet the qualifying requirements in § 413.64(h)(3) of this subchapter.

(iii) As provided in § 413.64(h)(5) of this subchapter, intermediary approval is conditioned upon the intermediary's best judgment as to whether payment can be made under the PIP method without undue risk of its resulting in an overpayment to the provider.

(2) *Frequency of payment.* (i) For long-term care hospitals approved for

PIP and paid solely under Federal prospective payment system rates under § 412.533(b), the intermediary estimates the long-term care hospital's Federal prospective payments net after estimated beneficiary deductibles and coinsurance and makes biweekly payments equal to  $\frac{1}{26}$  of the total estimated amount of payment for the year.

(ii) For long-term care hospitals approved for PIP and paid using the blended payment schedule specified in § 412.533(a) for cost reporting periods beginning on or after October 1, 2002, and before October 1, 2006, the intermediary estimates the hospital's portion of the Federal prospective payments net and the hospital's portion of the reasonable cost-based reimbursement payments net, after beneficiary deductibles and coinsurance, in accordance with the blended transition percentages specified in § 412.533(a), and makes biweekly payments equal to  $\frac{1}{26}$  of the total estimated amount of both portions of payments for the year.

(iii) If the long-term care hospital has payment experience under the prospective payment system, the intermediary estimates PIP based on that payment experience, adjusted for projected changes supported by substantiated information for the current year.

(iv) Each payment is made 2 weeks after the end of a biweekly period of service as described in § 413.64(h)(6) of this subchapter.

(v) The interim payments are reviewed at least twice during the reporting period and adjusted if necessary. Fewer reviews may be necessary if a hospital receives interim payments for less than a full reporting period. These payments are subject to final settlement.

(3) *Termination of PIP—(i) Request by the hospital.* Subject to paragraph (b)(1)(iii) of this section, a long-term care hospital receiving PIP may convert to receiving prospective payments on a non-PIP basis at any time.

(ii) *Removal by the intermediary.* An intermediary terminates PIP if the long-term care hospital no longer meets the requirements of § 413.64(h) of this subchapter.

(c) *Interim payments for Medicare bad debts and for Part A costs not paid under the prospective payment system.* For Medicare bad debts and for the costs of an approved education program, blood clotting factors, anesthesia services furnished by hospital-employed nonphysician anesthetists or obtained under arrangement, and photocopying and mailing medical records to a PRO,

which are costs paid outside the prospective payment system, the intermediary determines the interim payments by estimating the reimbursable amount for the year based on the previous year's experience, adjusted for projected changes supported by substantiated information for the current year, and makes biweekly payments equal to  $\frac{1}{26}$  of the total estimated amount. Each payment is made 2 weeks after the end of the biweekly period of service as described in § 413.64(h)(6) of this subchapter. The interim payments are reviewed at least twice during the reporting period and adjusted if necessary. Fewer reviews may be necessary if a long-term care hospital receives interim payments for less than a full reporting period. These payments are subject to final cost settlement.

(d) *Outlier payments.* Additional payments for outliers are not made on an interim basis. The outlier payments are made based on the submission of a discharge bill and represent final payment.

(e) *Accelerated payments—(1) General rule.* Upon request, an accelerated payment may be made to a long-term care hospital that is receiving payment under this subpart and is not receiving PIP under paragraph (b) of this section if the hospital is experiencing financial difficulties because of the following:

(i) There is a delay by the intermediary in making payment to the long-term care hospital.

(ii) Due to an exceptional situation, there is a temporary delay in the hospital's preparation and submittal of bills to the intermediary beyond its normal billing cycle.

(2) *Approval of payment.* A request by a long-term care hospital for an accelerated payment must be approved by the intermediary and by CMS.

(3) *Amount of payment.* The amount of the accelerated payment is computed as a percentage of the net payment for unbilled or unpaid covered services.

(4) *Recovery of payment.* Recovery of the accelerated payment is made by recoupment as long-term care hospital bills are processed or by direct payment by the long-term care hospital.

B. Part 413 is amended as set forth below:

**PART 413—PRINCIPLES OF REASONABLE COST REIMBURSEMENT; PAYMENT FOR END-STAGE RENAL DISEASE SERVICES; PROSPECTIVELY DETERMINED PAYMENT FOR SKILLED NURSING FACILITIES**

1. The authority citation for Part 413 continues 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, 13951(a), (i), and (n), 1395x(v), 1395hh, 1395rr, 1395tt, and 1395ww).

**Subpart A—Introduction and General Rules**

- 2. Section 413.1 is amended by:
a. Revising paragraph (d)(2)(ii).
b. Adding paragraphs (d)(2)(vi) and (d)(2)(vii).

**§ 413.1 Introduction.**

\* \* \* \* \*

- (d) \* \* \*
(2) \* \* \*

(ii) Payment to children's and psychiatric hospitals (as well as separate psychiatric units (distinct parts) of short-term general hospitals) that are excluded from the prospective payment systems under subpart B of part 412 of this subchapter and hospitals outside the 50 states and the District of Columbia is on a reasonable cost basis, subject to the provisions of § 413.40.

\* \* \* \* \*

(vi) For cost reporting periods beginning before October 1, 2002, payment to long-term care hospitals that are excluded under subpart B of part 412 of this subchapter from the prospective payment systems is on a reasonable cost basis, subject to the provisions of § 413.40.

