

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Health Care Financing Administration**

**42 CFR Part 413**

[HCFA-1808-F]

RIN 0938-AG70

**Medicare and Medicaid Programs; Salary Equivalency Guidelines for Physical Therapy, Respiratory Therapy, Speech Language Pathology, and Occupational Therapy Services**

**AGENCY:** Health Care Financing Administration (HCFA), HHS.

**ACTION:** Final rule.

**SUMMARY:** This final rule sets forth revisions to the salary equivalency guidelines for Medicare payment for the reasonable costs of physical therapy and respiratory therapy services furnished under arrangements by an outside contractor. This final rule also sets forth new salary equivalency guidelines for Medicare payment for the reasonable costs of speech language pathology and occupational therapy services furnished under arrangements by an outside contractor. The guidelines do not apply to inpatient hospital services and hospice services. The guidelines will be used by Medicare fiscal intermediaries to determine the maximum allowable cost of those services.

**EFFECTIVE DATE:** This rule is effective April 1, 1998. The rule is applicable for services furnished on or after April 1, 1998. This rule is a major rule as defined in Title 5, United States Code, section 804(2). Pursuant to 5 U.S.C. section 801(a)(1)(A), we have submitted a report to Congress on this rule.

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**FOR FURTHER INFORMATION CONTACT:** Jackie Gordon, (410) 786-4517.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Section 1861(v)(5) of the Social Security Act (the Act) requires the Secretary to determine the reasonable cost of services furnished to Medicare beneficiaries "under an arrangement" with a provider of services, by therapists or other health-related personnel. The Health Care Financing Administration (HCFA) pays the provider directly for these services, rather than paying the therapist or supplying organization. Under section 1861(w)(1) of the Act, this payment discharges the beneficiary from liability to pay for the services. Section 1861(v)(5) of the Act also specifies that the reasonable costs for these services may not exceed an amount equal to the salary that would reasonably have been paid for the services (together with any additional costs that would have been incurred by the provider or other organization) to the person performing them if they had been performed in an employment relationship with a provider or other organization (rather than under such arrangement), plus allowances for certain expenses that may be incurred by the contracting therapy organization in furnishing the services as the Secretary in regulations determines to be appropriate.

These statutory requirements are implemented in existing regulations at 42 CFR 413.106. The regulations apply to the services of physical, occupational, speech language pathologists, and other therapists and services of other health specialists (other than physicians) furnished under arrangements with a provider of services, a clinic, a rehabilitation agency, or a public health agency. The regulations provide for:

- Hourly salary equivalency amounts comprised of:
  - A prevailing hourly salary rate based on the 75th percentile of the range of salaries paid to full-time employee therapists by providers in the geographic area, by type of therapy.
  - Fringe benefit and expense factors to take into account fringe benefits generally received by an employee therapist, as well as expenses (such as maintaining an office, insurance, etc.) that a therapist or therapist organization might incur in furnishing services under arrangements.
    - A standard travel allowance to recognize time spent in traveling to the provider's site or the patient's home.
    - As provided for in existing regulations at § 413.106(e) and explained in section 1412 of the Provider Reimbursement Manual, the

following are additional allowances for costs incurred for services furnished by an outside supplier. In addition to the guidelines established for the adjusted hourly salary equivalency amount and the travel allowance, the following costs incurred for services furnished by an outside supplier are recognized, provided the services are properly documented as having been received by the provider.

- Overtime, if an outside supplier utilizes the services of its employees (including the services of aides and assistants) at an individual provider in excess of the provider's standard workweek. Several commenters stated that there should be no limits on overtime compensation. The proposed rule did not specifically introduce new limits on payment for overtime. The proposed rule provided that a provider would receive payment for overtime but if the therapist worked over 40 hours it would not receive the expense factor portion of the hourly salary equivalency guideline amount.
  - Administrative and supervisory duties, if an outside supplier provides more than one therapist and at least one therapist spends more than 20 percent of his or her time supervising other therapists and performing administrative duties.
  - Depreciable or leased equipment, including maintenance costs of equipment remaining at the provider's site, that the outside supplier uses in furnishing direct services to the provider's patients (may also include equipment that is transported from one provider site to another but excludes equipment owned by the provider).
  - Supplies furnished by the supplier for direct patient care (e.g., gases and sprays for respiratory therapy), excluding items such as envelopes, stamps, and typewriters that are reimbursed as overhead expenses and included in the fringe benefit and expense factor.
  - Travel expenses, based on 10 times the General Services Administration mileage rate for each day an outside supplier travels to a provider site.
  - Aides, who are paid as an add-on. Several commenters requested that we pay aides as a function of the hourly salary equivalency amount at 50 percent of these amounts.
  - Assistants, who are paid as a function of the hourly salary equivalency amount at 75 percent of these amounts. (All therapy types use assistants except respiratory therapists.)
- The provider must supply the intermediary with documentation that

supports these additional costs to the intermediary's satisfaction. These are the only additional costs that will be recognized.

The regulations at 42 CFR 431.106(b)(5) and (c) also provide for an exemption for limited part-time or intermittent services if the provider required the services of an outside supplier for a particular type of therapy service and the total hours of services performed for the provider, by type of service, average less than 15 hours per week for those weeks in the cost reporting period during which services were furnished by nonemployee therapists. (Travel time is not counted in the computation, even if the actual time is used.) If a provider qualifies for this exemption, the reasonable cost of such services is evaluated on a reasonable rate per unit of service basis, except that payment for these services in the aggregate, during the cost reporting period, may not exceed the amount that would be allowable had the provider purchased these services on a regular part-time basis for an average of 15 hours per week for the number of weeks in which services were furnished. Where the contract provides for a method of payment other than rate per unit of service (e.g., hourly rate or percentage of charges), payment cannot exceed the guideline adjusted hourly amounts plus other allowable costs, even though the services are performed on a limited or intermittent part-time basis.

In addition, the existing regulations at § 413.106(f)(1) have provided for an exception because of binding contract. An exception was granted to a provider that entered into a written binding contract with a therapist or contracting organization prior to the date the initial guidelines are published for a particular type of therapy. Before the exception was granted, however, the provider was required to submit the contract to its intermediary, subject to review and approval by the HCFA regional office. This exception may be granted for the contract period, but no longer than 1 year from the date that the guidelines for the particular therapy are published. During the period in which a binding contract exception was in effect, the cost of the services was evaluated under the prudent buyer concept. (Section 1414.1 of the Provider Reimbursement Manual contains instructions on this exception.) This exception did not apply to providers who entered into a contingency contract with a therapist or contracting organization or another provider. In a contingency contract, the provider and contractor agree that if Medicare does not reimburse the

provider for the rate at which the contract is set, the provider and contractor agree that the contractor will make up the difference. We do not consider a contingency contract a binding contract. (We are eliminating this exception in this final rule. See Section II. On responses to public comments on proposed rule for further discussion.)

Also, the existing regulations at § 413.106(f)(2) provide for an exception for unique circumstances or special labor market conditions. An exception may be granted when a provider demonstrates that the costs for therapy services established by the guidelines are inappropriate to a particular provider because of some unique circumstances or special labor market conditions in the area. As explained in section 1414.2 of the Provider Reimbursement Manual, exceptions will be granted only in extraordinary circumstances. Before the exception may be granted, the provider must submit appropriate evidence to its intermediary to substantiate its claim. The provider's request for an exception, together with substantiating documentation, must be submitted to the intermediary each year, no later than 150 days after the close of the provider's cost reporting period. Because providers had been required to submit cost reports to intermediaries no later than 90 days after the close of their cost reporting periods, we had required that the provider's request for an exception, together with substantiating documentation, also be submitted to the intermediary no later than 90 days after the close of its cost reporting period. On June 27, 1995 (60 FR 33137), we changed the due date for submission of cost reports to 150 days after the close of the provider's cost reporting period. Accordingly, as explained under Section II.F. of this preamble, we are revising the time period for a provider's request for an exception, together with substantiating documentation, to 150 days after the close of its cost reporting period. If the circumstances giving rise to the exception remain unchanged from a prior cost reporting period, however, the provider need only submit evidence to the intermediary 150 days after the close of its cost reporting period to establish that fact.

In order to establish an exception for unique circumstances, the provider must submit evidence to establish that it has some unique method of delivering therapy or other services, which affects its costs, that is different from the other providers in the area. The exception will be effective no earlier than the onset of the unique circumstances.

In order to substantiate an exception for special labor market conditions, the provider must submit evidence enabling the intermediary to establish that the going rate in the area for a particular type of service is higher than the guideline limit and that such services are unavailable at the guideline amounts. It is the duty of the provider to prove to the satisfaction of the intermediary that it has reasonably exhausted all possible sources of this service without success.

The intermediary collects information on the rates that other providers in the area generally pay therapists or other health care specialists. Once this information is collected, the intermediary will determine whether other providers in the area, in comparison to the provider requesting the exception, generally pay therapists or other health care specialists higher rates than the guideline amounts.

Under existing § 413.106(b)(6), HCFA issues guidelines establishing the hourly salary equivalency amounts in geographical areas for therapy services furnished to Medicare beneficiaries under arrangements. These guidelines apply only to the amount of payment the Medicare program makes to a provider for therapy services obtained under arrangements. The guidelines are not intended to dictate or otherwise interfere in the terms of a contract that a provider may wish to enter into with a therapist or therapist organization. The guidelines do not apply to services furnished by employees of a hospital or employees of other providers. There is also an exception to the guidelines for inpatient hospital services provided by hospitals paid under the prospective payment system or subject to rate-of-increase limits (§ 413.106(f)(4)), in which case the services are evaluated under the Medicare program's reasonable cost provisions as described at § 413.5). The salary equivalency guidelines also will not be applied to skilled nursing facilities (SNFs) that are paid under the prospective payment system for therapy services provided under arrangements for cost reporting periods beginning on or after July 1, 1998. (This includes low volume SNFs currently electing prospective payment under section 1888(d) of the Act.) In addition, the salary equivalency guidelines will not be applied to HHAs who are paid under the prospective payment system for therapy services provided under arrangements for cost reporting periods beginning on or after October 1, 1999. The salary equivalency guidelines also will not apply for outpatient therapy services provided by a SNF or an outpatient rehabilitation

provider for services provided to SNF patients on or after July 1, 1998 when payment for those services is made on a fee schedule basis. (Providers of Part B outpatient therapy services provided to Medicare beneficiaries whose nursing home stays are not paid by Medicare will be paid on a fee schedule basis for services furnished on or after July 1,

1998.) The guidelines also will not apply to an outpatient rehabilitation provider, a comprehensive outpatient rehabilitation facility (CORF), an HHA providing outpatient rehabilitation services to patients who are not homebound, or the outpatient department of a hospital when payment for those services is made on a fee

schedule basis beginning on January 1, 1999. Shown below is a chart outlining the provisions of the Balanced Budget Act of 1997. The salary equivalency guidelines will cease to apply to the enumerated provider types once the Balanced Budget Act provisions become effective.

Provider type	BBA provision	Effective date
Hospital Outpatient Therapy Services .....	Payment on a fee schedule basis .....	Calendar year 1999.
SNF Inpatient Services (Includes therapy services and applies to free-standing and hospital-based providers).	Payment on a Prospective Payment System basis.	Cost reporting periods beginning on or after July 1, 1998.
SNF Outpatient Therapy Services .....	Fee Schedule .....	For services beginning July 1, 1998.
CORFs (applies to free-standing and hospital-based providers).	Fee schedule .....	Calendar year 1999.
Outpatient Rehabilitation Providers .....	Fee schedule .....	Calendar year 1999.
CMHCs .....	Payment under the outpatient hospital Prospective System Payment basis.	Calendar year 1999.
Outpatient Therapy Services Provided by HHA But Not Under HHA benefit.	Fee Schedule .....	Calendar year 1999.
HHA Services (Includes therapy services and applies to free-standing and hospital-based providers).	Payment on a Prospective System Payment basis.	Cost reporting periods beginning on or after October 1, 1999.

\* A \$1500 annual limitation on services provided to Medicare beneficiaries will be applied beginning January 1, 1999 where therapy services are provided by providers under the outpatient physical therapy benefit (which includes speech language pathology services) and occupational therapy benefit.

However, we are establishing regulations that provide that the salary equivalency guidelines will apply in situations where compensation, at least in part, to a therapist employed by the provider is based on a fee-for-service or on a percentage of income (or commission). The entire compensation will be subject to the guidelines in cases where the nature of the arrangements are most like an under "arrangement" situation, although technically the provider may treat the therapists as employees. The guidelines will be applied in this situation so that an employment relationship is not being used to circumvent the guidelines.

The guidelines apply to SNFs providing therapy services under arrangements that elect prospective payment under section 1888(d) of the Act because that prospective payment system (PPS) only applies to routine and capital services and does not apply to ancillary services which include therapy services.

Section 413.106(d) provides that, prior to the beginning of a period to which a guideline will be applied, HCFA will publish a notice in the **Federal Register** establishing the guideline amounts to be applied to each geographical area by type of therapy. We have issued schedules of salary equivalency guidelines for the reasonable costs of physical therapy services since 1975, and for respiratory therapy services since 1978. On September 30, 1983, we published a final notice (48 FR 44922) that revised

the methodology used to establish the schedules, as well as the guidelines themselves. The guidelines continue to apply to physical therapy and respiratory therapy services provided under arrangements, as set forth in § 413.106, with hospitals, home health agencies (HHAs), SNFs, hospital-based HHAs, hospital-based SNFs, CORFs, and outpatient rehabilitation providers (ORPs). (Since we are issuing guidelines for occupational therapists, the guidelines also will apply to community mental health centers (CMHCs) that provide occupational therapy services furnished under arrangements. However, because CMHC therapy services will be paid under the outpatient hospital prospective payment system beginning with services furnished during calendar year 1999, at that time the guidelines will no longer apply to those occupational therapy services).

The September 30, 1983 final notice provided that, for providers with cost reporting periods beginning after October 1, 1982, the published guidelines would be revised upward by the projected 0.6 percent monthly inflation rate, not compounded. It also provided that, if for any reason we did not publish a new schedule of guidelines to be effective for cost reporting periods beginning on or after October 1, 1983 or did not announce other changes in the existing schedule, the existing guidelines would remain in effect, increased by the projected 0.6 percent monthly inflation rate, not

compounded, until a new schedule of guidelines was issued. This monthly inflation rate was based on a Data Resources Incorporated (DRI) forecast of the annual rate of increase in each component of the salary equivalency amounts (that is, salary, fringe benefits, rent, and other expenses), with each component weighted to form a composite rate of increase for the 12-month period ending March 31, 1984.

**II. Provisions of the March 28, 1997 Proposed Rule**

On March 28, 1997 we published in the **Federal Register** a notice of proposed rulemaking (62 FR 14851) that proposed changes in the methodology used to establish the salary equivalency guidelines. We proposed to establish salary equivalency guidelines for occupational therapy and speech-language pathology services that are contracted by providers. We also proposed to revise the guidelines that were currently in place for contracted physical therapy and respiratory therapy services. In the proposed rule:

- The prevailing hourly salary rates were derived:
  - From the 75th percentile of hourly therapist salaries of blended data from several sources of hospital and SNF wage rate data (weighted by relative employment levels in hospitals and nursing homes) to develop a national "best estimate" of prevailing salary levels as a basis for the guidelines.

—We calculated guideline levels for fourth quarter 1995 and trended forward to April 1998.

- We computed fringe benefits as a percent of total compensation using fiscal year 1994 Medicare cost reports for hospitals under the prospective payment system.
- The expense component was based on an estimate of the costs of maintaining a therapy services office.
- The standard travel allowance was set at 50 percent of the hourly salary equivalency amount.
- The published amounts were to be adjusted to take into account projected rates of inflation that occurred after the initial effective date.

The proposal provided for a 60-day period for public comment. The proposed rule also provided that the guidelines would not be effective until at least 60 days after the date of publication of the final rule.

We received 409 pieces of correspondence on the proposed guidelines. A significant number of comments focused on major aspects of the proposed methodology that required us to perform an extensive evaluation of the methodology before revised guidelines could be issued. A summary of the public comments and our responses follow.