(vii) For cost reporting periods beginning on or after October 1, 2002, payment to the long-term hospitals that meet the condition for payment of §§ 412.505 through 412.511 of this subchapter is based on prospectively determined rates under subpart O of part 412 of this subchapter.

\* \* \* \* \*

**Subpart C—Limits on Cost Reimbursement**

- 3. Section 413.40 is amended by:
a. Republishing the introductory text of paragraph (a)(2)(i).
b. Adding a new paragraph (a)(2)(i)(D).
c. Amending paragraph (a)(2)(ii) by republishing the introductory text, removing "and" at the end of paragraph (a)(2)(ii)(A), adding "and" at the end of

paragraph (a)(2)(ii)(B), and adding a new paragraph (a)(2)(ii)(C).

d. Adding a new paragraph (a)(2)(iv).

**§ 413.40 Ceiling on the rate of increase in hospital inpatient cost.**

(a) *Introduction.* \* \* \*

(2) *Applicability.* (i) This section is not applicable to—

\* \* \* \* \*

(D) Long-term care hospitals, as defined in section 1886(d)(1)(B)(iv) of the Act, that are paid based on 100 percent of the Federal prospective payment rate for inpatient hospital services in accordance with section 123 of Public Law 106-113 and section 307 of Public Law 106-554 and § 412.533 (b) and (c) of subpart O of part 412 of this subchapter for cost reporting periods beginning on or after October 1, 2002.

(ii) For cost reporting periods beginning on or after October 1, 1983, this section applies to—

\* \* \* \* \*

(C) Long-term care hospitals excluded from the prospective payment systems described in § 412.1(a)(1) of this subchapter and in accordance with § 412.23 of this subchapter, except as limited by paragraph (a)(2)(iv) of this section with respect to long-term care hospitals specified in § 412.23(e) of this subchapter.

\* \* \* \* \*

(iv) For cost reporting periods beginning on or after October 1, 1983 and before October 1, 2002, this section applies to long-term care hospitals that are excluded from the prospective payment systems described in § 412.1(a)(1) of this subchapter. For cost reporting periods beginning on or after October 1, 2002, and before October 1, 2006, this section also applies to long-term care hospitals, subject to paragraph (a)(2)(i)(D) of this section.

\* \* \* \* \*

**Subpart E—Payments to Providers**

4. In § 413.64, paragraph (h)(2)(i) is revised to read as follows:

**§ 413.64 Payment to providers: Specific rules.**

\* \* \* \* \*

(h) *Periodic interim payment method of reimbursement—* \* \* \*

(2) \* \* \*

(i) Part A inpatient services furnished in hospitals that are excluded from the prospective payment systems, described in § 412.1(a)(1) of this chapter, under subpart B of part 412 of this subchapter or are paid under the prospective payment systems described in subparts O and P part 412 of this subchapter.

\* \* \* \* \*

C. Part 476 is amended as set forth below:

**PART 476—UTILIZATION AND QUALITY CONTROL REVIEW**

1. The authority citation for part 476 continues to read as follows:

**Authority:** Secs. 1102 and 1871 of the Social Security Act (42 U.S.C. 1302 and 1395hh).

2. Section 476.71 is amended by revising paragraph (c)(2) to read as follows:

**§ 476.71 PRO review requirements.**

\* \* \* \* \*

(c) *Other duties and functions.* \* \* \*

(2) As directed by CMS, the PRO must review changes in DRG and LTC-DRG assignments made by the intermediary under the provisions of §§ 412.60(d) and 412.513(c) of this chapter that result in the assignment of a higher-weighted DRG or a different LTC-DRG. The PRO's review must verify that the diagnostic and procedural information supplied by the hospital is substantiated by the information in the medical record.

\* \* \* \* \*

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance)

Dated: December 12, 2001.

**Thomas A. Scully,**  
*Administrator, Health Care Financing Administration.*

Dated: February 22, 2002.

**Tommy G. Thompson,**  
*Secretary.*

**Editorial Note:** The following appendices will not appear in the Code of Federal Regulations.

**Appendix A—Proposed Market Basket for LTCHs**

A market basket has historically been used under the Medicare program to account for price increases of the services furnished by providers. The proposed market basket for LTCHs would include both operating and capital-related costs of LTCHs because we are proposing a single payment rate for both operating and capital-related costs (see section IV.D. of this proposed rule). Under the reasonable cost-based reimbursement system, the excluded hospital market basket is used to update limits on payment for operating costs for LTCHs. The excluded hospital market basket is based on operating costs from 1992 cost report data and includes Medicare-participating long-term care, rehabilitation, psychiatric, cancer, and children's hospitals. Since LTCH costs are reflected as a component of the excluded hospital market basket, this index in part reflects the cost shares of LTCHs. In order to capture total costs (operating and capital), we are proposing to add a capital component to

the excluded hospital market basket for use under the proposed LTCH prospective payment system. We are referring to this proposed index as the excluded hospital with capital market basket.

At this time, we are not proposing a separate market basket for LTCHs because, currently, we believe that we do not have sufficient LTCH data to develop an accurate market basket based only on the costs of LTCHs. As the excluded hospital market basket is currently used under the reasonable cost-based (TEFRA) payment system for LTCHs, we believe it is appropriate to propose to use that market basket (including a component for capital costs) for LTCHs under the proposed prospective payment system. The same excluded hospital with capital market basket is used under the IRF prospective payment system.

In the following discussion, we describe the methodology used to determine the proposed operating portion of the market basket, the methodology used to determine the proposed capital portion of the market basket, and additional analyses explaining the extent to which long-term care cost shares are reflected in the proposed excluded hospital with capital market basket for LTCHs.

The operating portion of the excluded hospital with capital market basket consists of major cost categories and their respective weights. The major cost categories include wages and salaries, employee benefits, professional fees, pharmaceuticals, and a residual. The weights for the major cost categories are developed from the Medicare cost reports for FY 1992. The cost report data used include those hospitals excluded from the hospital inpatient prospective payment system where the Medicare average length of stay is within 15 percent (higher or lower) of the total facility average length of stay. Using the 15-percent threshold resulted in a subset of hospitals that had a significant amount of Medicare days and costs compared to using no adjustment or using a different threshold. Limiting the sample in this way provides a more accurate reflection of the structure of costs for Medicare. We chose to compare the average length of stay for all patients to that of Medicare beneficiaries as the test of the similarity of the practice patterns for non-

Medicare patients versus Medicare patients. Our goal was to measure cost shares that were reflective of case-mix and practice patterns associated with providing services to Medicare beneficiaries (61 FR 46196, August 30, 1996). We chose to limit the data in the database because we use facility-wide data to calculate the cost shares and including facilities report costs that are significantly reflective of the non-Medicare case-mix would inappropriately skew the data and would not be reflective of the case-mix and practice patterns associated with Medicare patients. We accomplished our goal by limiting the reports we used to those with similar length of stays for the Medicare and total facility populations. The detailed cost categories under the residual are derived from the Asset and Expenditure Survey, 1992 Census of Service Industries, by the Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce. This survey is used in conjunction with the 1992 Input-Output Tables published by the Bureau of Economic Analysis, U.S. Department of Commerce. A more detailed description of the development of the operating portion of this index can be found in the final rule, "Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 1998 Rates," published in the **Federal Register** on August 29, 1997 (62 FR 45993 through 45997).

As previously stated, the proposed market basket for the proposed LTCH prospective payment system reflects both operating and capital-related costs. Capital-related costs include depreciation, interest, and other associated capital-related costs. The cost categories for the capital portion of the excluded hospital with capital market basket that we are proposing are developed in a similar manner as those for the hospital inpatient prospective payment system capital input price index, which is explained in the August 30, 1996 **Federal Register** (61 FR 46196-46197). We calculated weights for capital costs using the same set of Medicare cost reports used to develop the operating share. The resulting capital weight for the FY 1992 base year is 9.080 percent.

Because capital is consumed over time, depreciation and interest costs in the current

year reflect both current and previous capital purchases. We use vintage weighting to capture this effect. Vintage weighting, which is explained in the August 30, 1996 **Federal Register** (61 FR 46197 through 46203), is the process of weighting price changes for individual years in proportion to that year's share of total purchases still being consumed.

In order to vintage weight the capital portion of the index as described above, the average useful life of both assets and debt instruments (for example, a loan, bond, or promissory note) needs to be developed. For depreciation expenses, the useful life of fixed and movable assets is calculated from the Medicare cost reports for excluded hospitals, including LTCHs. The average useful life for fixed assets is 21 years and the average useful life for movable assets is 13 years. For interest expenses, we use the same useful life of debt instruments used in the hospital inpatient prospective payment system capital input price index. We believe that this useful life is appropriate because it reflects the average useful life of hospital issuances of commercial and municipal bonds from all hospitals, including LTCHs. The average useful life of interest expense is determined to be 22 years (61 FR 46199). After the useful life is determined, a set of weights is calculated by determining the average proportion of depreciation and interest expense incurred in any given year during the useful life. This information is developed using the Medicare cost reports. These calculations are the same as those described for the hospital inpatient prospective payment system capital input price index in the August 30, 1996 **Federal Register** (61 FR 46196 through 46198). The price proxies for each of the capital cost categories are the same as those used for the hospital inpatient prospective payment system capital input price index. The cost categories, price proxies, and base-year FY 1992 weights for the excluded hospital with capital market basket that would be used under the proposed LTCH prospective payment system are presented in Table 1 below. The vintage weights for the index are presented in Table 2 below.

TABLE 1.—EXCLUDED HOSPITAL WITH CAPITAL INPUT PRICE INDEX (FY 1992) STRUCTURE AND WEIGHTS

Cost category	Price/wage variable	Weights (%) base-year: 1992
Total .....	.....	100.000
Compensation .....	.....	57.935
Wages and Salaries .....	CMS Occupational Wage Proxy .....	47.417
Employee Benefits .....	CMS Occupational Benefit Proxy .....	10.519
Professional fees: Non-Medical .....	ECI—Compensation: Prof. & Technical .....	1.908
Utilities:		1.524
Electricity .....	WPI—Commercial Electric Power .....	0.916
Fuel Oil, Coal, etc. ....	WPI—Commercial Natural Gas .....	0.365
Water and Sewerage .....	CPI—U—Water & Sewage .....	0.243
Professional Liability Insurance .....	CMS—Professional Liability Premiums .....	0.983
All Other Products and Services .....	.....	28.571
All Other Products .....	.....	22.027
Pharmaceuticals .....	WPI—Prescription Drugs .....	2.791
Food: Direct Purchase .....	WPI—Processed Foods .....	2.155
Food: Contract Service .....	CPI—U—Food Away from Home .....	0.998
Chemicals .....	WPI—Industrial Chemicals .....	3.413