### III. Summary of Public Comments and Departmental Responses

#### A. Data Sources for Salary Equivalency Guidelines

We proposed to use the latest available Bureau of Labor Statistics (BLS) hospital occupational/industry wage survey data along with data from several other sources of hospital and nursing home data to develop the salary equivalency guidelines. This was the first time that we had proposed using data sources in addition to the BLS data in issuing the salary equivalency guidelines. We based this decision on the following:

First, BLS carried out its last hospital occupational/industry wage surveys in 1989 and 1991 and for budgetary reasons has discontinued conducting this survey. Accordingly, even if we had chosen to use BLS survey data as our primary source for the proposed rule, we would have needed to investigate other rehabilitation therapy survey data sources for projecting the 1989 and 1991 data to a current base period such as 1995 and for use in future guidelines. In addition, although the 1989 and 1991 BLS survey data continue to meet the rigorous publication standards of BLS and provide the only statistically reliable national/regional data for wages

by occupation of which we are aware, questions have been raised as to whether the BLS data meet the Senate Committee on Finance's recommendation on timeliness. We took this concern into consideration explicitly in the proposed rule. Furthermore, the BLS hospital occupational/industry wage surveys of 1989 and 1991 include only hospital data. The last BLS nursing home occupational/industry wage survey was conducted in 1985. We believed it was reasonable to use combined hospital and SNF wages in the determination of the guidelines as was done previously because therapist wage levels are primarily determined in occupational labor markets, not in separate or isolated industry labor markets. We also needed to review the SNF therapist data so that we could determine the wage levels in SNFs holding all other factors constant (including local labor market conditions, and working conditions).

*Comment:* We received numerous comments regarding the strengths and weaknesses of the various data sources that we proposed to use to determine the guidelines.

*Response:* We intend to utilize five additional data sources for hospital wages and two additional data sources for freestanding SNF wages, each of which we discuss in detail below. We acknowledge the commenters' observations of strengths and weaknesses present in several of the data sources. However, to delete any one data source would give more weight to the remaining data sources, which have their own strengths and weaknesses. To delete any data source with any weakness relating to statistical reliability would leave only the BLS data which are not as timely as we would have preferred. Although we received many comments about the strengths and weaknesses of the various data sources that we did use, we did not receive compelling evidence to either add or delete any data source or change the equal weight given to each data source.

A summary of the different data sources appears below the summaries of the public comments we received and our responses to those comments.

#### 1. BLS Data—General

BLS collected average hourly earnings (AHE) data for all four types of therapists in 1989. However, the January 1991 BLS survey included only the average hourly earnings for full-time physical and respiratory therapists (BLS January 1991 average hourly earnings for full-time physical and respiratory therapists were found in the BLS

*Occupational Wage Survey: Hospitals, January 1991, pp. 36–119).* The hospitals in this survey employed 50 or more workers. We therefore needed to estimate 1991 average hourly wages for speech language pathologists and occupational therapists at the full labor market rate. To do so, we started with the BLS 1989 survey of all four types of therapists as a baseline (*BLS Industry Wage Survey: Hospitals, March 1989 (the latest previous survey), pp. 33–118).* The hospitals in the 1989 survey employed 100 or more workers. Our analysis of the University of Texas survey data for U.S. hospitals indicated that the wages for speech language pathologists and respiratory therapists increased at similar rates between 1989 and 1993. Wages for occupational therapists also increased at rates similar to that for physical therapists during that period. Therefore, we determined that we could employ the 1991 to 1989 growth rates of respiratory therapist wages and of physical therapist wages in order to estimate 1991 wage levels for speech language pathologists and occupational therapists, respectively.

To update the data for the four therapist types from 1991 to later periods, we derived rates of increase for the period from January 1991 through January 1994 (the period which predates the additional data sources that HCFA used) and based 50 percent on American Hospital Association Panel wage data and 50 percent on the average hourly earnings for hospital workers published by the BLS Current Employment Statistics Survey, SIC Code 806 (Hospitals). The additional industry data sources, detailed below, that HCFA used were surveyed in 1994–1995.

For the period from January 1994 through October 1995, we updated the BLS occupational industry wage data for the four therapy types using the BLS Current Employment Statistics Survey for hospital worker hourly earnings. By incorporating the American Hospital Association data, which had a higher rate of increase than the BLS data during the January 1991–January 1994 period, HCFA captured the relatively faster growth in therapist wages during the period, resulting in wage levels that reflected current market conditions in January 1994. As mentioned above, we used the BLS Current Employment Statistics Survey to trend therapist wage increases from 1994 to 1995.

*Comment:* One commenter stated that most data sources that HCFA used, especially BLS and Mutual of Omaha, were not statistically valid. Specifically, the commenter argued that the BLS data were biased and the extrapolation of the BLS survey to non-surveyed areas was

not a valid statistical procedure, especially since there was no known relationship between surveyed areas and non-surveyed areas. Several commenters noted that the National Association for the Support of Long-Term Care (NASL) and the American Health Care Association (AHCA) surveys provide timely and accurate data and should be the only data sources used for the salary equivalency guidelines in SNFs. One commenter concluded that the BLS survey had a "high response rate" and the data were reliable.

*Response:* We agree that no available data source is ideally suited for all purposes. The data sources used may contain biases that we were unable to remove using standard statistical editing routines. We believe that the biases go in both directions and tend to offset each other. Given that the mean hourly wages of therapists generally cluster in rather small ranges, we believe that an average of the various sources, including any inherent biases, fairly represents the national wage rate for each of the four therapist types. We agree that the NASL and AHCA databases are timely, but each has shortcomings regarding representativeness. We address specific comments concerning the Mutual of Omaha data and the issue of separate salary equivalency guidelines for each setting later.

*Comment:* One commenter stated that Congress does not want HCFA to use the BLS data because Congress discontinued funding for these surveys in 1992.

*Response:* Congress discontinued funding for these surveys for reasons unrelated to the salary equivalency guidelines. The BLS surveys were replaced by the Occupational Compensation Survey (OCS). We could not use the OCS because it did not contain the level of detail by occupation required for use in establishing salary equivalency guidelines.

## 2. National Association for the Support of Long-Term Care (NASL)

In March 1996, NASL, representing a portion of the rehabilitation therapy industry, submitted an October 1995 sample survey of salaried therapists in hospitals and nursing homes to HCFA, as allowed under our regulations. This survey did not meet the requirements of the regulations at § 413.106(b)(6), since the survey design, questionnaires, and instructions were not approved by HCFA prior to the start of the survey. The survey did provide data that were current in SNFs and hospitals, and some documentation was furnished. We,

therefore, conducted a special analysis of this NASL survey data, including a limited audit of the survey records. Based on this analysis and limited audit, we determined that the survey was not adequate as a sole or primary source of data in determining the guidelines, but could be useful in combination with other data sources. There were several reasons for this determination:

- The data were not audited or certified by an independent party. We were permitted to conduct an audit of the survey records only under stringent restrictions designed to protect the confidentiality of the survey respondents. Those restrictions made it impossible for us to verify the survey results. For example, we were unable to compare submitted survey data with data from other sources.

- The verification survey, conducted to determine the reliability of data submitted by mail, did not appear to be adequate. Only five providers were included in the verification survey. Specifically, we were not satisfied that the verification sample was either sufficiently large or adequately representative.

- The survey is not sufficiently representative. There were variable response rates for hospitals and SNFs. The response rate for hospitals was 10.8 percent and the response rate for SNFs was 29.9 percent. In addition, the sample seemed to include an overrepresentation of large hospitals and chain-affiliated SNFs.

Because there is an underrepresentation of small hospitals and non-chain SNFs in the NASL survey, we cannot be assured with this small response rate that the large hospitals and chain-affiliated SNFs will adequately represent the small hospitals and non-chain SNFs not included in the survey. (The GAO stated in its report, "Medicare Early Resolution of Overcharges for Therapy in Nursing Homes is Unlikely", August 16, 1996, p. 7, regarding the NASL survey data, "However, the survey response rate was low (10 percent for hospitals and 30 percent for SNFs), which raises questions about how representative the data are." In a footnote on that page, GAO points out, "Official government surveys generate a much higher response rate. The BLS White Collar Pay Survey (one component of which was the hospital salary data survey on which the draft guidelines were based) has an overall response rate of 82 percent. Typically, BLS response rates exceed 80 percent)."

- Despite requests for the raw unedited data file, the file was not provided to us.

- We have questions about the validity of certain edits.

- We were also concerned that supervisory time and compensation in lieu of benefits were not consistently reported. Additionally, we were concerned that the supervisory time included in the NASL survey was above a certain threshold that we use in developing the guidelines.

*Comment:* Some commenters challenged HCFA's characterization of the NASL data and felt that HCFA should give greater weight to the NASL data for a variety of reasons.

*Response:* In general, the mean wages from the various data sources we used were rather tightly clustered. None of the commenters offered compelling evidence that NASL data should be weighted preferentially. Therefore, we did not change the weighting of any of the data sources used.

*Comment:* One commenter stated that the NASL data have response rates comparable to those achieved in unspecified BLS studies, hospital industry studies, and long-term care studies. The same commenter pointed out that the NASL data consisted of responses from 711 institutions while the BLS data were from 628 institutions. Another commenter stated that the NASL survey suffered from a low response rate.

*Response:* The NASL surveyed hospitals, hospital-based SNFs, and freestanding SNFs while the BLS surveyed hospitals only. The response rate of the BLS survey was 84 percent, in contrast to the response rate of the NASL survey, which was 20 percent in the aggregate (10 percent for hospitals and 29 percent for SNFs). We agree with the comment that the response rate for the NASL data was low with respect to statistical sampling theory. While, the validity and reliability of a sample survey depends primarily upon the representativeness of the sample, not on the number of responses (assuming an adequate sample size), we have concerns about the representativeness of the NASL survey. These concerns, along with the low response rate to the survey, lead us to believe that the NASL data should be given no greater weight than the data from other sources.

*Comment:* One commenter asserted that the NASL survey followed a rigorous statistical design in consultation with HCFA and that the NASL data were as good as the data HCFA used.

*Response:* HCFA did comment and make suggestions on some aspects of the

statistical design. NASL did not, however, implement all of the suggestions that HCFA felt were necessary for a valid statistical design. Nevertheless, we are using the NASL data in conjunction with data from several other sources, giving it the same weight as all other data sources.

*Comment:* One commenter defended the quality of the NASL data by stating that HCFA performed an audit of the data, although limited by conditions set by NASL.

*Response:* The restrictions set by NASL were such that essentially all that HCFA was able to perform during its on-site visit to NASL was a review. The data were not audited or certified by an independent party. We were permitted to review the survey records only under stringent restrictions designed to protect the confidentiality of the survey respondents. Those restrictions made it impossible for us to verify the survey results. For example, we were unable to compare submitted survey data with data from other sources.

*Comment:* One commenter noted that the NASL survey benefitted from a verification survey.

*Response:* We concur that verification surveys are beneficial, but our review of the NASL survey disclosed that the number of provider verifications actually conducted was extremely limited. As stated earlier, there were only 5 verifications on 711 responses, a number too small to give statistical significance to the result.

*Comment:* Several commenters recommended that HCFA use only the NASL and/or AHCA data from SNFs to develop rates for SNFs.

*Response:* As stated above, HCFA has blended SNF and hospital data in our previous notice and we see no valid reason not to do so again. In addition, we found a number of shortcomings with the NASL data and the AHCA data, which we found to be biased toward SNF chains and to include some supervisory data. We edited the data as much as possible to improve data quality, but did not use either data source alone to develop rates for SNFs. We address the issue of separate salary equivalency guidelines for each provider setting later in this final rule.

*Comment:* Several commenters pointed out that the NASL data were the most timely data available.

*Response:* We agree that the NASL data were the most timely data available, but, as discussed earlier, timeliness alone does not sufficiently meet the criterion for validity and reliability.

*Comment:* One commenter noted that the NASL data were skewed toward larger hospitals.

*Response:* We concur that the sample responses were skewed toward larger hospitals as well as larger SNF chains but, as stated earlier, some of the other data sources are biased in other ways as well. The extent of response bias within the reweighted data is not possible to quantify without some additional survey work. Again, by combining data sources with different biases, we believe that the biases tend to offset each other as evidenced by the clustering of means.

3. Texas National Hospital Survey (1994 National Survey of Hospital and Medical School Salaries, University of Texas Medical Branch, Galveston, TX, 1994, pp. 15-19)

The University of Texas National Hospital Survey data are from October 1994. This annual survey of hospitals is voluntary. The survey has been conducted for many years for hospitals in various regions of the country to use as a benchmark of regional wage levels for specific health professional occupations. While there are data from all regions of the United States, the survey was not designed to meet the rigorous BLS standards for representativeness or statistical validity at the regional level. It does, however, give reasonable levels at the national level when compared to other data sources.

*Comment:* One commenter stated that it was inappropriate for HCFA to use the University of Texas survey of hospitals in the United States because the data "includes medical schools with a low wage bias to establish rates of pay for therapists that are working primarily in SNFs."

*Response:* The commenter's assertion is incorrect because the mean wages from the University of Texas data clustered with the mean wages from other data sources. Specifically, the University of Texas mean hourly wage ranged from being \$0.19 higher to \$0.83 lower than the mean hourly wage for the four therapy types using all the data sources—a range well within reasonable boundaries associated with statistical variation. For physical therapists, the University of Texas mean wage was \$20.29; the mean wage from all sources of hospital wage data was \$21.00, a difference of 3 percent. For occupational therapists, the University of Texas mean wage was \$19.28; the mean wage from all sources of hospital wage data was \$19.73, a difference of 2 percent. For speech language pathologists, the University of Texas mean wage was \$18.58; the mean wage from all sources

of hospital wage data was \$18.67, a difference of less than one percent. For respiratory therapists, the University of Texas mean wage was \$15.74; the mean wage from all sources was \$15.58, a difference of negative one percent.

4. American Health Care Association (AHCA) Data

The AHCA report includes data on both SNFs and hospitals. The SNF data for January 1995 are both current and industry-specific. However, the data are unevenly edited and appear to include some supervisors and additional salary in lieu of benefits. The sample is heavily weighted by large chains that are members of the Association. The SNF data, unlike BLS data, appear as both employee-weighted and facility-weighted averages and, therefore, do not permit computation of a median or 75th percentile levels for individual workers.

*Comment:* One commenter objected to HCFA's observations concerning the 1994 and 1995 AHCA survey data and indicated that HCFA's criticisms were unreasonable, given the lack of alternative sources and the constant enhancement of the AHCA database since 1987. In particular, the commenter objected to HCFA's observations that the AHCA data were "unevenly edited and appear to include supervisors and additional salary in lieu of benefits," stating that HCFA fails to acknowledge discussions addressing these issues. The same commenter suggested that HCFA give the AHCA data greater weight because they were both timely and accurate, noting that: (a) AHCA data are exhaustively and consistently screened and cleaned with participants and the database is certified by Buck Consultants as being representative; (b) Buck Consultants has taken steps to insure that supervisory data are excluded from the data; (c) there are no wages or salary in lieu of benefits in the data; and (d) this is an annual study, given the same scrutiny each year and, therefore, should increase the degree of confidence that HCFA has in the data. Other commenters acknowledged the bias in the AHCA data toward large chains and indicated that HCFA could correct the AHCA survey for large company bias as well as individual data point analysis and exclusion of supervisory rates.

*Response:* We acknowledge the steps taken to improve the quality of the AHCA data over time, and agree that the quality of the data has improved. Our analyses of the 1994 and 1995 AHCA survey indicate that the survey is still not representative of Medicare-certified facilities; it represents primarily large chains that are members of AHCA. We

made the same observations as did some commenters regarding AHCA data deficiencies and took steps to exclude supervisory data. HCFA did not have the necessary information to correct for large company bias. We believe that the biases tend to offset the data as evidenced by the clustering of mean wages. Further, individual worker data are not available to validate the reasonableness of the means for each institution. For these reasons, it would not be appropriate for HCFA to modify the weights given to the AHCA data, or to use these data as the sole source in developing the salary equivalency guidelines.

*Comment:* Another commenter asserted that the NASL and AHCA data probably contained more responses from therapists than were contained in the BLS studies and that the occupational nature of therapists should outweigh the industry focus created by counting numbers of institutions.

*Response:* The 1989 and 1991 BLS samples had responses from 536 and 628 hospitals, respectively. The 1989 and 1991 BLS data that we used contained responses from 12,672 certified therapists as follows: 3,668 in physical therapy (1991); 1,742 in occupational therapy (1989); 668 in speech language pathology (1989); and 6,594 in respiratory therapy (1991). The post-edit NASL survey had responses from 191 hospitals, 50 hospital-based SNFs, and 351 freestanding SNFs. The post-edit NASL survey contained responses from 5,741 registered/certified therapists as follows: 1,720 in physical therapy; 1,204 in occupational therapy; 680 in speech language pathology; and 2,137 in respiratory therapy. The AHCA data contained responses from 3,515 certified therapists: 1,806 physical therapists; 1,405 occupational therapists; and 304 speech language pathologists. The commenter was apparently seeking to give more weight to the NASL and AHCA data because "the number of therapists reported in the NASL and AHCA survey probably exceeds the numbers reported in the BLS studies \* \* \*" implying that the two industry data bases are more reliable for that reason. In fact, the BLS studies (12,672 therapists) we used contained 37 percent more therapists than the NASL and AHCA data combined (5,741 and 3,515, respectively).

#### 5. Maryland Health Services Cost Review Commission Data

The Maryland Health Services Cost Review Commission conducts an annual census of occupational wage rates for all Maryland hospitals. We analyzed data from the 1995 census. While this is a complete census covering over 50 hospitals, it is for Maryland only. In addition, speech-language pathologists are not included as a separate occupational category.

*Comment:* One commenter noted that the Maryland Health Services Cost Report Commission's database is not representative of the United States because the data are from only one State. Further, the commenter noted that speech language pathologists are not separately identified in the data.

*Response:* Despite its shortcomings, the strengths of the Maryland census are that it is timely, accurate, and contains data from providers of various sizes in geographically diverse urban and rural areas. It is a rich data source for variations in occupational wage levels by degree of urbanization. In fact, the mean hourly wage for physical therapists in the Maryland data was \$20.78; the mean wage from all sources of hospital wage data was \$21.00, a difference of only 1 percent. The mean hourly wage for occupational therapists in the Maryland data was \$20.60; the mean wage from all sources of hospital wage data was \$19.73, a difference of 4 percent. The mean hourly wage for respiratory therapists in the Maryland data was \$16.20; the mean wage from all sources of hospital wage data was \$15.58, a difference of four percent. We used the data because we concluded that its strengths outweighed its weaknesses for our specific purpose.

#### 6. 1995 American Rehabilitation Association (ARA) Salary Survey

The ARA collected July 1994 data from its members that are medical and residential rehabilitation providers. Among ARA members are CORFs that provide physical therapy, respiratory therapy, speech language pathology, and occupational therapy services to Medicare and Medicaid beneficiaries. The response rate was low and the Association indicated in its report that these data cannot be presumed to represent the full population of rehabilitation facilities. However, this survey appears to give reasonable wage levels at the national level when compared to other data sources. Information on SNFs was not reported due to an inadequate sample size.

*Comment:* One commenter noted that the ARA survey had a low response rate and that it could not be assumed to be representative. Another commenter noted that despite the low response rate, the results appeared to yield reasonable wage levels nationally.

*Response:* We agree with the observations of both commenters. Although the data could not be assumed to be representative, they were reasonable and fairly close to the other data sources we used. In fact, the mean hourly wage for physical therapists in the ARA freestanding hospital data was \$20.82; the mean wage from all sources of hospital wage data was \$21.00, a difference of less than 1 percent. The mean hourly wage for occupational therapists in the ARA freestanding hospital data was \$18.90; the mean wage from all sources of hospital wage data was \$19.73, a difference of only 4 percent. Similarly, the mean hourly wage for physical therapists in the ARA rehabilitation unit data was \$21.12; the mean wage from all sources of hospital wage data was \$21.00, a difference of less than one percent. The mean hourly wage for occupational therapists in the ARA rehabilitation unit data was \$19.82; the mean wage from all sources of hospital wage data was \$19.73, a difference of less than one percent. As is the case with the other data sources, we used the ARA data because we concluded that its strengths outweighed its weaknesses.

#### 7. Mutual of Omaha Data

Mutual of Omaha, an HCFA intermediary, conducted a survey of about 2,000 Medicare SNF providers in 1995. Data were collected on contract therapy prices and salary rates for occupational therapy and speech language pathology.

*Comment:* Several commenters stated that the Mutual of Omaha survey was not statistically valid because of inadequate sample design, no analysis of respondents vs. nonrespondents, too small a sample size, overrepresentation of hospital-based SNFs and contract therapists, no physical therapist or respiratory therapist data, and data that were limited to aggregate facility data as opposed to data points for each employee. The weight of many comments is reflected in their assertions that the average wage rates of occupational therapists and speech language pathologists reflected in the Mutual of Omaha data are out of line with other data sources.



*Response:* We agree that the Mutual of Omaha survey does not meet the rigorous sample design requirements of the BLS survey data included in our estimates. However, we did use it in combination with the other described data sources. The Mutual of Omaha data are similar to other data sources such as AHCA and the American Rehabilitation Association (ARA) that reflect universes other than the national. The Mutual of Omaha estimate of the mean hourly wage level of occupational therapists in SNFs in October 1995 that we used in the salary computation was \$22.90, compared to the mean wage rate of all SNF data sources of \$20.33. The Mutual of Omaha mean wage rate for occupational therapy is thus 13 percent above the mean wage rate of all data sources. The Mutual of Omaha mean wage rate for speech language pathologists in SNFs in October 1995 was \$20.34 compared to the mean wage rate of \$19.26. The Mutual of Omaha mean wage rate for speech language pathologists is thus 6 percent above the mean wage rate of all SNF data sources.

#### 8. Unused Data Source—"A Study of Respiratory Care Human Resources in Hospitals 1992"

This survey was conducted by the American Association of Respiratory Care's (AARC) Task Force on Professional Direction in conjunction with consultants from Arthur Andersen & Co. The AARC surveyed 2,732 of 4,900 hospitals having respiratory care departments and received 858 responses (31 percent response rate), comprising 17 percent of all hospitals with respiratory care departments.

*Comment:* One commenter inquired as to why HCFA did not use this study by AARC in conjunction with consultants from Arthur Andersen & Co.

*Response:* HCFA used data from academic (e.g., University of Texas), government and industry-wide surveys for hospitals, SNFs, etc. that included occupational specific data. HCFA did not use data sources specific to one occupational category from its own professional association, e.g., American Occupational Therapy Association data. Using specific occupational data from a particular association may have biased the results relative to the other occupational categories, given the wide discretion used in defining wages, income, and statistical design among the four occupational groups.

#### B. Methodology

In order to establish the proposed hourly salary equivalency amounts, we determined the "best estimate" of wages for both hospitals and SNFs. We first

found mean wage rates for each of the data sources listed above.

BLS surveyed average hourly earnings (AHE) for all four therapies in 1989. However, their January 1991 survey included the average hourly earnings only for full-time physical and respiratory therapists. (BLS January 1991 average hourly earnings for full-time physical and respiratory therapists were found in the BLS Occupational Wage Survey: Hospitals, January 1991, pp. 36-119. The hospitals in this survey employed 50 or more workers.) We, therefore, needed to estimate 1991 average hourly wages for speech language pathology and occupational therapy. To do so, we started with the BLS 1989 survey of all four therapies as a baseline (BLS Industry Wage Survey: Hospitals, March 1989 (the latest previous survey), pp 33-118). The hospitals in the 1989 survey employed 100 or more workers. Our analysis of the University of Texas data for U.S. hospitals indicated that the wages for speech language pathology and respiratory therapy increased at a similar rate between 1989 and 1993. Wages for occupational therapy and physical therapy also increased at a similar rate during that period.

Therefore, we determined that we could employ the 1989 ratios of speech language pathology to respiratory therapy, and of occupational therapy to physical therapy, in order to estimate 1991 wage levels for speech language pathology and occupational therapy. Specifically, multiplying the ratio of 1989 average hourly occupational therapy wages to 1989 average hourly physical therapy wages by 1991 physical therapy wages yielded estimated 1991 occupational therapy wages. The following formula summarizes the computation (all values are average hourly wages):

$$[(\text{March 1989 AHE, OT}) / (\text{March 1989 AHE, PT})] \times (\text{January 1991 AHE, PT}) = (\text{estimated January 1991 AHE, OT}).$$

Similarly, multiplying the ratio of 1989 average hourly speech language pathology wages to 1989 average hourly respiratory therapy wages by the 1991 average hourly respiratory therapy wages yielded estimated 1991 average hourly speech language pathology wages. Again, the following formula summarizes the computation (all values are average hourly wages):

$$[(\text{March 1989 AHE, speech language pathology}) / (\text{March 1989 AHE, respiratory therapy})] \times (\text{January 1991 AHE, respiratory therapy}) = (\text{estimated January 1991 AHE, speech language pathology}).$$

The American Health Care Association data provided facility-weighted mean wage rates for SNFs. The Association has estimated that 5 percent of the SNF wage rates represented supervisors and additional wages paid in lieu of fringe benefits. We used that estimate to reduce the Association survey wage data to a nonsupervisory, no additional salary in lieu of benefits basis.

We converted annual data in the American Rehabilitation Association and University of Texas surveys to hourly wages using a divisor of 2080 hours, which represents a standard work year.

The Maryland Health Services Cost Review Commission census data provided wage data, paid hours, and numbers of personnel for each hospital. We eliminated data for employees who worked less than 35 hours or more than 40 hours a week to restrict the computation to full-time employees only. We then determined the average hourly wage for each hospital by dividing aggregate wages by the number of paid hours. Finally, we computed the average hourly wages across all hospitals, weighted by the number of employees in each hospital.

NASL data were first divided by 52 to arrive at weekly salary, then divided by the number of hours worked per week which were also given in the survey, to obtain hourly wage rates. As in the case of the Maryland census data, we eliminated data for employees who worked less than 35 hours, or more than 40 hours a week to restrict the computation to full-time employees only.

We trended all data to the 1995 fourth quarter as described in detail in the March 1997 proposed rule. We then determined the salary equivalency guideline amounts for 1998 in five steps. Those five steps were: (1) Determine average wages by therapy type, separately for hospitals and nursing homes; (2) blend the hospital and nursing home average wages by therapy type, to yield average wages by therapy type for the four occupational markets; (3) approximate the 75th percentile of wages by therapy type; (4) calculate salary equivalency guideline levels for fourth quarter 1995, by adding amounts for fringe benefits, rent, etc.; and (5) update these guideline amounts to April 1, 1998, the proposed effective date.

In the first step, we determined the mean wage levels, by therapy type, for hospitals in each of the available data sources. (Data sources used for hospitals were: BLS, Industry Wage Survey: Hospitals, March 1989 and



Occupational Wage Survey: Hospitals, January 1991; University of Texas 1994 *National Survey of Hospital and Medical School Salaries*; American Rehabilitation Association's surveys of freestanding hospitals and of rehabilitation units, 1995 *Salary Survey*; Maryland Health Services Cost Review Commission's census of hospitals; American Health Care Association hospital report's data profile, 1994 *AHCA Survey*; and NASL 1995 survey of hospitals). We similarly determined the mean wage levels, by therapy type, for nursing homes in each of the available data sources. (Data sources used for SNFs were: 1995 NASL survey of SNFs; American Health Care Association survey of SNFs, 1995 *AHCA Survey*; and the 1996 survey of SNFs by Mutual of Omaha). We then averaged the mean wage levels from the available data sources by therapy type, separately for hospitals and nursing homes.

In the second step, we blended the hospital and nursing home average wage levels, by therapy, to yield average wage levels by therapist type across the four occupational markets. We employed a blending process used in the previous salary equivalency guidelines notice (48 FR 44922, September 30, 1983), to weight the occupational averages by relative employment levels in hospitals and nursing homes, respectively. To establish appropriate weights, we used employment of therapists in nursing homes (Standard Industrial Classification (SIC) Code 805) and in hospitals (SIC Code 806), as found in the BLS Occupational Employment Statistics survey (OES). (The most recent available survey of employment in nursing homes is for 1993, while the most recent survey data of employment in hospitals is for 1995.) We applied these weights to the mean hospital and SNF wage rates by the four therapist types as determined in the first step. The BLS Occupational Employment Statistics survey shows that the hospital industry is a major employer of therapists of all types, while SNFs employ fewer salaried therapists. The weights for hospitals and nursing homes, respectively, are: for physical therapy, 85 percent and 15 percent; for occupational therapy, 85 percent and 15 percent; for speech language pathology, 82 percent and 18 percent; and for respiratory therapy, 99 percent and 1 percent.

In the third step we approximated the 75th percentile of the blended wage rates for each therapy occupation. It was necessary to approximate the 75th percentile because, unlike our previous computations of the guidelines, in this proposal we could not determine

percentile values directly from each of the sources. We have observed in the BLS data and a regression analysis we performed on NASL data that the 75th percentile was approximately 110 percent of the mean. We, therefore, proposed to increase each of the four blended wage averages by 10 percent to approximate the 75th percentile of wages in each discipline across the occupational market. (In response to comments on the proposed rule, however, we have increased the factor to estimate the 75th percentile from 110 percent of the mean to 112 percent of the mean to reflect inherent variations that we were not able to quantify.) The inherent variations are due to estimating national rates for each of the four rehabilitation therapies, then using the GPCI to approximate wage and fringe levels in all geographic areas of the United States. Data does not exist to verify that, for each of the four therapies, every local labor market in the United States is accurately portrayed by the GPCI.

Salary equivalency guidelines are based on the therapists' time in the facility. Adjustments to average hourly earnings data were necessary to include a reasonable allowance for vacation, sick leave, and administrative time. In order to convert the average hourly earnings from an hours paid basis to an hours worked basis, we applied a factor of total paid hours divided by hours worked ( $2,080 \div 1,808$ ) to the average hourly earnings determined thus far, which is the same methodology used in the previous notice. The 1,808 figure was computed based on 2,080 hours (40 hours/week  $\times$  52 weeks; a standard work year) less 15 vacation days, 10 sick leave days and 9 holidays equal to 34 days, or 272 hours. Data on leave benefits come from the BLS Employee Benefits Survey. (U.S. Department of Labor, Bureau of Labor Statistics: *Employee Benefits in Small Private Establishments, 1992*, Bulletin 2441, U.S. Government Printing Office, May 1994, pp. 10-20.)

In the fourth step, we added fringe benefit and expense factors to the prevailing salary rates determined for each therapy type. The fringe benefit and expense factors are intended to recognize fringe benefits that are received by an employee therapist, as well as overhead expenses that a therapist or therapist organization might incur in furnishing services under arrangements. These factors are expressed as percentages of the prevailing hourly rate and are applied to every hour of service furnished at the provider site. Fringe benefits may include vacation and sick pay,

insurance premiums, pension payments, allowance for job-related training, meals, severance pay, bonuses, etc.

We computed fringe benefits as a percent of total compensation using fiscal year 1994 Medicare cost reports for hospitals under the prospective payment system. We believe these data are the best proxy for therapist fringe benefit information, which is not available for SNFs. We used the Medicare cost reports for prospective payment system hospitals to obtain fringe benefit information because these data are carefully scrutinized; they are used to adjust the labor portion of hospital payments under the prospective payment system. Also, the BLS Employment Cost Index (ECI) for March 1994 showed that fringe benefits for professional and technical workers in hospitals and nursing homes were similar. In the proposed rule, the fringe benefit component was about 14 percent of the total salary equivalency guideline amount. In the final rule, we have, instead, added the amount determined from the adjustment to average hourly earnings for vacation, sick leave, and administrative time to the fringe benefit amount excluding leave determined from the hospital cost reports. By including paid leave in fringe benefits rather than in salary, the final weight for fringe benefits is about 20 percent of the guideline amount or about 28 percent of total compensation.

The expense component takes into account expenses a therapist or therapist organization might have, such as maintaining an office, purchasing insurance, etc. We based the expense component of the guidelines on an estimate of the costs of maintaining a therapy services office. The general methodology for computing the expense component is similar to that used in the September 30, 1983 notice (48 FR 44922) but the factors have been revised. This component has rental and non-rental portions.

To determine the rental portion of the expense component, we used the 1995 rental rate data compiled by the Building Owners and Managers Association International (BOMA) and published in the 1996 BOMA Experience Exchange Report for Downtown and Suburban Office Buildings. (Building Owners and Managers Association International: *1996 BOMA Experience Exchange Report*, Washington, DC, 1996, p. 17.) BOMA reported a national rent average, excluding utility cost, of \$18.37 per square foot per year. We applied an occupancy factor of .887 to take into account the space used for rental building hallways, elevators, etc., that

are included in the BOMA rent figure, but are not part of the area rented for an office. We then added the BOMA utilities cost of \$1.82 per square foot. We determined total rental cost, assuming a rental area of 250 square feet, the same rental area used in prior schedules of guidelines. The total 1995 rental cost was divided by 1,808 (the hours factor applied to average hourly earnings) to compute rental cost per hour worked in 1995.

The expense component includes costs of maintaining an office, such as wages and salaries of administrative and clerical help, insurance, telephones, etc. Medicare pays for services at their reasonable cost. It has been reported to HCFA that an effective and efficient rehabilitation therapy firm incurs overhead expenses of about 25 percent. We estimate this component, including rent, to be within a reasonable cost range of 28.2 percent of total expenses in 1995. The 1995 rent per square foot amount and the other expenses amount were constant across the four therapy types, implying that the share of these costs vary by therapy type (the share for rent is lowest for physical therapy since the physical therapy wage rates are the highest).

As described in detail in the proposed rule, we added the fourth quarter 1995 dollar values of the "blended" wages, fringe benefits, rent, and the remainder of the other expenses factors to obtain salary equivalency guideline amounts for fourth quarter 1995. We updated the resultant fourth quarter 1995 salary equivalency guideline amounts to April 1998, using a Standard & Poor's DRI 1997:4 forecast.