TABLE 1.—EXCLUDED HOSPITAL WITH CAPITAL INPUT PRICE INDEX (FY 1992) STRUCTURE AND WEIGHTS—Continued

Cost category	Price/wage variable	Weights (%) base-year: 1992
Medical Instruments .....	WPI—Med. Inst. & Equipment .....	2.868
Photographic Supplies .....	WPI—Photo Supplies .....	0.364
Rubber and Plastics .....	WPI—Rubber & Plastic Products .....	4.423
Paper Products .....	WPI—Convert. Paper and Paperboard .....	1.984
Apparel .....	WPI—Apparel .....	0.809
Machinery and Equipment .....	WPI—Machinery & Equipment .....	0.193
Miscellaneous Products .....	WPI—Finished Goods .....	2.029
All Other Services:		6.544
Telephone .....	CPI-U—Telephone Services .....	0.574
Postage .....	CPI-U—Postage .....	0.268
All Other: Labor .....	ECI—Compensation: Service Workers .....	4.945
All Other: Non-Labor Intensive .....	CPI-U—All Items (Urban) .....	0.757
Capital-Related Costs:		9.080
Depreciation .....		5.611
Fixed Assets .....	Boeckh-Institutional Construction: 21 Year Useful Life .....	3.570
Movable Equipment .....	WPI—Machinery & Equipment: 13 Year Useful Life .....	2.041
Interest Costs:		3.212
Non-profit .....	Avg. Yield Municipal Bonds: 22 Year Useful Life .....	2.730
For-profit .....	Avg. Yield AAA Bonds: 22 Year Useful Life .....	0.482
Other Capital-Related Costs .....	CPI-U—Residential Rent .....	0.257

\* The wage and benefit proxies are a blend of 10 employment cost indices (ECI). A detailed discussion of the price proxies can be found in the August 30, 1996 and August 29, 1997 FEDERAL REGISTER final rules (61 FR 46197 and 62 FR 45993). The operating cost categories in the excluded market basket described in August 29, 1997 FEDERAL REGISTER (62 FR 45993 through 45996) had weights that added to 100.0. When we add an additional set of cost category weights (capital weight = 9.08 percent) to this original group, the sum of the weights in the new index must still add to 100.0. If capital cost category weights sum to 9.08, then operating cost category weights must add to 90.92 percent. Each weight in the excluded hospital market basket from the August 29, 1997 FEDERAL REGISTER (62 FR 45996 through 45997) was multiplied by 0.9092 to determine its weight in the excluded hospital with capital market basket.

TABLE 2.—EXCLUDED HOSPITAL WITH CAPITAL INPUT PRICE INDEX (FY 1992) VINTAGE WEIGHTS

Year	Fixed assets (21- year weights)	Movable assets (13-year weights)	Interest: capital-re- lated (22-year weights)
1 .....	0.0201	0.0454	0.0071
2 .....	0.0225	0.0505	0.0082
3 .....	0.0225	0.0562	0.0100
4 .....	0.0285	0.0620	0.0119
5 .....	0.0301	0.0660	0.0139
6 .....	0.0321	0.0710	0.0161
7 .....	0.0336	0.0764	0.0185
8 .....	0.0353	0.0804	0.0207
9 .....	0.0391	0.0860	0.0244
10 .....	0.0431	0.0923	0.0291
11 .....	0.0474	0.0987	0.0350
12 .....	0.0513	0.1047	0.0409
13 .....	0.0538	0.1104	0.0474
14 .....	0.0561	.....	0.0525
15 .....	0.0600	.....	0.0590
16 .....	0.0628	.....	0.0670
17 .....	0.0658	.....	0.0742
18 .....	0.0695	.....	0.0809
19 .....	0.0720	.....	0.0875
20 .....	0.0748	.....	0.0931
21 .....	0.0769	.....	0.0993
22 .....	.....	.....	0.1034
Total .....	1.0000	1.0000	1.0000

We further analyzed the extent to which the weights in the excluded hospital with capital market basket that we are proposing reflect the cost weights in LTCHs, particularly since more than 50 percent of excluded hospitals are psychiatric hospitals. For this purpose, we conducted an analysis comparing the major cost weights for LTCHs to the same set of cost weights for excluded

hospitals. We analyzed the variations of wages, drugs, and capital. This analysis showed that these weights differed only slightly between the different types of hospitals. When the LTCH weights were substituted into the market basket structure for sensitivity analysis, the effect was less than 0.2 percentage points in any given year. This difference is less than the 0.25

percentage point criterion that determines whether a forecast error adjustment under the hospital inpatient prospective payment system is warranted. In addition, many LTCHs specialize in rehabilitation or psychiatric services. Thus, it would be anticipated that the cost shares would not differ drastically from these other types of prospective payment system-excluded

hospitals. Based on this analysis, we believe that using the excluded hospital with capital market basket for the proposed LTCH prospective payment system would provide a reasonable measure of the price changes facing LTCHs. We request comments on any other data sources that may be available to provide detailed cost category information on LTCHs.