#### 1. Occupational Labor Market

In calculating the salary equivalency guidelines proposed on March 28, 1997, HCFA used a blend of hospital and SNF therapist wages. We also used a blend of hospital and SNF therapist wages in the establishment of salary equivalency guidelines for physical and respiratory therapy in the September 30, 1983 notice. The use of a blended wage reflects the influence of occupational labor market conditions on rehabilitation therapist wages, given the substantial degree of mobility between the settings. In the proposed rule, the labor market for therapists was characterized as an integrated occupational market in which therapists working in hospitals and SNFs have the potential to migrate between the two settings with relatively little difficulty resulting from differences in job requirements. We noted, however, that wage levels across settings for the same occupation may differ due to reasonable

compensating wage differentials associated with working conditions, risk of injury, and geographic location. Wage differentials may also be associated with differences in worker characteristics, such as experience and skill. When these factors are taken into account, the ability to move across settings should ensure that the wage levels between these settings bear a reasonable relationship over time.

*Comment (general):* Many of the comments on the proposed rule have focused on the issue of compensating wage differentials, asserting that HCFA should not blend wages of hospital and SNF therapists in the establishment of salary equivalency guidelines. These comments maintain that wage differentials that exist between the two settings can be fully explained by a combination of higher skill requirements and a less agreeable work setting in SNFs. For this reason, commenters claim that the full difference in wages should be recognized by HCFA.

*Response:* The assertion that differences in skills and work environment fully explain current differences in wage rates rests on the assumption that compensating wage differentials between hospitals and SNFs are equivalent to the actual wage differentials observed at a point in time. However, there are a number of factors which may cause actual wage differentials to vary from those associated solely with differences in skills or environment. These factors include adjustments to short-term shifts in demand, entrance barriers to the therapy professions which have slowed adjustment to these shocks, and distortions to the operation of markets for therapy services and labor within the SNF sector caused by the inflation of prices and wages by Rehabilitation Therapy Firms (RTFs) to quickly gain market share as well as the lack of sufficient efforts to minimize costs by SNFs.

HCFA contracted with Standard & Poor's DRI to study this issue. Their data indicate that HCFA's proposed salary equivalency rates, incorporating the adjustment to the 75th percentile of the wage distribution, are more than sufficient to cover legitimate compensating wage differentials for skills and work environment in SNFs, as well as the wage differential which would result from increases in demand for therapy services in SNFs given cost-minimizing behavior by SNFs and RTFs.

*Comment:* Some commenters stated that there is no legal foundation for using a blended wage rate for hospitals

and skilled nursing facilities to set salary equivalency rates.

*Response:* We do not believe that the statute prohibits use of a blended wage rate. We used a methodology based on blending wages from therapists in hospitals and SNFs in the September 30, 1983 notice which revised salary equivalency guidelines for physical and respiratory therapists. In that notice, HCFA established the prevailing salary component based on a blended hourly wage for hospitals and nursing home hourly wage at the 75th percentile of the wage distribution. As discussed in more detail in the Statutory Issues section below, we believe that this approach comports with Congressional intent as expressed in the relevant legislative history.

*Comment:* One commenter stated that the growing wage differential between therapists in the SNF setting and those in the hospital setting implies that the labor markets for therapists in these two settings are separate and distinct. According to the commenter, this indicates that the concept of an occupational labor market cannot be used as the basis for establishing salary equivalency rates based on a blend of hospital and SNF wages.

*Response:* The key factor involved in determining the extent to which an occupational labor market is integrated is the substitutability of professional skills across settings. This determines the potential for mobility between the two settings. If workers can flow relatively freely across industry settings, and markets are functioning competitively, this means that wage rates in different settings will be influenced by the supply and demand conditions for that occupation in all settings. This does not mean that wages will be equivalent. Compensating wage differentials for differing skills and environments will result in a reasonable relationship of wages across all settings.

The term "occupational labor market" implies some range of shared, and, therefore, substitutable skills. The question then becomes whether the extent to which skills required in the two settings are overlapping, whether the educational requirements are similar, and whether substantial retraining is required in order for therapists to move from one setting to another. An examination of these issues for therapists in hospitals versus SNFs indicates that the required educational qualifications and skills are extremely similar. All therapists complete the same accredited education programs and substantive retraining for individuals moving between these two settings is not standard. For therapists

employed in hospitals and SNFs, it is clear that, while not identical, the skills needed to perform their jobs are highly substitutable. This is evidenced in commenters' observations by the shift in employment of roughly a quarter of physical therapists and speech language pathologists formerly employed in hospitals who have been moved to SNFs or HHAs without substantive retraining. In addition, both hospitals and SNFs routinely hire occupational therapists, physical therapists, and speech language pathologists directly out of college, indicating that the body of required skills is covered by the general educational programs completed by all accredited therapists.

The existence of actual wage differentials between two settings does not indicate that an integrated occupational labor market does not exist. These differences are not solely those associated with different skill requirements or working conditions. Short-term differentials may reflect disequilibrium in response to rapid shifts in employment in the presence of transaction costs, costs of information, and lags in the adjustment of the occupational labor supply. These are reasonable wage differentials that are consistent with cost minimizing behavior. Differentials may also reflect differences in incentives to minimize costs between the two settings.

The fact that SNFs may have little economic incentive to minimize costs, beyond the point where they are subject to risk of audit, will likely result in higher relative prices for therapy and higher therapist wages in the SNF sector. Rehabilitation therapy firms may take advantage of this incentive structure to push prices and wages beyond prudent buyer rates. Because SNFs have little incentive to switch suppliers unless the price is far above their current rates, higher prices will not cause the rehabilitation therapy firm to lose market share. There is no market pressure to push prices down and less pressure for rehabilitation therapy firms to minimize costs than would be the case in competitive cost-minimizing markets.

*Comment:* Some commenters were concerned that therapists attracted to SNFs and HHA settings are different from those attracted to hospitals and, therefore, do not compete in the same labor market. The wage differential between hospitals and SNFs is a reasonable compensating wage differential associated with these differences in skills and work environment. These differences make it harder for SNFs to recruit qualified therapists. Specific differences between

hospitals and SNFs cited by commenters were:

(a) Therapists in SNFs must work independently with less supervision. For this reason, SNFs require a more experienced workforce.

(b) The work environment in SNFs is less appealing than that in hospitals. —There is less variety in the case mix, —Smaller therapy departments in SNFs mean less collegiality, less potential for advancement, and fewer opportunities for training; and —Patients in SNFs are more difficult to work with.

*Response:* We agree that compensating wage differentials potentially exist between different work settings for therapists. In using a blended hospital/SNF wage rate as the basis for salary equivalency rates, the question is the magnitude of these differentials and whether they are covered by the use of the blended wage rate at the 75th percentile of the wage distribution.

In response to industry requests for additional statistical research on this issue, we contracted with Standard & Poor's DRI to estimate the magnitude of justifiable wage differentials for physical and occupational therapists, and speech-language pathologists. The resulting data presents estimates of compensating wage differentials associated with skills and work environment across industry settings for 1979–89, wage differentials associated with short-term labor market disequilibrium under conditions of cost-minimization, and wage premiums resulting from the failure of many SNFs to behave as cost-minimizers.

The DRI data estimated a net compensating wage differential associated with education, experience, and work environment which is very small in comparison to the actual disparity in wages between the two sectors in 1995. The conclusion of this study was that our proposed salary equivalency rates, based on the blended wage approach, were more than sufficient to cover reasonable compensating wage differentials between hospitals and SNFs and an additional positive short-term differential for SNF therapist wages associated with the estimated increase in the relative demand for therapists in SNFs under the condition that SNFs behave as cost-minimizers.

The commenters maintained that the current disparity of wages is solely reflective of compensating wage differentials associated with the underlying fundamentals of skills and work environment. However, the actual

wage differential will be equal to the compensating wage differential only in cases where product and labor markets are competitive (i.e. suppliers, providers and consumers are cost minimizers) and in equilibrium. Neither of these assumptions are met in the case of the labor market for therapists in rehabilitation therapy firms and SNFs.

The nursing home reform requirements of the Omnibus Budget Reconciliation Act of 1987 (OBRA '87), which took effect in 1990, caused a rapid increase in the relative demand for therapist labor in SNFs. The continued shift of employment from hospitals, educational institutions, and other settings towards SNFs, which is associated with the current observed wage differential, means that the occupational labor market has not yet reached equilibrium. This indicates that some part of the wage disparity between hospitals and SNFs is reflective of continued efforts to sharply increase the share of the pool of therapists who are employed in SNFs over a fairly short period of time.

In the presence of costs associated with changing jobs and costs of information about available positions and associated wage rates, these efforts can be expected to result in a temporary wage differential even with cost minimizing behavior. This effect is heightened by constraints on the number of new graduates from accredited therapy programs, since job mobility is less costly for new graduates than established therapists. Long queues for entry into accredited therapy programs indicate that current occupational wages are well above the level needed to attract new entrants to the professions. This suggests that difficulties in expanding the capacity of educational programs is contributing to the cross-sectoral adjustment process. These effects on therapist wages in SNFs are beyond the control of the SNFs in minimizing costs, and should therefore be covered by salary equivalency guidelines.

DRI also has shown that the market for therapy services in SNFs does not function in the normal parameters of a cost minimization framework. This analysis relied on a model framework originally developed by Joseph Newhouse (1978)<sup>1</sup> for the analysis of the behavior of medical cost increases under conditions where cost-sharing requirements for consumers vary. This model has the implication that the

<sup>1</sup> Newhouse, Joseph P. The Erosion of the Medical Marketplace, R-2141-1-HEW, The Rand Corporation, Santa Monica, California, December 1978.

supply of medical services will exhibit increasing inefficiency as the coverage of costs approaches 100 percent, resulting in higher volumes, prices, and wages than would otherwise be the case.

Therapy services provided under arrangement in SNFs represent a service that closely approximates 100 percent coverage. Medicare Part A, which accounts for 58 percent of such services, requires zero cost-sharing for the first 20 days. The daily coinsurance rate that beneficiaries must pay for days 21 through 100 for 1998 is \$95.50.

Medicare pays for all costs over this coinsurance rate. However, because the daily rate in a SNF is usually higher than the coinsurance rate (in 1995, the latest year for which data is available, the average daily rate in a nursing home was \$127.16), beneficiaries will pay the full coinsurance amount whether they receive therapy services or not. The extra cost of therapy services is usually paid for by Medicare. Medicare Part B coverage, which begins after 100 days and accounts for 32 percent of therapy services provided in SNFs, requires a 20 percent copayment which is primarily covered by Medigap policies.<sup>2</sup> An additional 5 percent of services are covered by Medicaid, again with zero cost-sharing. While 5 percent of contract therapy services are covered by private insurance (and therefore may be subject to some cost-sharing), this fraction of the market is too small to introduce any significant sensitivity to price into this market.

In many cases, higher contract therapy costs result in higher relative reimbursement from Medicare for allocated overhead as well as for the direct costs of contract therapy services. This reimbursement methodology and market structure has implications for the behavior of firms that supply contract therapy services to SNFs. Cost-effective therapy firms will have little advantage in this market and will not tend to gain any substantial market share compared to the case of freely functioning market. In this situation, Newhouse argues that a competitive cost minimizing supply curve for the industry does not exist. This invalidates claims that prices, input and output quantities, and wages in this setting are at cost-minimizing rates that reflect freely functioning markets.

The Standard & Poor's DRI data produced estimates of hospital/SNF wage differentials associated with reasonable compensating wage

differentials based on worker and job characteristics as well as reasonable differentials based on short-term disequilibrium associated with increases in demand, given cost-minimization by SNFs. The estimated differentials associated with characteristics of the workforce and work environment were produced by the estimation of wage equations relating the hourly wages of individual employees throughout the U.S. economy with human capital variables such as education and experience, as well as the systematic differences across occupations and industry groups that are associated with work environment. This estimation was based on regression analysis using pooled cross-sectional data from the 5 percent Public Use Microdata Samples from the 1980 and 1990 decennial census. The census sample incorporates information for therapists in all settings with information on salary, hours worked, educational attainment, demographic characteristics, and location. These data were carefully screened for potential inaccuracies associated with self-reporting and reviewed for consistency with licensure requirements and consistency with other available data sources. The estimation period ended before the implementation of OBRA '87 in 1990. This indicates that wage differentials associated with the resulting unanticipated increase in demand, and those associated with failure to minimize costs in an environment with little restraint on volume and prices, will not bias the estimated compensating wage differentials.

DRI data show that in 1989 SNFs were actually able to hire similarly qualified therapists for a slightly lower wage than could hospitals, holding skills and environment constant. While it is not possible to obtain comparable multivariate estimates based on other data sources because of the lack of available information on skill variables and other occupational groups, we note that several other sources from 1989 and surrounding years confirm that actual wage differentials for SNFs relative to hospitals were small positives or negatives. The American Speech-Language Hearing Association (ASHA) reported a negative differential for SNFs relative to hospitals in 1989, while the American Occupational Therapy Association (AOTA) reports a small positive differential for 1990 (1989 is not available). The differentials reported by ASHA and AOTA are close to those seen in the Census wage data without

adjustment for skills and work environment.

Data from the 1990 decennial census indicates that, on average, physical and occupational therapists working in SNFs do have more experience than physical and occupational therapists in hospitals, possibly because some therapists in SNFs need to work more independently or with less supervision. The estimated wage differential associated with the greater degree of experience, however, was small (in both cases less than 5 percent.) The reason for the small differential appears to be that the greater degree of experience is usually past the point where additional experience results in a substantial increase in wages. Rapid increases in wages associated with experience occur during the first decade of practice with wage increases for additional years of experience adding little in the terms of wage gains. Thus, additional years of experience past this point add relatively little to the wages these therapists can demand. On the other hand, speech language pathologists in the census sample reported slightly less experience on average than those employed in hospitals.

However, since the compensating differential resulting from the Census wage equations applies to the year 1989 (1990 Census), it is important to analyze how these conditions might have changed between 1989 and 1995. The principle reason why more experienced therapists might be required in the SNF environment, according to comments, was the relative lack of supervision for these therapists, when compared to hospitals, which have larger, more established therapy departments. The key issue becomes the determination of the direction of changes in the level of supervision since the year 1989 on which our estimates are based.

Given the rapid expansion in the volume of therapy services provided in SNFs, and the larger number of therapists practicing within a given SNF, it follows that the opportunity to consult supervisory personnel has actually grown over the past 6 years. This suggests that, while a gap in the average years of work experience may exist, the size of the gap is likely to be smaller than was the case in 1989.

Comments on the unappealing work environment in SNFs focused on two areas: (1) The nature of the work, that is there is less variety in the case mix, and (2) the lack of collegiality, potential for career advancement, and training opportunities associated with smaller therapy departments in SNFs relative to hospitals.

<sup>2</sup> Weiner and Zeid, Comparing Current Cost with Salary Equivalency Reimbursement for Physical Therapy, Occupational Therapy, and Speech-Language Pathology, Washington DC, April 1995.

To apply these estimates to the later period, we must analyze how these conditions that contribute to the less appealing work environment would have changed between 1989 and 1995. It would appear that there would actually be more variety in case mix in 1995 than in 1989 due to the expansion of therapy services in the SNF setting and the trend towards discharging hospital patients to SNFs earlier. With the significant increases in therapy programs in SNFs, it is likely that career advancement, training opportunities, and the opportunity to work with other therapists would have grown similar to that of hospitals.

Given the changes in the SNF and hospital environments over the past 6 years, these environments are likely to have grown more similar, on average, than otherwise. It, therefore, appears unlikely that the relative appeal of the two settings would be far different than in 1989. DRI's estimates of compensating wage differentials can therefore be applied to the later period.

*Comment:* Several commenters stated that, by combining hospital and SNF wages, HCFA was not recognizing the full compensating wage differential for therapists in SNFs.

*Response:* Our salary equivalency rates cover the full compensating wage differential for therapists in SNFs (which, as explained above, is very small), and a reasonable wage differential for the estimated costs of the increased demand that would have occurred after OBRA '87, under the condition that all SNFs behaved as cost-minimizers.

The observed relative wages for therapists in SNF settings have become distorted by the lack of cost minimization efforts in the provision of therapy supply services in SNFs. Blending hospital and SNF wage rates, as we have done in the past, provides a methodology that covers compensating differentials associated with skills and work environment, while avoiding the validation of increases associated with the absence of sufficient cost minimization efforts. As hospitals and educational institutions adjusted wages upwards at a rate slower than rehabilitation therapy firms and SNFs to retain staff, access to therapy services in these settings would decrease, while the volume of services available in SNFs continued to increase beyond the point where the benefits conveyed to patients justified the costs incurred.

## 2. Trending Old Data To Reflect Current Conditions

*Comment:* HCFA should use the percent increases in physical therapy wages to update speech language pathology wages from 1989 BLS speech language pathology data to 1991 rather than using the percent changes in respiratory therapy wages.

*Response:* The University of Texas data source was the only source that had all four therapy types over time with relatively consistent definitions and methodology. The University of Texas data indicated that the speech language pathology wage growth from 1989 to 1991 correlated better with respiratory therapy wage growth than with physical therapy wage growth. Therefore, we used the same percentage growth for speech language pathology wages as existed for respiratory therapy wages from 1989 to 1991.

*Comment:* One commenter suggested that the use of 6- and 8- year-old BLS hospital data is inappropriate and does not satisfy the Senate Finance Committee's recommendation for timely and accurate data. This commenter also suggested that trending forward does not mitigate distortions of using old data and does not capture the significant changes in the marketplace over the past several years. Other commenters stated that because the BLS data were relatively old, HCFA should give a lesser weight to the BLS data or not use these data at all.

*Response:* We believe that our methodology for aging the baseline BLS data is consistent with Congressional intent. We used the most recent BLS data available on therapists employed in hospitals and trended it forward using the best data sources of which we were aware. If the commenter's assertion that trending forward does not capture the significant changes in the therapy marketplace were correct, then the BLS hospital data for therapists trended forward to 1995, would be substantially different from the best industry data sources for 1995. In fact, the trended BLS data tend to be at the center of the clustered industry data sources for 1995. For physical therapists, the trended BLS mean wage was \$20.90; the mean wage from all sources was \$21.00, a difference of less than one percent. For occupational therapists, the trended BLS mean wage was \$19.67; the mean wage from all sources was \$19.73, a difference of less than one percent. For speech language pathologists, the trended BLS mean wage was \$19.30; the mean wage from all sources was \$18.67, a difference of 3 percent. For respiratory therapists, the trended BLS mean wage

was \$15.48; the mean wage from all other sources was \$15.58, a difference of less than one percent. Therefore, we do not think it would be appropriate to give the BLS data a smaller weight or remove BLS from the mix of data sources.

## 3. Blending Hospital and SNF Data for Occupational Labor Market Wage

*Comment:* Many commenters believed that use of hospital data in the blend was (1) inappropriate because only SNF data should have been used; (2) irrelevant because the rule applies exclusively to nonhospital settings; (3) flawed because there are problems with the sources of hospital data that HCFA used; and (4) incorrect because of the large difference in wage levels between hospitals.

*Response:* Hospital wage levels by therapy type were used, in part, because hospital therapists constitute a large part of the therapist labor market. In addition, hospitals are a major source of therapists hired by SNFs and rehabilitation therapy firms that contract with SNFs to furnish therapy services. Also, the salary equivalency guidelines do apply to contracted therapy services provided in the outpatient departments of hospitals. Following traditional labor market theory for professional services, we believe that there is an occupational labor market for therapists, with compensating differentials for workers for worker characteristics and job requirements. Had we used only SNF wage data, the result would have reflected the relatively higher rates that the rehabilitation therapy firm can afford to pay to bid therapists away from other sectors that operate in a more financially constrained contract environment. With respect to commenters' assertion that hospital data are irrelevant in determining wages for therapists that work primarily in nonhospital settings, our analyses supports our position that an occupational labor market exists. We discussed these issues in more detail in Section III.B.1 the Occupational Labor Market of this final rule.

We believe that our "best estimate" approach incorporated the BLS occupational/industry data in a reasonable way with other data from less statistically reliable but more current sources. Each set of data has equal weight in developing the "best estimate" for therapist wages in hospitals and in SNFs. Each of the data sources we used is discussed more fully in section III.A, Data Sources for Salary Equivalency Guidelines of this final rule.

*Comment:* Many commenters challenged our blending of hospital and SNF wage levels, but offered various blending recommendations in the event that we use blending in the final rule. Many commenters agreed that the employment weights as proposed for respiratory therapy wages (99 percent hospital and 1 percent SNF) were correct. These same commenters, however, offered a wide range of alternative employment weights for use in blending hospital and SNF wages for physical and occupational therapists and speech language pathologists. Some of these commenters offered alternative employment weights which included HHAs as well as SNFs and hospitals.

*Response:* We believe that an occupational labor market, with compensating differentials, exists and that blending is required to achieve equitable wage levels across settings as indicated in the discussion above.

We also believe that the proposed blending method is reasonable. When we blended the wages for each type of therapy, we used hospital therapist employment and SNF therapist employment to develop the relative shares. For SNFs, we used BLS' 1993 Occupational Employment Statistics survey data, the latest and most complete employment data for SNFs available from a government source. For hospitals, we used BLS' 1995 Occupational Employment Statistics survey data, also the latest and most complete employment data for hospitals available from a government source. Some commenters preferred that employment data for both settings be for the same year. We agree. Data on a same-year basis, however, are not yet available. Based on industry discussions, we believe that, as contract therapy services to SNFs have grown, there has been a corresponding drop in the relative share of employed therapists in SNFs. Without new data to substantiate this hypothesis, we felt that the most appropriate option was to use the 1993 Occupational Employment Statistics survey for employment of therapists in SNFs, by therapy type, as we did in the proposed rule (Occupational Employment Statistics SNF data were collected for 1990 and 1993). This approach may overstate SNF employment relative to hospitals in 1995, and therefore the blended wage may also be slightly overstated.

One reason for the discrepancy between BLS Occupational Employment Statistics and commenters' suggested shares of employment in SNFs and hospitals is that commenters have included contract therapists in their employment count for SNFs and

hospitals. Using employment setting (contract and employed) rather than employer to determine the share in SNFs and hospitals increases the SNF share and decreases the hospital share to use in blending. As rehabilitation therapy firms have hired therapists away from SNFs and hospitals to work as contract therapists, it is likely that the percentage of employed therapists in SNFs relative to employed therapists in hospitals has decreased. As indicated earlier, the SNF employment weights that we use may be too high.

*Comment:* One commenter believed the blend is invalid because SIC codes (806 for hospitals, 805 for SNFs) do not differentiate between registered therapists, therapy assistants, and therapy aides. In addition, a few commenters noted that audiologists are included in the OES survey figures for speech language pathologists.

*Response:* The BLS Occupational Employment Statistics survey has a separate occupational category for registered therapists. Therapy aides and assistants are in a separate category and are excluded from therapist employment numbers. Regarding the audiologist data included with speech language pathology data in the Occupational Employment Statistics survey, we believe that including audiologist data will not significantly skew the employment shares in hospitals and SNFs for speech language pathologists.

*Comment:* Another commenter proposed using total wages (wage bill share of costs) rather than employment shares in blending hospital and SNF wages.

*Response:* Using wage bill shares of costs for weights would double the weight given to wages. The wage bill share is the number of hours of service times the hourly wage for each therapy type in each setting. The wage bill approach would, in effect, use SNF and hospital wage levels twice in the calculation rather than once as is appropriate.

*Comment:* Several commenters were concerned that in the blending methods we used we have not shown the difference in wage levels between hospital and SNF, and that we have not proven the statistical validity of combining these two wage values (hospital and SNF) to arrive at the wage portion of the salary equivalency guidelines.

*Response:* In this final rule, we followed the same procedure that we used in the 1983 rebasing of the salary equivalency guidelines for physical and respiratory therapy, as published in the September 30, 1983 **Federal Register** (48

FR 44924). The industry requested a statistical analysis of our blending therapist wages by relative employment. We commissioned a complete statistical analysis of therapist wage differentials under contract with Standard & Poor's DRI. A full discussion of the results of this study appears in Section III.B.1., the Occupational Labor Market of this final rule.

#### 4. 75th Percentile

*Comment:* Commenters indicated that HCFA has significantly underestimated the 75th percentile differential. Some want therapy-specific differentials applied to each therapy type and many offered alternatives to the 10 percent that HCFA used to approximate the 75th percentile differential.

*Response:* HCFA estimated the 75th percentile differential using several different data sources. We did not use the data sources that did not have the 75th percentile available. The 75th percentile differential in hospitals varied from 6.9 percent to 14.7 percent depending on the data source and therapy type. The 75th percentile differential in SNFs varied from 9.7 percent to 26.9 percent depending on the data source and therapy type. None of the SNF sample surveys met the sample design criterion of the Federal Government, resulting in wider variation than would otherwise be the case.

When we ran regressions on the NASL data for hospitals and SNFs with adjustments for region, ownership, and chain or individual establishment, the 75th percentile for hospitals ranged from 9 to 11 percent, depending upon therapy type, while the 75th percentile for SNFs ranged from 12 to 14 percent, again depending upon therapy type.

The 75th percentile differential varies so widely because if two samples with the same means are compared, one meeting the BLS sample design standard and the other below the BLS standard, the 75th percentile differential will tend to be smaller for the BLS-type sample than for the other sample. The alternatives offered by commenters come from samples that do not meet BLS sample design standards.

We proposed a 10-percent differential to approximate the 75th percentile for all therapy types because we believed that we had selected a reasonable estimate for the range of average 75th percentile differentials for the various therapy types. We have increased the differential from 10 percent to 12 percent to allow for factors that we may not have quantified previously. In choosing 12 percent for all therapy types, we believe that we have selected

a reasonable estimate of the 75th percentile differential.

#### 5. Calculations

*Comment:* Some commenters suggested that HCFA use BLS' 1991 Employee Benefits for Medium and Large Private Establishments rather than its 1992 Small Establishments survey. As an adjunct to this comment, some commenters indicated that the number of productive hours HCFA used was too high, and that HCFA should make adjustments for breaks and lunches, family leave, jury duty, funeral leave, and military leave.

*Response:* The average number of employees per establishment in SIC Code 805, Nursing and Personal Care Facilities, calculated from the BLS ES-202 survey in 1995, was fewer than 100. The average number of employees per facility in the AHCA survey's sample data for 1995 was fewer than 100, despite the fact that this data source is skewed toward larger SNF chains. These figures support our decision that employee benefits for small firms should be used in determining the number of productive hours with which to adjust the hourly wage from hours paid to hours worked.

The 1994 Small Private Firms survey reports even fewer paid leave days (vacation, sick leave, and holidays) than did the 1992 survey. For 5-year employees, subtracting paid leave and 2 days for continuing education from the standard work year (2,080 hours), still brings the number of productive hours very near to our 1,808 productive hours figure.

When data from the BLS Employment Cost Index Employer Costs for Employee Compensation for March 1995 or March 1996 are used, only State and Local Government Health Services and one of its subcategories, State and Local Hospitals, have employees who work fewer productive hours than the 1,808 hours used in HCFA's hours adjustment. All other white collar, professional and technical occupations, as well as the Health Services and Service Producing industries, work more productive hours than we used in this calculation. (The calculation to reach productive hours is 2,080 hours—272 hours of paid leave = 1,808 productive hours. Paid leave days numbered 33.7 (rounded to 34 days) and multiplied by 8 hours per day to equal 272 hours of paid leave. This adjustment equals approximately 15 percent of the therapist hourly wages.)

Data from both the recent BLS Employee Benefits Survey and the BLS Employer Costs for Employee Compensation Survey support our

choice of number of productive hours worked per year. It is our policy to limit paid leave to vacation, sick leave, and holidays.

*Comment:* Many commenters believed that HCFA's estimate of the fringe benefit share of compensation is too low. Most commenters mentioned about 30–31 percent of salary for a fringe benefits share, while another mentioned 27 percent of salary for the standard fringe benefit factor. Some commenters indicated that our proposed fringe benefit share of 14 percent was too low; others asked that the ECI for fringe benefits be used to determine fringe benefit share.

*Response:* For our fringe benefits calculation, HCFA used Health Care Provider Cost Report Information System (HCRIIS) prospective payment system hospital cost reports to determine the share of compensation other than leave that fringe benefits constitute. The amount determined was 19.5 percent of total compensation excluding leave, or about 24.2 percent of salary. Adding the fringe benefit of paid leave (15 percent of salary associated with the productive hours adjustment) to the fringe benefits determined from the cost reports results in an overall fringe benefit rate of 39.2 percent of salary. Thus, fringe benefits, including paid leave, constitute 28.2 percent of total compensation, which is similar to the shares recommended by commenters.

*Comment:* A few commenters stated that the allowed rental space of 250 square feet for office space was not sufficient to meet direct and indirect space requirements. These commenters suggested that greater allowance should be made for human resources management, program support, compliance, and general business support.

*Response:* Contract therapists work in office space outside of the rehabilitation therapy firm for which HCFA pays as part of Medicare payments to providers. We believe that the 250 square feet for each contract therapist allowed for rehabilitation therapy firm office space is more than adequate to allow for human resources management, program support, and general business support as well as space for individual therapists.

*Comment:* Commenters offered what they termed "technically justifiable corrections" that would have added between \$5.20 and \$13.38 to the proposed guidelines, depending on the therapy type. Others suggested salary equivalency guidelines somewhat closer to HCFA's proposed guideline amounts. Several commenters stated that speech

language pathology guidelines should be as high or higher than those for physical therapy. The commenters pointed out that speech language pathologists have greater education requirements than do the other types of therapists for whom salary equivalency guidelines were proposed. In addition, commenters indicated that the services speech language pathologists perform merit higher guidelines than we proposed.

Other commenters indicated that if salary equivalency guidelines do not reflect accurately contract rates in the RTF industry, SNFs and other providers will be unable to obtain medically necessary services for Medicare beneficiaries. Some commenters believed that, in addition to having difficulty in procuring therapy services, SNFs may find their profit margins depressed to the point where some may close.

Commenters reported that some rehabilitation therapy firms pay therapists sign-on bonuses and offer cruises as special incentives.

*Response:* We carefully analyzed all the industry "technically justifiable correct" alternative levels for salary equivalency guidelines and made modifications where we believed them to be appropriate. We carefully reviewed recommended changes to employment weights, fringe benefit shares, rental space, overhead shares, and 75th percentile differentials. Modifications were made where they were justified by the data, as stated in other sections of this rule. We recognize that sign-on bonuses and other incentives such as cruises, noted by some commenters, increase the operating costs of rehabilitation therapy firms and result in higher wages than cost conscious purchasers can afford to pay. This regulation requires HCFA to set the salary equivalency guidelines at levels reasonably close to costs that providers would incur for their own employees. These bonuses and other incentives have contributed to distorting the therapist market. We do not believe that Medicare should recognize these extraordinary costs, which may not be considered to be related to patient care, as part of its salary equivalency guidelines. Finally, we believe that the therapist market, including rehabilitation therapy firms, will adjust to these new guidelines without disrupting access to care. Indeed, because of provisions in the Balanced Budget Act of 1997, the new guidelines will not be the only change controlling provider behavior.



**C. One Schedule for Respiratory Therapists**

We proposed to use one schedule of guidelines for respiratory therapists, in contrast to the three schedules that we issued in the September 30, 1983 notice. This decision was based on the fact that HCFA does not differentiate in covering respiratory therapists by different levels. Therefore, to make coverage conform with payment for respiratory therapy services, we proposed one schedule for respiratory therapists. Information from fiscal intermediaries and the American Association for Respiratory Care indicates that industry practice is to use only one schedule. For respiratory therapists in 1991, BLS showed two wage classes and a summary wage level. The summary level was the consistent category present for all metropolitan statistical areas (MSAs) and encompassing all nonsupervisory levels of responsibility. This final rule includes one schedule of guidelines for all therapy types.

*Comment:* One commenter was concerned that the American Hospital Association (AHA) and BLS data do not distinguish between wages for a Certified Respiratory Therapy Technician and a Registered Respiratory Therapist and fail to take the salary differentials of the two levels into consideration. The commenter felt this was important for two reasons. First, SNFs usually require the more experienced registered respiratory therapists. Second, with a single rate, HCFA would introduce an incentive for SNFs "to contract for the less costly, yet less experienced and less trained CRTT, rather than the more advanced registered respiratory therapist to provide respiratory care services to the medically acute SNF patient," raising questions about the delivery of appropriate quality patient care.

*Response:* We used the AHA and BLS data for trending purposes only and assumed that certified respiratory therapy technician and registered respiratory therapist wages rose at the same rate. This rule implements one schedule of guidelines for respiratory therapists, regardless of whether services are rendered by a certified respiratory therapy technician or a registered respiratory therapist. We

developed a single respiratory therapy wage rate that includes wages for certified respiratory therapy technicians and registered respiratory therapists, weighted for the various levels in respiratory therapy. The single wage rate for the BLS data aged to 1995 was \$15.48 per hour, compared to \$15.58 per hour for all data sources, a difference of less than one percent.