### Appendix B—Proposed Update Framework

Section 307(b) of Public Law 106–554 requires that the Secretary examine the appropriateness of certain adjustments to the LTCH prospective payment, including updates. Updates are necessary to appropriately account for changes in the prices of goods and services used by a provider in furnishing care to patients. A market basket has historically been used under the Medicare program in setting update factors for services furnished by providers. We are proposing that, beginning in FY 2004, the annual update to the standard Federal rate (described in section IV.D. of this proposed rule) would be equal to the percentage change in the excluded hospital with capital market basket index described in Appendix A of this proposed rule. However, in the future we would develop an update framework to update payments to LTCHs that would account for other appropriate factors that affect the efficient delivery of services and care provided to Medicare patients. The update framework would be proposed in the appropriate annual proposed rule in accordance with the notice and comment rulemaking process. While we are not proposing a specific update framework for the LTCH prospective payment system at this time in this proposed rule, we are providing a conceptual basis for developing such an update framework.

#### A. Need for an Update Framework

Under the proposed LTCH prospective payment system, Medicare payments to LTCHs would be based on a predetermined national payment amount per discharge. Under section 123 of BBRA and section 307(b) of BIPA, the Secretary has broad

authority to make appropriate adjustments to the LTCH payment system, including updates to payment rates. Our goal is to develop a method for analyzing and comparing expected trends in the underlying cost per discharge to use in establishing these updates. However, as stated earlier, we are proposing that until an update framework is developed, future updates would be based only on the increase in the excluded hospital with capital market basket.

A market basket for the proposed LTCH prospective payment system (the excluded hospital with capital market basket), developed by CMS's Office of the Actuary (OACT), represents just one component in the measure of growth in LTCHs' costs per discharge. It captures only the pure price change of inputs (labor, materials, and capital) used by the hospital to produce a constant quantity and quality of care. However, other factors also contribute to the change in costs per discharge, including changes in case-mix, intensity, and productivity.

Under the hospital inpatient prospective payment system, CMS and MedPAC use an update framework to account for these other factors and to make annual recommendations to the Congress concerning the magnitude of the update. We are currently examining these factors and exploring ways that they could be incorporated into an update framework for the LTCH prospective payment system. We are also examining some additional conceptual and data issues that must be considered when the framework is constructed and applied.

At this time, we are proposing that future annual updates would be equal to the proposed market basket for the LTCH prospective payment system described in Appendix A of this proposed rule (the excluded hospital with capital market basket). We believe an annual update based on the proposed market basket for the LTCH prospective payment system would provide for a reasonable update until a more comprehensive update framework can be developed. Currently, under the TEFRA system, the excluded hospital market basket is used as the basis for updates to LTCHs' target amounts for inpatient operating costs.

While our experience in developing other update frameworks, such as the hospital inpatient (operating and capital) and SNF prospective payment systems, could provide us with the conceptual framework, we are not proposing to apply an update framework at this time since we believe that it is important to develop successively more refined models of an update framework based on our evaluation of public comments and recommendations submitted to us on this issue. We would then further study the potential adjustments and the best available data. We are actively pursuing developing an analytical framework that would support the continued appropriateness and relevance of the payment rates for services provided to beneficiaries in LTCHs. To this end, we are requesting comments concerning the use and feasibility of the conceptual approach outlined below in this proposed rule. We are specifically interested in comments concerning which factors are appropriate and should be accounted for in the framework, and suggestions concerning potential data sources and analysis to support the model. As with the existing methodology used under the hospital inpatient prospective payment system, the features of a LTCH-specific update framework would need to be based on sound policy and methodology.

#### B. Factors Inherent in LTCH Payments Per Discharge

In order to understand the factors that determine LTCH costs per discharge, it is first necessary to understand the factors that determine LTCH payments per discharge. Payments per discharge under the LTCH prospective payment system are based on the cost and an implicit normal profit margin to the LTCH in providing an efficient level of care. We have developed a methodology to identify a mutually exclusive and exhaustive set of factors included in LTCH payments per discharge. The discussion here details a set of equations to identify these factors.

In its simplest form, the average payment per discharge to a LTCH can be separated into a cost term and a profit term as shown in equation (1):

$$\frac{\text{Payments}}{\text{Discharge}} = \frac{\text{Costs}}{\text{Discharge}} + \frac{\text{Profits}}{\text{Discharge}} \quad (1)$$

This equation can be made multiplicative by converting profit per discharge into a profit rate as shown in equation (2):

$$\frac{\text{Payments}}{\text{Discharge}} = \frac{\text{Costs}}{\text{Discharge}} * \frac{\text{Payments}}{\text{Costs}} \quad (2)$$

An output price term can be introduced into the equation by multiplying and dividing through by input prices and

productivity. As shown in equation (3), the term inside the brackets represents the output price, since an output price reflects

the input price and profit margin adjusted for productivity:

$$\frac{\text{Payments}}{\text{Discharge}} = \frac{\text{Costs}}{\text{Discharge}} * \left( \frac{\text{Payments}}{\text{Costs}} * \frac{\text{Input Prices}}{\text{Productivity}} \right) * \frac{\text{Productivity}}{\text{Input Prices}} \quad (3)$$