Regarding the commenter's concern of introducing an incentive to SNFs to use "less experienced and less trained" certified respiratory therapy technicians rather than registered respiratory therapists, we believe that as long as the therapist is qualified to provide respiratory therapy services, then the provider will furnish quality care. Therefore, both a certified respiratory therapy technician or a registered respiratory therapist should be qualified to provide respiratory therapy services.

**D. Geographic Adjustment Factors**

**1. Use of Urban Portions of the Prospective Payment System Hospital Area Wage Index for Geographic Adjustment**

We proposed using the urban portion of the prospective payment system hospital area wage index to adjust the guideline amounts for local labor-related cost variations. We chose the urban portions of the prospective payment system hospital area wage index because we felt that SNFs compete in the same labor markets as hospitals, HHAs, and other health care providers. There was also precedent for using the hospital area wage index since two other long-term care Medicare benefit programs, SNF and HHA care, use it to adjust for local labor cost variation.

*Comment:* Several commenters stated that using the hospital area wage index to adjust the salary equivalency guidelines for geographic variation exaggerates the market variances both within and across States. The commenters suggested that the geographic wage variation in rehabilitation therapist labor markets is less than the geographic variation in hospital industry labor markets. Therefore, they concluded that using the hospital area wage index creates variations among localities that are

much too large. The commenters offered suggestions that they believed would more adequately reflect the actual geographic variations in therapist wages. One of these suggestions was the Geographic Practice Cost Index (GPCI) used under the Resource-Based Relative Value Scale (RBRVS) of the Physician Fee Schedule. Other suggestions included aggregating data into State or regional rates similar to those under the existing guidelines, or creating State guideline amounts close to the national average with exceptions for markets that have extreme variations. Commenters also suggested using the hospital area wage index, but applying it to a smaller portion of the labor-related costs to reduce distortions within and across states. Another commenter suggested using the reclassified prospective payment system hospital area wage index, instead of the pre-reclassified area wage index. That would give SNFs and therapy suppliers the same advantages that prospective payment system hospitals receive since SNFs compete in the same labor markets as hospitals.

*Response:* As recommended by commenters, we are using the GPCI contained in the Physician Fee Schedule (62 FR 59052, October 31, 1997) instead of the hospital area wage index. We will use the Work, Practice Expense, and Malpractice GPCIs, and apply them to therapist compensation and overhead shares. Therapist compensation and overhead shares come from the therapy-specific input price indexes as developed by HCFA. There was no direct source of data on therapist malpractice cost shares. To estimate a malpractice share, we analyzed the malpractice shares from relevant rehabilitation therapy Current Procedural Terminology (CPT) codes under the Physician Fee Schedule. We determined that, on average, malpractice represents roughly 3.0 percent of total expenses for these therapy CPT codes. We used 3.0 percent for the malpractice share of the GPCI and subtracted 3.0 percentage points from the overhead share of the GPCI to avoid accounting for malpractice twice. The shares for these therapy-specific input price indexes are presented in the table below.

Therapist cost category	GPCI	Cost shares from therapy-specific input price indexes			
		Physical therapist	Occupational therapist	Speech language pathologist	Respiratory therapist
Therapist Compensation .....	Work .....	0.74	0.72	0.71	0.67
Therapist Practice Expense .....	Practice Expense .....	0.23	0.25	0.26	0.30

Therapist cost category	GPCI	Cost shares from therapy-specific input price indexes			
		Physical therapist	Occupational therapist	Speech language pathologist	Respiratory therapist
Therapist Malpractice .....	Malpractice .....	0.03	0.03	0.03	0.03
Total .....	.....	1.00	1.00	1.00	1.00

The guideline amounts are calculated by the following equation:

$$\begin{aligned}
 &\text{Locality SEG amount} \\
 &= \\
 &\text{National SEG amount} \\
 &\times \\
 &[(\text{Work GPCI} \times \text{Therapy-Specific Compensation share}) \\
 &+ \\
 &(\text{Practice Expense GPCI} \times \text{Therapy-specific Overhead share}) \\
 &+ \\
 &(\text{Malpractice GPCI} \times \text{Therapy-specific Malpractice share})]
 \end{aligned}$$

The GPCIs and guideline amounts for each therapy type for each GPCI locality are in Table I under section V of this final rule.

We decided to use the GPCI for several reasons. The Balanced Budget Act of 1997 mandates that many therapy services that are now reimbursed based on the salary equivalency guidelines will be shifted to the physician fee schedule, and, thus, therapist wages will be indexed by the GPCI as early as July 1, 1998. We, therefore, saw that using the GPCI was the direction for future therapy wage adjustments. We assessed the appropriateness of using the GPCI and found that, of the available indexes, the GPCI most accurately reflects the local labor costs of therapists. Using the GPCI produces a less widespread geographic distribution of guideline amounts. Also, many commenters asked us to provide statewide rates as opposed to MSA rates provided in prior salary equivalency guideline notices.

We decided to apply the GPCI to the therapist compensation share as determined by the therapy-specific input price index. We then used the practice expense GPCI to approximate the relative cost differences by geographic area of practice expenses (clerical and managerial compensation, office costs, and other costs) used to provide therapy services. In addition, we use the malpractice expense GPCI to approximate the relative cost differences by geographic area for malpractice expenses incurred in providing therapy services. The application of these GPCIs is analogous to the methods used under the Physician Fee Schedule.

As mandated by section 4541 of the Balanced Budget Act of 1997, many

services presently covered under the therapy guidelines will be paid under the physician fee schedule beginning in January 1999. Since the physician fee schedule is adjusted for geographic variation by the GPCI, both the current and future payment systems will reflect similar geographic wage adjustments providing a smoother transition from the salary equivalency guidelines to the physician fee schedule.

*Comment:* Commenters suggested that the hospital area wage index in the proposed rule did not reflect the known geographic differences in therapist wages in different settings, specifically, hospital-employed therapists as compared to SNF-employed therapists. Many commenters suggested that until HCFA can demonstrate that the geographic variation in the wages in other settings are comparable, the use of the PPS hospital area wage index should be abandoned.

*Response:* We responded to the variation in wage levels among different settings in our responses to comments on the occupation labor market for therapists under section III.B. of this final rule. We have no data that indicate that the geographic adjustment needs to be done by setting if the national baseline amounts by setting are appropriately handled.

*Comment:* A commenter recommended that HCFA use nursing home employed therapist wage data, and that the recent revision to the SNF Medicare cost report would be useful in this regard. The commenter suggested this as a long-term option and was willing to accept modification of the hospital area wage index as a short-term solution for reducing the influence of the geographic adjuster.

*Response:* We have decided to use the GPCI from the physician fee schedule as the geographic adjuster. Currently, however, therapist wage data are not available on the Medicare SNF cost reports. Also, the Balanced Budget Act of 1997 provides for payment for outpatient rehabilitation services on a fee schedule basis which uses the GPCI as the wage index. Since we will only have salary equivalency guidelines for a short period of time, we have not developed a separate wage index for

therapy services using nursing home employed therapist wage data.

## 2. Methodology for Determining Rural Rates Under Salary Equivalency

We proposed to calculate the guidelines in rural (non-urban) areas in a given State as the weighted average of the prospective payment system hospital wage index for MSAs within a State's boundaries. We proposed this method because our analyses indicated that the therapy market for rural areas tends to reflect the prevailing compensation conditions of the surrounding urban areas in the region. By weighing the urban areas in a state by the amount of hours associated with the delivery of PPS hospital care, the rural rate would reflect the larger weight given to MSAs with the most hospital hours. These urban areas with most of the hospital hours also tend to have higher wage index values.

*Comment:* Several commenters were concerned that rates in some rural areas may be set too low. Some commenters indicated that this would impede access to quality health care by Medicare beneficiaries because it would be difficult to recruit and retain therapists in rural areas. These commenters offered no recommendation on how to mitigate this potential problem.

*Response:* Since we have decided, based on industry comments and HCFA analyses, to use the work, practice expense, and malpractice GPCIs from the physician fee schedule, we analyzed rural rates using the GPCI. Unlike the hospital area wage index, the GPCI provides no distinction between rural and urban areas. Instead, certain localities have separate GPCIs based on their unique characteristics. The rest of the areas in a state use the state GPCI. The localities given separate index values are usually the larger urban areas and have been separated because they have unique labor cost characteristics. Using the GPCI essentially creates a geographic cost adjustment for the unique areas and a different geographic cost adjustment for the rest of the state. Under this methodology, a rural area would have a similar guideline amount to any other area in the state (urban and non-urban), except those areas that have

unique cost markets. The 1990 Census data showed that therapist wages in rural areas were close to therapist wages in other rural and urban areas while therapist wages in the largest urban areas were distinctly higher than the national averages. Using the work GPCI produces a local labor adjustment that mirrors the actual geographic wage variations for therapists as determined from the 1990 Census data.

Because of the resulting distribution created by using the GPCI, we do not feel that rural areas will have difficulty recruiting and retaining therapists. Since only those areas that have shown unique costs would have a different guideline amount, rural areas would receive effectively the same rate as most nonrural areas in the State. Thus, there would be no incentive to diminish services in rural areas or compromise access to quality health care by Medicare beneficiaries due to relatively lower wage levels. We do not believe that a local labor cost adjustment (work GPCI) that mirrors the actual geographic wage distributions for therapists will create shortages in rural areas.

*Comment:* Several commenters were concerned that the guideline amounts would force SNFs in rural areas to use on-call therapists rather than contract therapists. The commenters stated that the only reason rural areas can currently attract contract therapists is that therapy companies can offer bonuses to their employees. If the rates in rural areas are set too low, contract therapy companies could not hire as many therapists and, therefore, could not provide services in rural areas. Thus, rural nursing homes would have to use on-call therapists who are less qualified than contract therapists.

*Response:* Since we are using the GPCI to adjust the guidelines for relative cost differences by geographic area, we believe that we have addressed the concerns of these commenters. As explained above, most areas in a State, including rural areas, are adjusted by the same GPCI. Only those areas that have shown unique characteristics would have a different adjustment factor under the GPCI. In fact, there are 33 states that have statewide rates only. We feel this methodology more accurately reflects the current labor market for therapists for two reasons: First, therapy companies can attract therapists under these guidelines because the guidelines more accurately reflect the relative costs of an hour of therapy patient-time for a given therapy type. Second, using the work GPCI to adjust the guidelines provides a more accurate reflection of the geographic distribution of therapist wages. Therefore, we see no reason for

therapy companies to be unable to attract therapists nor do we see any reason for rural areas to be unable to attract contract therapists under these guidelines.

The use of on-call therapists is a decision to be made by the individual nursing home. While some commenters believed that on-call therapists were not as qualified as contract therapists, other commenters seemed to imply that on-call therapists came from the same group of therapists as contract therapists. As far as we know, there is no difference in education, training, or credentialing between the two. Commenters also alluded to rural areas using on-call therapists because that was the nature of their caseload. We do not feel that these new salary equivalency guidelines disadvantage rural areas, particularly regarding on-call therapists.

*Comment:* One commenter believed that HCFA's proposed methodology for computing the rural rates is incorrect because it should be based on the cost of employing labor in a rural area or weighted by other data representative of labor costs of speech language pathologists in rural areas. The commenter suggested using either rural area speech language pathology wage data, state average speech language pathology wage data, rural area hospital wage data, or state average hospital wage data. The commenter also suggested applying the prospective payment system hospital wage index to one-third of the guideline amounts instead of 83.378 percent as proposed.

*Response:* There are no available data or index for speech language pathology wages in rural areas or state areas that could be used to adjust the guidelines. Because there are no available geographic data on speech language pathology wages and because the hospital wage distribution does not reflect therapist wage distribution, we have decided, based on industry comments and HCFA analyses, to use the work GPCI for the therapist compensation portion of the therapy-specific input price indexes. We will also apply the practice expense GPCI to the practice expense portion and the malpractice GPCI to the malpractice expense portion. Based on our analysis of the different data surveys of therapist wages by geographic region, the work GPCI provides a close approximation of the distribution of therapist wages.

*Comment:* One commenter recommended that HCFA have a special adjustment for rural providers that contract for more than 40 percent of any specific therapy services.

*Response:* This comment implied that the adjustment should increase the guideline amounts for rural providers that contract for large amounts of therapy services because contracting for these services in rural areas is more costly. We feel that, by using the GPCI to adjust the guideline amounts for geographic variation, we have adequately determined rural rates. The guideline amounts in rural areas are consistent with the guideline amounts in nonrural areas that have not displayed unique labor costs. The distribution of rural guideline amounts as they compare with guideline amounts in other areas is consistent with the geographic distribution patterns of therapist wages shown in other surveys.

*Comment:* One commenter suggested that HCFA continue, as in the proposed rule, to apply a blended MSA rate as a substitute for rural calculations.

*Response:* We are not blending urban rates to determine rural rates in this final rule because we are not using the hospital area wage index to adjust the guideline amounts for local labor cost variations. Instead, we are using the GPCI from the physician fee schedule to adjust the guideline amounts for relative cost differences by geographic area. The work GPCI more accurately reflects the geographic distribution of therapist wages and produces a rural area amount that is consistent with nonrural areas in a state that has not shown unique cost characteristics.

### 3. Local Labor Market Theory

We proposed to adjust the salary equivalency guideline amounts for local labor cost variations because the labor market theory suggests that payment amounts reflect the costs of providing services in a given area. Many other Medicare payment systems such as hospital prospective payment system, SNF and HHA cost limits, and the physician fee schedule, adjust payments for geographic variation. Adjusting the guidelines for local labor cost variations is consistent with the adjustments made under these other payment systems. The only difference is that the salary equivalency guidelines are established for a single type of occupation (therapists) whereas costs in these other programs include all occupations in the industry. Because of this difference, there is no available adjustment factor that is completely accurate for therapist wage variations by geographic area. Instead, we use the adjustment index that best reflects the observed geographic distribution in therapist wages. The most appropriate adjustment index HCFA has been able to find was

the work GPCI from the physician fee schedule.

*Comment:* One commenter believed that it was inconsistent for HCFA to simultaneously recognize and adjust for differences in therapist wages among geographic regions while, at the same time, insisting that the much greater wage differentials among sites of employment within the same geographic region are not also worthy of adjustment.

*Response:* We believe that the adjustment to therapist wages for local labor cost variation is a different issue than the compensation of wage differentials among sites of employment within the same geographic area. We discuss our logic and the reasoning behind our decisions on wage differentials by employment setting in our responses to comments on the occupational labor market for therapists under Section III.B. of this final rule. We have concluded that the observed wage differentials by employment setting result from compensating differences in working conditions, skills required, short-run market disequilibrium, and different degrees of cost-minimizing behavior in different settings. The relative cost differentials by geographic area are simply variations caused by local market conditions and are not designed to replace the compensating differentials that HCFA incorporates in the guideline amounts. Relative cost differences by geographic area are captured in both the PPS hospital area wage index and the GPCI. However, for specific occupations, this differential can be smaller or larger than the average for all occupations. For therapists, we have found that local labor cost variation is smaller than the variation for all hospital occupations. The GPICs and guideline amounts for each therapy type for each GPCI locality are in Table I under section V. of this final rule.

#### E. Salary Equivalency Amount Updates

In the March 28, 1997 proposed rule, we discussed the development of the Rehabilitation Therapist Input Price Index needed to update guideline levels from the base period to the implementation period (62 FR 14868). The rehabilitation therapist input price index would also be used to adjust the guidelines in future periods, using forecasts by Standard & Poor's DRI.

##### 1. Rehabilitation Therapist Input Price Index and Related Issues

As discussed at 62 FR 14868, we proposed that the therapist input price index would be a fixed-weight, or Laspeyres-type, index. The index would be consistent with other HCFA input

price indexes used to update Medicare payment rates. HCFA input price indexes are normative indexes measuring the pure price change of a fixed market basket of inputs to provide specific services. A normative index is designed to measure pure price changes under normal competitive conditions, conditions that may not exist in health care markets given the extensive presence of third-party payers. The rehabilitation therapist input price index consists of two parts for each cost category: (1) base weights that are determined from the same data sources as used to produce the guideline payment levels, and (2) price proxies that show price changes reflective of cost-minimizer market forces impacting a given cost category.

*Comment:* One commenter suggested that changes be made to correct the fringe benefit factor and to adjust the rental cost share to reflect what the commenter believes to be more realistic space needs. The commenter recommended using the ECI data on fringe benefits for hospital workers and increasing the rental area to 750 square feet.

*Response:* As explained in the section on methodology, we have modified the fringe benefits factor to include the productive hours adjustment. The productive hours adjustment had previously been added to wages rather than fringe benefits. Reclassifying the productive hours adjustment to the fringe benefits factor increases its share of total compensation to more than 28 percent. This share which we calculated using the hospital Medicare Cost Reports and the productive hours adjustment, is consistent with the ECI data on fringe benefits for hospital workers. The consistency supports our view that the hospital Medicare Cost Reports are the most accurate source of fringe benefit data since they are carefully scrutinized for use under hospital prospective payment system. Therefore, we believe that this is an accurate estimate of the fringe benefit share for the rehabilitation therapist input price index.

We also believe that the 250 square feet allowed as office space in the proposed rule is sufficient for efficient and effective therapy services as was explained in section III.B., Methodology, of this final rule. We will continue to use the cost associated with 250 square feet as the rent share in the rehabilitation therapist input price index.

*Comment:* One commenter recommended using internal proxies for wages and fringe benefits consistent with the hospital and SNF blend used

in determining wage levels for the guideline amounts.

*Response:* The hospital and SNF blend uses rehabilitation therapy wage levels for physical therapy, occupational therapy, speech language pathology, and respiratory therapy to reflect occupational market wage levels for the nation. The rehabilitation therapy input price index is used to update the base wage levels for inflation and is analogous to our market baskets for prospective payment system hospitals and HHAs. In both of these market baskets, rehabilitation therapists are included as part of professional-technical occupations with a 50/50 blend of the ECI for civilian hospital workers and the ECI for private professional-technical workers. The rehabilitation therapy input price index uses this same blend of ECIs.

*Comment:* One commenter proposed an alternative method of escalation which, for the time period tested, actually would project lower monthly increases than would the 96:3 forecast of the rehabilitation therapist input price index.

*Response:* The escalation method proposed by the commenter used a market basket that differed slightly from the one we derived. The commenter's market basket blended the ECI for nursing homes with the ECI for hospitals to create a blended internal wage proxy. Our rehabilitation therapist input price index is consistent with the 50/50 blend of ECI for hospitals and the ECI for Professional and Technical used in the hospital PPS and HHA input price indexes. We believe this methodology most closely measures relevant buyer price inflation even if it results in projected monthly increases that are higher than the alternative proposal.

*Comment:* One commenter suggested using the CPI plus an additional percentage, determined by HCFA, while another commenter suggested using the CPI plus 3 percent as the update factor if updates are not applied within a certain time limit.

*Response:* Our rehabilitation therapy input price index updates are conceptually superior for adjusting the salary equivalency guidelines because they are specific to the cost structure of rehabilitation therapy. We use weights that reflect the mixture of costs appropriate for efficiently providing contract rehabilitation therapy services. The rehabilitation therapist input price index includes proxies for wages and benefits of health sector and professional and technical workers as well as wages and benefits for administrative support and managerial

personnel, office costs, and other costs. These proxies are conceptually closer to changes in the actual cost of rehabilitation therapy supply services than is a broad measure like the CPI.

HCFA has currently produced updates through the year 2000. The Balanced Budget Act of 1997 shifts most services covered by salary equivalency guidelines to SNF PPS or to the physician fee schedule well before the year 2000.

## 2. Timing of Rebasing Rates and Market Basket

*Comment:* Some commenters believed that HCFA should establish a schedule for adjusting inflation assumptions and provide that schedule in the final rule. These commenters also felt that HCFA should explain when and how rebasing would be done. Some commenters requested it be rebased at least every 3 years. One commenter recommended we update for inflation annually.

*Response:* The Balanced Budget Act of 1997 included some provisions that we believe will implement more effective and simpler controls over providers' costs of contracting for therapy services and that appear to make revised salary equivalency guideline regulations unnecessary in the future. The Balanced Budget Act of 1997 provided prospective payment systems for SNFs, HHAs, and Community Mental Health Centers, which ultimately will eliminate the need for salary equivalency price restraints in those venues. In addition, the Balanced Budget Act of 1997 contained various provisions which will move therapy payment from a cost basis to using the physician fee schedule for therapy provided in CORFs and outpatient rehabilitation facilities and by other providers furnishing Part B outpatient therapy service. This includes the therapy provided under Part B to nursing home patients, outpatient hospital services, and outpatient therapy services provided by an HHA to patients not under the HHA benefit. The Balanced Budget Act of 1997 also provided a \$1,500 annual limitation per Medicare beneficiary where therapy services are provided under the outpatient physical therapy benefit (which includes outpatient speech language pathology services) or occupational therapy benefit. We believe that these new prospective payment systems, application of the physician fee schedules, and the \$1,500 annual limitation per Medicare beneficiary, when they are implemented, will override limiting payment of contracted therapy services to the salary equivalency guidelines

because they will limit payment for contracted therapy services and should offer a strong incentive for providers to control costs. Therefore, we almost certainly will not be revising the salary equivalency guidelines in the future. Until the new payment systems are implemented for the different providers, this rule provides a monthly adjustment factor for May 1998 through April 2001 (Table IV). Also, for cost reporting periods beginning on or after May 2001, the schedules would remain in effect, increased by the appropriate adjustment factor.

## F. Other Technical and Policy Issues

### 1. Travel Allowance

*Comment:* Several commenters requested clarification regarding payment of the standard travel allowance. Many commenters requested that we revise the current policy, which permits only one standard travel allowance per supplier traveling to a provider site. Some commenters suggested that we should permit a standard travel allowance for each therapist traveling to the provider site. Some commenters believed that the standard travel allowance is inadequate, especially for HHAs, and another commenter believed that the standard travel allowance may discourage therapists contracting with providers in rural areas. One commenter stated that it should be noted that a salaried therapist is not subjected to a reduced compensation allowance for time spent traveling to a patient's home. Another commenter recommended an alternative of one travel allowance for each discipline or therapy type that performs services at each provider site each day.

*Response:* We have not found any evidence that the standard travel allowance has discouraged therapists from contracting with rural providers in rural areas. Also, our longstanding policy authorizes HHAs to receive payment under the optional travel allowance policy if they document their time spent in traveling and, if they choose, their travel mileage. We have decided to adopt the recommendation made by one commenter to provide a travel allowance for each discipline or therapy type that performs services at each provider site each day.

*Comment:* We asked for comments in the proposed rule on extending the optional travel allowance established for home health agencies to all providers. We received a large amount of comments requesting that we adopt this provision. In addition, one commenter stated that a salaried employee is not subjected to reduced compensation

when he/she travels to a patient's home. A salaried employee who receives a set compensation is paid for all duties of his job including travel time within an 8 hour day. This is in contrast to a person who is being paid on a contractual basis.

*Response:* After consideration of the comments, we decided to expand the optional travel allowance. In this rule, we are permitting the optional travel allowance for all providers who furnish therapy services in areas in which geographic distance creates unique labor markets, e.g., rural areas. Under this optional travel allowance, each therapy type or discipline traveling to either the patient's home or provider site may claim this optional travel allowance. However, the provider must maintain documentation of the therapist's travel time and mileage. This optional travel allowance will help providers who are disadvantaged by one standard travel allowance per supplier. We believe that the standard travel allowance is adequate.

### 2. Data Sources for Future Salary Equivalency Guidelines

This topic is now obsolete because, as a result of the Balanced Budget Act of 1997 provisions, we are not publishing revised guidelines in the future.

### 3. Application of Guidelines

*Comment:* We received three comments regarding application of the guidelines in situations where compensation to a therapist employed by the provider is based (at least in part) on a fee-for-service or on a percentage of income (or commission) and that was of particular concern to the home health industry. One commenter pointed out that this issue is in litigation and should not be resolved through regulations. In addition, this commenter stated that, based on the law, HCFA could not apply salary equivalency guidelines to employees paid on a fee-for-service basis and that this proposal is only one step away from applying guidelines to the allowable costs of all therapy services whether salaried employees, hourly compensated employees, "fee-for-service" employees, or outside contractors. Another commenter felt that this proposal needs to be considered more carefully. The third commenter was in favor of this provision and felt that it was a good safety measure.

*Response:* We are establishing regulations that will allow that the salary equivalency guidelines to apply in situations where at least partial compensation to a therapist employed by the provider is provided on a fee-for-

service basis or on a percentage of income (or commission). The entire compensation will be subject to the guidelines in cases where the nature of the arrangements are most like an "under arrangement" situation, although the provider may technically treat the therapists as employees. The guidelines will be applied in this situation so that an employment relationship is not being used to circumvent the guidelines. Since June 1977, our longstanding policy on this issue has been contained at section 1403 of the Provider Reimbursement Manual. We are now establishing this provision in regulations that further the statutory purpose of cost control as reflected in the legislative history of the guidelines. HCFA recognizes that certain employment relationships would effectively circumvent the guidelines, has provided for these circumstances in instructions in section 1403 of the Provider Reimbursement Manual, and now provides for them in regulations at 42 CFR § 413.106(c). The guidelines will only be applied in such cases, not to all salaried employees. We do not believe that the fact that there is litigation on this issue prevents us from establishing this longstanding policy in regulations.

#### 4. Limiting Contracted Services to 40 Hours

In the proposed rule, we had stated that, while we were evaluating the data used in developing the guideline amounts, we became aware of a tendency for contracted therapy hours in some cases to exceed 40 hours per therapist a week, the amount of hours a full-time employee would generally work (62 FR 14872). We proposed to eliminate the expense factor where the hours of therapy services per therapist exceed 40 hours.

*Comment:* An overwhelming amount of commenters requested that we not eliminate the expense factor for therapy hours per therapist that exceed 40 hours. Several commenters said that in rural areas, where it is hard to obtain therapists' services, the therapists must sometimes work over 40 hours.

*Response:* We have decided to retain the expense factor in cases where the therapist provides services to the provider exceeding 40 hours per week. We believe that this may be burdensome for the intermediaries and as stated by the commenters, there may be some providers who do appropriately utilize services in this manner.

#### 5. Outcomes Based Systems

*Comment:* Several commenters stated that they used the Functional Independence Measurements in SNFs.

They also stated that they wanted payment outside of the expense factor for this service which should be reimbursed based on the prudent buyer policy.

*Response:* Events have superseded our allowing an additional payment for outcomes-based systems. OBRA '87 required that the SNF must complete a comprehensive resident assessment which is the minimum data set. The Balanced Budget Act of 1997 also mandates, for purposes of the SNF prospective payment system, that SNFs complete the MDS for collecting information for payment under prospective payment system for therapy and other services. SNFs are and will be reimbursed for completing the minimum data set. We will not be able to permit an additional payment outside of the salary equivalency guidelines for other outcomes based systems.

#### 6. Exception for Binding Contract

We proposed to eliminate the exception for binding contract.

*Comment:* Several commenters requested that we not eliminate the exception for binding contract and that it continue in the manner that it is currently provided for in the regulations. Other commenters believed that therapy contractors and nursing home providers should not be subject to rates that were not yet published at the time a contract was negotiated.

*Response:* We continue to believe that providers should have been prudent buyers of therapy services at the time they negotiated the contracts. Therefore, elimination of the exception for binding contract and applying the salary equivalency guidelines to these services where a binding contract is in effect should not yield a different result than what a prudent buyer should pay. Accordingly, we are eliminating the binding contract exception in § 413.106(f)(1).

#### 7. Exceptions Process for Unique Circumstances or Special Labor Market Conditions Including Time Period for Submission of Requests

We received several comments on the substantiating requirements and the process.

*Comment:* One commenter asked that we establish a new exceptions process that would include specific requirements for a provider qualifying as having unique circumstances or a special labor market condition. The commenter also requested that we have specific time limits on intermediary, HCFA Regional Office, and Central Office review of the exception request. Several other commenters also made

similar requests. Several commenters said that the exceptions process was adequate but recommended a deadline of 90 to 120 days from receipt of application for fiscal intermediary response.

*Response:* At this time, we will not be establishing a new exceptions process. The Balanced Budget Act of 1997 introduces new payment systems which, for a large portion of the providers, will override the salary equivalency guidelines in the next year. We also believe that the current exceptions process provides sufficient latitude for submission of provider documentation to support either an exception request for unique circumstances or special labor market conditions. Also, with the 60 day increase in time that the provider has to submit documentation, the providers should have enough time to provide documentation to the fiscal intermediaries. Regulations at § 413.106(f)(4) now reflect the increase from 90 to 150 days. We encourage providers to do so and, as suggested in the comments, we will require that the intermediaries process the exception requests within 180 days after receiving the exception request which is the same time frame required for SNF and HHA exception requests to routine cost limits. Because this has never been a HCFA Central Office responsibility, we do not want to make it so now, since the salary equivalency guidelines will shortly be phased out for all providers. However, we believe the 180 days will give the intermediary enough time to conduct their own review of the documentation and, if necessary, enough time to consult with the Regional Office.

Although we did not ask for comments in the proposed rule on payment for supervisory services, we received several comments on the issue of supervisory pay.

*Comment:* Several commenters asked that payment for these services be made at 135 percent of the hourly salary equivalency guideline amount.

*Response:* Because there was no evidence to substantiate these comments, we will continue to have the fiscal intermediaries pay for these services based on the intermediaries' knowledge of the differential between physical therapists', respiratory therapists', occupational therapists', and speech language pathologists' supervisors' salaries and physical therapists', respiratory therapists', occupational therapists', and speech language pathologists' salaries in similar provider settings in the area.

*Comment:* Several commenters asked for a definition of a supervisor and an

administrator. Several commenters asked if one supervisor could supervise all types of therapy. One commenter asked if there could be a different supervisory rate per discipline.

*Response:* In the past, the Medicare program has not defined these terms. However, section 1412.5 of the Provider Reimbursement Manual permits an additional payment for a chief therapist and those therapists who spend at least 20 percent of their time supervising other therapists or in administrative duties. Supervising other therapists is distinguished from simply being expected, as a staff therapist, to direct trainees, aides, and assistants in performing therapy services. Administrative responsibility is the performance of those duties that normally fall within the purview of a department head or other supervisor. Because the provider department head or supervisor is not providing direct patient care, it would not be necessary for this person to hold the credentials for the particular type of department he is heading. For that reason, we are not asking intermediaries to determine different administrative/supervisory rates for each discipline.

*Comment:* Several commenters requested that we pay aides as a function of the hourly salary equivalency amount at 50 percent of these amounts. Some commenters suggested that aides be paid at one third of the hourly salary equivalency amount. Another commenter asked that HCFA conduct a study of the classification and compensation of rehabilitation therapy aides and establish a set of salary standards specific to respiratory therapy aides.

*Response:* Because the commenters did not supply any substantiating evidence in the comments to support their request for paying aides as a function of the hourly salary equivalency amount at 50 percent, we will continue our policy of having the intermediary look at a comparable position, e.g., the nurses aide in order to determine the reimbursement amount. Because there are no educational requirements for coverage of aides' services and we continue to believe that their services are comparable to nurses aides, we do not feel that it is necessary to conduct a study of the classification and compensation of therapy aides.

Although we did not request comments on payment for assistant services, we did receive several comments on this issue.

*Comment:* Several commenters asked that we increase payment to 85 percent of the hourly salary equivalency amounts for assistants.

*Response:* Because there was no evidence to substantiate the commenters' request, we will continue with payment at 75 percent of the hourly salary equivalency amount.

*Comment:* Several commenters were concerned that we were limiting payment for overtime.

*Response:* The proposed rule did not specifically introduce new limits on payment for overtime. The proposed rule states that a provider would receive payment for overtime; however, if the therapist worked over 40 hours he/she would not receive the expense factor portion of the hourly salary equivalency guideline amount. As stated previously, we are not limiting the expense factor if a therapist works over 40 hours. We are also not revising the overtime policy. Section 1412.4 of The Provider Reimbursement Manual contains our longstanding policy for overtime reimbursement.

*Comment:* Several commenters asked that HCFA add a provision to the regulations that recognizes a 12.5 percent shift differential for weekend and second shift services.

*Response:* We continue to believe that it is not customary for therapists to provide services on shifts that would not be part of a normal day-time shift. Therefore, we suggest, for those cases where a provider is paying a shift differential, that the provider apply for an exception as a unique circumstance. The fiscal intermediary will determine if the amount paid is reasonable and justifiable as a unique circumstance.

*Comment:* One commenter suggested that HCFA use the HHA per visit limits for the salary equivalency guideline amounts instead of the proposed rule.

*Response:* We cannot use the HHA per visit limits because they do not represent hourly wage rates for employees. They are visit costs which do not necessarily represent an hour's worth of service and do not represent hourly wage rates for therapists.

*Comment:* One commenter felt that HCFA should exempt from the salary equivalency guidelines those facilities participating in Phase I of the Multi-State Case Mix Demonstration project.

*Response:* In Phase I and Phase II of the Multi-State Case Mix Demonstration project, the therapy services were paid on a reasonable cost basis and therefore, payment was limited to the salary equivalency guidelines. Under Phase III, therapy services are paid on a prospective payment rate. However, the providers will have to continue to complete a Medicare cost report reflecting the salary equivalency guidelines. Ultimately, the salary equivalency

guidelines will not effect the payment the providers receive because payment for therapy is on a prospective rate. As SNFs participating in the demonstration project are paid under the prospective payment system, they will no longer be paid under the demonstration project. They will be subject to prospective payment system for cost reporting periods beginning on or after July 1, 1998.