The cost per discharge term can be further separated by accounting for real case-mix. Under the proposed LTCH prospective

payment system, LTC-DRGs are used to classify patients. Based on accurate DRG classification data, average real case-mix per

discharge can be incorporated, as shown in equation (4):

$$\frac{\text{Payments}}{\text{Discharge}} = \frac{\text{Costs/Discharge}}{\text{Real Case Mix/Discharge}} * \frac{\text{Real Case Mix}}{\text{Discharge}} * \left( \frac{\text{Payments}}{\text{Costs}} * \frac{\text{Input Prices}}{\text{Productivity}} \right) * \frac{\text{Productivity}}{\text{Input Prices}} \quad (4)$$

The term "real" is imperative here because only true case-mix should be measured, not case-mix caused by improper coding

behavior. By rearranging the terms in equation (4), a set of mutually exclusive and

exhaustive factors such as those shown in equation (5) can be identified:

$$\frac{\text{Payments}}{\text{Discharge}} = \left( \frac{\frac{\text{Costs}}{\text{Discharge}}}{\text{Input Prices} * \frac{\text{Real Case Mix}}{\text{Discharge}}} * \text{Productivity} \right) * \frac{\text{Real Case Mix}}{\text{Discharge}} * \frac{1}{\text{Productivity}} * \text{Input Prices} * \frac{\text{Payments}}{\text{Costs}} \quad (5)$$

The term in brackets can be analyzed in two steps. First, excluding the productivity term results in case-mix adjusted real cost per discharge, which is input intensity per discharge. Second, multiplying input

intensity by productivity results in case-mix adjusted real payment per discharge, or output intensity per discharge. The rationale behind this step is explained in detail in section C below.

The result of this exercise is that LTCH payment per discharge can be determined from the following factors:

$$\text{Payment Per Discharge} = \frac{\left( \frac{\text{Case-Mix-Constant}}{\text{Real Output Intensity Per Discharge}} \right) * \left( \frac{\text{Real Case Mix}}{\text{per Discharge}} \right) * (\text{Input Prices}) * (\text{Profit Margins})}{\text{Productivity}} \quad (6)$$

Thus, it holds that the change in LTCH payment per discharge is a function of the change in these factors shown above. In order to determine an annual update that most accurately reflects the underlying cost to the LTCH of efficiently providing care, the four factors related to cost must be accounted for when an update framework is developed. A brief discussion of each factor, including specific conceptual and data issues, is provided in section C below.

*C. Defining Each Factor Inherent in LTCH Costs Per Discharge*

Each cost factor from equation (6) in section B is discussed here in detail. Because this is a basic conceptual discussion, it is likely that more detailed issues may be relevant that are not explored here.

1. Input Prices

Input prices are the pure prices of inputs used by the LTCH in providing services. When we refer to inputs, we are referring to costs, which have both a price and a quantity component. The price is an input price, and the quantity component reflects real inputs or real costs. Similarly, when we refer to outputs, we are referring to payments, which also have both a price and a quantity component. The price component is the transaction output price, and the quantity component is the real output or real payment. The real inputs include labor, capital, and materials such as drugs. By definition, an input price reflects prices that LTCHs encounter in purchasing these inputs, whereas an output price reflects the prices that buyers encounter in purchasing LTCH

services. We currently measure input prices using the excluded hospital with capital market basket. While not specific to LTCHs, we believe this index adequately reflects the input prices faced by LTCHs as we describe in Appendix A.

2. Productivity

Productivity measures the efficiency of the LTCH in producing outputs. It is the amount of real outputs, or real payments, that can be produced from a given amount of real inputs or real costs. For LTCHs, these inputs are in the form of both labor and capital; thus, they represent multifactor productivity, as not just labor productivity is reflected. The following set of equations shows how multifactor productivity can be measured in terms of available data, such as payments, costs, and input prices:

$$\text{Productivity} = \frac{\text{Real Payments}}{\text{Real Costs}} = \frac{(\text{Payments/Output Price})}{(\text{Costs/Input Price})} = \frac{\text{Payments}}{\text{Costs}} * \frac{\text{Input Price}}{\text{Output Price}}$$

Rearranging the terms, this multifactor productivity equation was used as the basis for incorporating an output price term in equation (3) above. This equation is the basis for understanding the relationship between input prices, output prices, profit margins, and productivity.

Equation (6) shows that productivity is divided through the equation, offsetting other factors. The theory behind this offset is that if an efficient LTCH in a competitive market

can produce more output with the same amount of inputs, the full increase in input costs does not have to be passed on by the provider to maintain a normal profit margin.

3. Real Case Mix Per Discharge

Real case mix per discharge is the average overall mix of care provided by the LTCH, as measured using the proposed LTC-DRG classification system. Over time, a measure of real case mix will change as care is given in more or less complex LTC-DRGs. Changes in

the level of care within a LTC-DRG classification group would not be reflected in a case-mix measure based on LTC-DRGs, but instead should be captured in the intensity factor of equation (6). The important distinction here is the difference between real and nominal case mix. Under the proposed LTCH prospective payment system, LTCHs would submit claims using the proposed LTC-DRG classification system. The case-mix reflected by the claims is

considered “nominal”. However, the reported classification can reflect the true level of care provided or improper coding behavior. An example of improper coding behavior would be the upcoding, or case-mix “creep,” that took place when the hospital inpatient prospective payment system was implemented. Any change in case-mix that is not associated with the actual level of care or a true change in the level of care provided must be excluded in order to determine real case-mix.

#### 4. Case-Mix Constant Real Output Intensity Per Discharge

Intensity is the true underlying nature of the product or service and can take the form

of output or input intensity, or both. In the case of LTCHs, output intensity per discharge is associated with real payment per discharge, while input intensity per discharge is associated with real cost per discharge. For example, input intensity would be associated with a nurse’s hours when providing treatment, whereas output intensity would be associated with the type and number of treatments a nurse provides. The underlying nature of LTCH services is determined by such factors as technological capabilities, increased utilization of inputs (such as labor or drugs), site of care, and practice patterns. Because these factors can be difficult to measure, intensity per

discharge is usually calculated as a residual after the other factors from equation (6) have been accounted for.

Accounting for output intensity associated with an efficient LTCH can be more accurately analyzed using a LTCH’s costs rather than its payments. This analysis would also provide an alternative to developing or using a transaction output price index. The following series of equations shows how to use the definition of an output price as defined earlier to convert the equation for output intensity per discharge to reflect costs instead of payments, as used in equation (6):

Case-Mix Constant Real Output Intensity per Discharge

$$\begin{aligned}
 \text{Case-Mix Constant} \\
 \text{Real Output Intensity} &= \frac{[\text{Payments/Discharge}]}{\text{Output Prices} * \text{Real Case Mix/Discharge}} \\
 \text{per Discharge} &= \frac{[\text{Payments/Discharge}]}{\left( \frac{\text{Payments} * \text{Input Prices}}{\text{Costs} * \text{Productivity}} \right) * \text{Real Case Mix/Discharge}} \\
 &= \frac{[\text{Payments/Discharge}] * \text{Costs}}{\text{Payments} * \frac{\text{Input Prices}}{\text{Productivity}} * \text{Real Case Mix/Discharge}} \\
 &= \frac{\text{Payments} * [\text{Costs/Discharge}]}{\text{Payments} * \frac{\text{Input Prices}}{\text{Productivity}} * \text{Real Case Mix/Discharge}} \\
 &= \frac{[\text{Costs/Discharge}]}{\frac{\text{Input Prices}}{\text{Productivity}} * \text{Real Case Mix/Discharge}} \\
 &= \frac{[\text{Costs/Discharge}]}{\text{Input Prices} * \text{Real Case Mix/Discharge}} * \text{Productivity}
 \end{aligned}$$

The last equation is identical to the term in brackets in equation (5), case-mix constant real input intensity per discharge multiplied by productivity. Thus, output intensity per discharge can be defined in such a way that cost data from the LTCH are utilized. This equation can be broken down even further to account for different types of input intensity per discharge. We discuss this matter more fully in section D below.

#### D. Applying the Factors That Affect LTCH Costs Per Discharge in an Update Framework

As discussed earlier, payments per discharge under the LTCH prospective payment system must be updated each year. Under this proposed rule, updates would be equal to the percent change in the excluded hospital with capital market basket beginning in FY 2004. The development of an update framework with a sound conceptual basis would provide the capability to understand the underlying trends in LTCH costs per discharge for an efficient provider.

Earlier, factors inherent in LTCH costs per discharge were identified. Changes in these factors determine the change in LTCH costs per discharge. Accounting for each of these factors from equation (6) under the proposed

LTCH prospective payment system is discussed below:

- Change in case-mix constant real output intensity per discharge would be accounted for in the update framework, reflecting the factors that affect not only case-mix constant real input intensity per discharge, but also productivity, which is determined separately. Factors that can cause changes in case-mix constant real input intensity per discharge include, but are not limited to, changes in site of service, changes in within-LTC-DRG case-mix, changes in practice patterns, changes in the use of inputs, and changes in technology available.

- As discussed earlier, changes in nominal case-mix are automatically included in the payment to the LTCH. Therefore, the update framework should include an adjustment to convert changes in nominal case-mix per discharge to changes in real case-mix per discharge.

- Change in multifactor productivity would be accounted for in the update framework. The availability of historical data on input prices, payments, and costs are useful in the analysis of this factor. MedPAC sets this factor as a target under hospital inpatient prospective payment system.

- Changes in input prices for labor, material, and capital would be accounted for in the update framework. Our Office of the Actuary currently has an input price index, or market basket, to assist in updating payments for LTCH services; this is the excluded hospital with capital market basket.

- In an update framework, a forecast error adjustment would be included to reflect that the updates are set prospectively and a forecast error for a given year should not be perpetuated in payments for future years. In the case of the hospital inpatient prospective payment system, this prospective adjustment is made on a 2-year lag and only if the error exceeds a defined threshold (0.25 percentage points).

#### E. Current Hospital Inpatient Prospective Payment System and Illustrative LTCH Prospective Payment System Update Frameworks

Table I shows the payment update framework for the current hospital inpatient prospective payment system and an illustrative update framework for the LTCH prospective payment system. Some of the factors in the hospital inpatient prospective payment system framework are computed using Medicare cost report data, while others

are determined based on policy considerations. The details of calculating each factor for the hospital inpatient prospective payment system framework can be found in the May 4, 2001 proposed rule (66 FR 22891) that set forth proposed updates to the payment rates used under the hospital inpatient prospective payment system for FY 2002. This design for a LTCH update framework is for illustrative purposes only,

as much more work needs to be done to determine the appropriate level of detail for each factor. The numbers provided for the hospital update are only intended to serve as examples of prior updates recommended for the hospital inpatient prospective payment system.

MedPAC supports the use of this type of framework for updating payments and applies a similar framework when it proposes

updates to hospital payments in its annual recommendation to Congress. The appropriateness of this framework for updating inpatient hospital payments was discussed in the Health Care Financing Review, Winter 1992, in an article entitled, "Are PPS Payments Adequate? Issues for Updating and Assessing Rates." A similar framework would be useful for analyzing updates to LTCH payments.

TABLE I.—CURRENT CMS HOSPITAL INPATIENT PROSPECTIVE PAYMENT SYSTEM AND ILLUSTRATIVE LTCH PROSPECTIVE PAYMENT SYSTEM UPDATE FRAMEWORKS

CMS hospital inpatient prospective payment system update percent change in:	FY 2002 calculated hospital update percent change	Illustrative LTCH prospective payment system update percent change in:
CMS Prospective Payment System Hospital Market Basket.	3.3 .....	CMS Excluded Hospital with Capital Market Basket.
Forecast Error .....	0.7 .....	Forecast Error.
Productivity .....	-0.6 to -0.5 .....	Productivity.
Output Intensity: .....	0.2 to 0.3 .....	Output Intensity:
Science and Technology .....	.....	Science and Technology.
Practice Patterns .....	.....	Real Within-DRG Change.
Real Within-DRG Change .....	.....	Utilization of Inputs.
Site of Service .....	.....	Site of Service.
Case-mix Adjustment Factors:		Case-mix Adjustment Factors:
Projected Case Mix .....	& -1.0 .....	Nominal Across-DRG Case-Mix.
Real Across-DRG Change .....	1.0 .....	Real Across-DRG Change.
Total Cost Per Discharge .....	0.3 to 0.5 .....	Total Cost Per Discharge.
Other Policy Factors:		Other Policy Factors:
Reclassification and Recalibration .....	0.0 .....	None.
Total Calculated Update .....	3.6 to 3.8 .....	Total Calculated Update.

<sup>1</sup> Table data derived from the May 4, 2001 FEDERAL REGISTER, Medicare Program; Changes to the Hospital Inpatient Prospective Payment System and Fiscal Year 2002 Rates; Proposed Rule (66 FR 22890).

F. Additional Conceptual and Data Issues

Additional conceptual issues specific to the proposed LTCH prospective payment system include the relevance of a site-of-service substitution adjustment, the necessity of an adjustment for LTC-DRG reclassification, the handling of one-time factors, and consistency with other types of hospital updates since LTCHs are similar in structure to these other types of hospitals.

Under the hospital inpatient prospective payment system, a site-of-service substitution factor (captured as part of intensity) was necessary because of the incentive to shift care from inpatient hospital to other settings such as hospital outpatient departments, SNFs, or HHAs. For the proposed LTCH prospective payment system, it is not clear without additional research whether there is an incentive to shift care either into or out of the LTCH because of the changes in behavior created by the different Medicare payment systems.

A reclassification and recalibration adjustment under the hospital inpatient prospective payment system is necessary to account for changes in the case-mix or the types of patients treated by LTCHs resulting from the annual reclassification and recalibration of the proposed LTC-DRGs. This adjustment for case-mix is applied to the current fiscal year update, but reflects the effect of revisions in the fiscal year 2 years prior. MedPAC does not make this adjustment in its update framework. Whether a LTC-DRG reclassification adjustment would be necessary in the update framework would depend on the data availability and

the likelihood of revisions to LTC-DRG classifications on a periodic basis.

There is also a question about how to handle one-time factors (an example of these could be those increased costs of converting computer systems to Year 2000 compliance). An update framework might be an appropriate mechanism to account for these items, but because of uncertainty surrounding their impact on costs, determining an appropriate adjustment amount may be difficult. MedPAC has discussed this issue in prior sessions, but was unable to agree on the exact methodology for these types of factors.

LTCHs are heterogeneous and are designated as a separate payment category only because their patients have longer average lengths of stay. This raises the question of whether certain factors in an update framework for LTCHs should be consistent with the factors in an update framework for other types of hospitals since they face similar cost pressures. Additional research in this area would need to be conducted to determine the reasonableness of having consistent updates.

The purpose of this conceptual discussion is not to determine how the identified factors of the update framework would be measured. We recognize that there are significant measurement issues in accurately determining the factors that would account for growth in costs per discharge for efficiently providing care. This is driven, in part, by the shift from a cost-based payment system with an upper payment limit to a prospective payment system. Significant research and data collection will be

necessary to accurately measure these factors over the historical period. One example of this would be to measure the distinction between real and nominal case-mix change. However, many of these same concerns were also encountered and successfully addressed in the hospital inpatient prospective payment system update framework.

The discussion here provides the conceptual basis for developing an update framework for the LTCH prospective payment system that reflects changes in the underlying costs of efficiently providing services. It is important to note that the framework would not handle distribution issues such as geographic wage variations. Due to some variations in technical methodologies for measuring the factors of an update framework, and because of some of the data concerns mentioned earlier, implementing an update framework for the LTCH prospective payment system would involve making significant policy decisions on issues similar to those made for the hospital inpatient prospective payment system update framework. We invite comments on the type of data sources to use, what other factors (if any) we should consider in an update framework, and any additional comments concerning the issues discussed in this proposed rule regarding the update framework.

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