*Comment:* One commenter recommended that a variety of costs should be reimbursed for contract therapists working in SNFs: (1) Education, (2) training, (3) attendance at professional meetings, (4) licensing and credentialing, and (5) liability insurance.

*Response:* We believe that because these costs are the type of costs that an employee may incur, they are reimbursed under the hourly salary equivalency amount as part of the fringe benefit and expense factor.

*Comment:* Several commenters supported an exception for certain diagnostic services, such as video fluoroscopies, and recommended that such procedures be exempt from the salary equivalency guidelines.

*Response:* We do not believe that there should be an exception for these services. We believe that if qualified speech language pathologists are permitted to perform those services, then they are speech language pathology services that should be paid for in the same manner as other speech language pathology services. We want to point out that any special equipment that is required for these services will be reimbursed as an additional allowance to the hourly salary equivalency guideline amounts. Also, if these services take longer to perform than some other therapy services, the provider will be reimbursed for the additional hours.

*Comment:* One commenter suggested that HCFA study the impact that the Medicare transfer agreement requirement has on the cost of providing respiratory therapy services to SNFs. The commenter stated that the transfer agreement creates another layer of costs.

*Response:* Because the Balanced Budget Act of 1997 provides that, for respiratory therapy services furnished by a SNF on or after July 1, 1998, there will no longer be a requirement for SNFs to provide respiratory therapy services to SNF patients through a transfer agreement hospital, we do not believe it is necessary to perform the suggested study.

*Comment:* One commenter wanted HCFA to clarify which rate may be charged when a rehabilitation facility



bills for services using contracted employees in several sites that cross geographic wage index lines (*i.e.*, charge geographic rates based on central office location or site location?)

*Response:* We do not interfere with the provider's charging practices as long as it is consistently applied to all patients. However, the guidelines would limit provider's costs to the central office location guideline amount because the salary equivalency guidelines limit the costs of the provider who incurs the costs and does the billing. In addition, we do not have any site-of-service-billing requirements for therapy services.

*Comment:* One commenter stated that HCFA was deficient in not developing data for HHAs, CORFs, and outpatient rehabilitation facilities.

*Response:* We did not have the database resources to perform the types of studies and surveys that are necessary for the salary equivalency guidelines. As pointed out in other sections of this final rule, we are unable to use the cost report as a data source for wage rates because it does not collect information on hourly wages for employees. Moreover, no outside sources submitted reliable data for these individual provider types that were consistent with the type of data described in the Senate Committee on Finance Report (S. Rept. No. 1230, 92nd cong., 2nd sess. 251 (1972)).

*Comment:* One commenter wanted HCFA to develop salary equivalency guidelines for HHAs, rehabilitation agencies, and CORFs using relevant data from those settings.

*Response:* As pointed out in the previous comment, we did not have the resources to develop this data, nor could we use the cost report for this purpose. In addition, we did not receive this type of data from outside sources. We also do not believe that the statutory language under section 1861(v)(5) of the Act requires that we develop individual salary equivalency guidelines for each provider type.

*Comment:* One commenter stated that HCFA should continue to include professional associations in discussions concerning future payment methodologies.

*Response:* Because we have no plans to publish revised salary equivalency guidelines in the future, we cannot address this issue in the context of further discussions of the salary equivalency guidelines. However, we have included, and will continue to include, professional associations in discussions of the new payment methodologies that are provided in the Balanced Budget Act of 1997.

*Comment:* One commenter wanted HCFA to clarify its position regarding application of the salary equivalency guidelines as Medicare providers move to prospective payment systems.

*Response:* The Balanced Budget Act of 1997 provided prospective payment systems for SNFs, HHAs, and community mental health centers and payment on a fee schedule basis for outpatient rehabilitation services. When providers go under these systems, the salary equivalency guidelines will no longer apply, as stated previously, because these prospective payment systems and fee schedules will limit payment for therapy services and should provide a strong incentive for providers to control costs.

*Comment:* One commenter suggested that in place of salary equivalency guidelines, HCFA should develop a uniform method for payment of therapy services regardless of setting.

*Response:* In the Balanced Budget Act of 1997, Congress enacted a uniform method for payment of therapy services regardless of setting and employee or contractor arrangements for services. This legislation provides for prospective payment systems for inpatient rehabilitation hospitals, skilled nursing facilities, home health agencies, and community mental health centers. It also provides for payment on a fee schedule basis for all outpatient rehabilitation services regardless of setting.

*Comment:* One commenter suggested that HCFA reimburse the contractors' costs associated with therapists' 9 month clinical training program.

*Response:* We can only reimburse the provider for services related to patient care. If the therapist will be providing services to Medicare patients, during the therapist's 9 month clinical trial, then we may reimburse the provider for some of those services as an aide.

*Comment:* One commenter stated that HCFA should pay for in-service training and utilization review services that are contracted out by the SNF.

*Response:* The Provider Reimbursement Manual section 1412.5, describes a therapist's professional services, as serving on utilization review and other appropriate committees and participating in training. Because this section is part of the instructions for salary equivalency guidelines which relate to contracted services, we are recognizing that a provider could contract out for these services.

*Comment:* One commenter stated that calculation of the guideline amount for each metropolitan statistical area for each individual provider would take some time for each individual fiscal

intermediary. The commenter also suggested that funding be provided to the maintainers of the STAR programs (formerly Aetna, now Mutual of Omaha) to provide a computer program to each fiscal intermediary that would automatically calculate the therapy limitations for each provider.

*Response:* In the final rule, we used the GPCI as our wage index, we did not develop as many local rates as we did in the proposed rule. Therefore, it should be easier for the intermediaries to calculate the providers' guideline amounts.

*Comment:* One commenter stated that there are a number of outpatient rehabilitation providers who have established branch offices. Therefore, HCFA should clarify the application of the proposed guidelines for providers with branch offices.

*Response:* We do not have a policy which mandates that an outpatient rehabilitation provider bill for their services at the site of service. The guideline amounts have been based and will continue to be based on the central office address of the provider.

*Comment:* One commenter wanted to know if the guidelines are finalized during a provider's cost reporting year, will the provider be subject to two sets of limits.

*Response:* This has happened in previous schedules of guidelines. The intermediary will prorate the different guideline amounts for the different parts of the cost reporting year to which they apply.

#### G. Statutory Issues

*Comment:* One commenter was concerned that the proposed rule would violate section 1861(v)(5) of the Act that says: "reasonable cost for these services may not exceed an amount equal to the salary that would reasonably have been paid for services to the person performing them \* \* \*" for several reasons. One commenter felt that HCFA must include data from all settings, while another commenter believed that the statute requires setting-specific rates. A third commenter stated that contract therapist wages should have been included.

*Response:* HCFA has broad legal authority to determine reasonable cost. HCFA has implemented section 1861(v)(5) of the Act through regulations that authorize the establishment of salary equivalency guidelines. The Senate Finance Committee Report accompanying PL 92-603, section 251(c), discusses the methodology for developing the initial salary equivalency guidelines and revisions. The Senate Finance

Committee Report stated that guideline amounts should be set at the 75th percentile of the range of salaries paid in the area (by type of therapy) to full-time employee therapists. The Report specifically mentioned the use of salary data compiled by the BLS in determining the 75th percentile level of salaries in an area to the extent feasible, timely, and accurate. Thus, the committee report sets forth a detailed plan describing the measure of reasonableness (prevailing salary), the parameters (75th percentile), and the preferred data source (Bureau of Labor Statistics) which does not specify that HCFA set rates for each setting nor that we use data for each provider type. Until the publication of the proposed rule, we have always relied on the BLS hospital and nursing home wage data. Because there was some concern as to the timeliness of the 1989 and 1991 BLS hospital wage survey data which was the latest BLS survey data available, we felt that we could not use this data as

our sole source for the salary equivalency guidelines. We decided to use the "best estimate" methodology combining a number of data sources.

*Comment:* One commenter stated that lumping together data from different provider types to determine the reimbursement of all provider types does not meet the statutory and regulatory requirements.

*Response:* We do not believe that the statute or regulations prohibit us from combining different provider type data for developing the salary equivalency guidelines. In fact, in 1983, where BLS had provided both hospital and nursing home wage data, we did combine the different types of provider type data. Again, the legislative history supports this approach. We believe that the word "provider" was used in the statute to include all types of entities that meet the definition of that term in the statute.

*Comment:* One commenter stated that it would be appropriate to include salary data from rehabilitation agencies

and other providers in developing salary equivalency guidelines, as these settings represent significant segments of the occupational market for therapy services. The commenter believes that the statutory language in stating, "\* \* \* with such provider or other organization" refers to section 1861(p) of the Act where "other organization" includes rehabilitation agencies.

*Response:* We did not receive nor did we have available this type of data. Moreover, as mentioned earlier, the Senate Committee on Finance Report endorsed the use of the BLS survey as the primary data source. Because the language in section 1861(p) of the Act regarding "other organizations" existed in the statute at the time the Report was written, we believe that the Report supports the use of the BLS provider data in establishing guidelines to be applied to these other organizations as well.

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## IV. Schedules of Guidelines

TABLE I: 1998 GEOGRAPHIC PRACTICE COST INDICES AND SALARY EQUIVALENCY GUIDELINE AMOUNTS BY LOCALITY							
Locality Name	GPCI			SEG			
	Work	Practice Expense	Mal- practice	PT	OT	SLP	RT
NATIONAL				50.65	48.06	46.23	40.01
ALABAMA	0.979	0.871	0.902	48.19	45.66	43.86	37.77
ALASKA	1.064	1.164	1.575	55.85	53.06	51.09	44.40
ARIZONA	0.996	0.964	1.255	50.46	47.86	46.02	39.77
ARKANSAS	0.954	0.854	0.415	46.32	43.88	42.16	36.31
ANAHEIM/SANTA ANA, CA	1.037	1.198	0.799	54.06	51.41	49.53	43.16
LOS ANGELES, CA	1.056	1.203	0.799	54.83	52.13	50.22	43.73
MARIN/NAPA/SOLANO, CA	1.015	1.171	0.632	52.67	50.08	48.26	42.04
OAKLAND/BERKLEY, CA	1.041	1.206	0.632	54.05	51.40	49.53	43.16
SAN FRANCISCO, CA	1.068	1.315	0.632	56.35	53.64	51.72	45.20
SAN MATEO, CA	1.048	1.287	0.632	55.27	52.61	50.73	44.33
SANTA CLARA, CA	1.063	1.276	0.632	55.70	53.00	51.09	44.60
VENTURA, CA	1.028	1.162	0.702	53.16	50.53	48.67	42.37
REST OF CALIFORNIA*	1.009	1.046	0.663	51.02	48.43	46.61	40.40
COLORADO	0.988	0.961	0.811	49.45	46.91	45.11	38.99
CONNECTICUT	1.050	1.182	1.027	54.71	52.00	50.09	43.58
DELAWARE	1.020	1.030	0.826	51.49	48.86	47.01	40.70
DC + MD/VA SUBURBS	1.051	1.177	1.006	54.65	51.94	50.03	43.53
FORT LAUDERDALE, FL	0.997	1.031	1.825	52.16	49.51	47.65	41.30
MIAMI, FL	1.016	1.082	2.403	54.35	51.61	49.68	43.12
REST OF FLORIDA	0.976	0.946	1.372	49.68	47.12	45.31	39.16
ATLANTA, GA	1.007	1.032	0.927	51.18	48.58	46.74	40.50
REST OF GEORGIA	0.971	0.896	0.927	48.23	45.71	43.93	37.89
HAWAII/GUAM	0.999	1.202	0.938	52.91	50.34	48.52	42.36
IDAHO	0.961	0.887	0.577	47.22	44.75	43.01	37.09
CHICAGO, IL	1.028	1.084	1.538	53.50	50.81	48.90	42.42
EAST ST. LOUIS, IL	0.988	0.930	1.345	49.90	47.31	45.48	39.25
SUBURBAN CHICAGO, IL	1.007	1.080	1.262	52.25	49.63	47.78	41.48
REST OF ILLINOIS	0.964	0.885	0.906	47.80	45.31	43.54	37.54
INDIANA	0.982	0.917	0.382	48.06	45.56	43.79	37.78
IOWA	0.959	0.880	0.664	47.19	44.72	42.98	37.06
KANSAS*	0.964	0.895	1.041	48.13	45.62	43.85	37.82
KENTUCKY	0.971	0.871	0.813	47.76	45.25	43.48	37.45
NEW ORLEANS, LA	0.999	0.948	1.075	50.11	47.51	45.68	39.44
REST OF LOUISIANA	0.969	0.876	0.972	47.99	45.47	43.69	37.64
SOUTHERN MAINE	0.980	1.032	0.734	49.88	47.36	45.59	39.55
REST OF MAINE	0.962	0.925	0.734	47.94	45.46	43.71	37.77
BALTIMORE/SURR. CNTYS, MD	1.020	1.038	1.107	52.01	49.36	47.49	41.13
REST OF MARYLAND	0.984	0.969	0.864	49.48	46.94	45.14	39.04
METROPOLITAN BOSTON	1.040	1.205	0.846	54.33	51.67	49.78	43.38
REST OF MASSACHUSETTS	1.011	1.089	0.846	51.88	49.28	47.44	41.20
DETROIT, MI	1.043	1.030	3.060	55.74	52.88	50.86	43.99
REST OF MICHIGAN	0.997	0.937	1.836	51.06	48.41	46.54	40.17
MINNESOTA	0.990	0.966	0.551	49.19	46.66	44.87	38.79
MISSISSIPPI	0.957	0.845	0.724	46.79	44.33	42.58	36.65
METROPOLITAN KANSAS CITY, MO	0.989	0.949	1.202	49.94	47.36	45.54	39.34
METROPOLITAN ST. LOUIS, MO	0.995	0.944	1.203	50.11	47.51	45.68	39.44
REST OF MISSOURI*	0.946	0.831	1.162	46.88	44.41	42.66	36.71
MONTANA	0.952	0.871	0.744	46.95	44.49	42.75	36.86
NEBRASKA	0.950	0.873	0.444	46.44	44.01	42.30	36.47
NEVADA	1.006	1.030	0.942	51.14	48.54	46.71	40.46
NEW HAMPSHIRE	0.988	1.034	0.965	50.55	48.00	46.19	40.06
NORTHERN NJ	1.058	1.203	0.779	54.88	52.17	50.26	43.76
REST OF NEW JERSEY	1.029	1.104	0.779	52.63	49.99	48.12	41.78
NEW MEXICO	0.974	0.907	0.754	48.21	45.70	43.92	37.89
MANHATTAN, NY	1.094	1.356	1.600	59.28	56.42	54.41	47.56
NYC SUBURBS/LONG I., NY	1.068	1.234	1.846	57.24	54.42	52.44	45.68
POUGHKPSIE/N NYC SUBURBS, NY	1.011	1.083	1.272	52.45	49.82	47.96	41.64
QUEENS, NY	1.058	1.237	1.763	56.77	53.99	52.03	45.35
REST OF NEW YORK	1.000	0.957	0.807	49.85	47.27	45.45	39.26
NORTH CAROLINA	0.971	0.921	0.466	47.82	45.34	43.59	37.64
NORTH DAKOTA	0.951	0.869	0.637	46.72	44.28	42.55	36.68
OHIO	0.991	0.940	1.062	49.70	47.12	45.30	39.12
OKLAHOMA	0.969	0.881	0.437	47.23	44.76	43.01	37.06
PORTLAND, OR	0.997	1.011	0.612	50.08	47.53	45.72	39.60
REST OF OREGON	0.962	0.934	0.612	47.86	45.40	43.65	37.73
METROPOLITAN PHILADELPHIA, PA	1.025	1.090	1.261	53.04	50.37	48.49	42.08

REST OF PENNSYLVANIA	0.990	0.928	0.687	48.95	46.41	44.61	38.49
PUERTO RICO	0.883	0.734	0.314	42.10	39.84	38.25	32.84
RHODE ISLAND	1.019	1.072	1.379	52.79	50.12	48.24	41.85
SOUTH CAROLINA	0.976	0.902	0.321	47.56	45.08	43.33	37.37
SOUTH DAKOTA	0.936	0.865	0.439	45.81	43.42	41.73	35.99
TENNESSEE	0.976	0.899	0.538	47.86	45.36	43.59	37.59
AUSTIN, TX	0.987	0.993	0.838	49.84	47.29	45.49	39.38
BEAUMONT, TX	0.993	0.896	1.407	49.78	47.17	45.32	39.05
BRAZORIA, TX	0.993	0.972	1.407	50.68	48.07	46.23	39.97
DALLAS, TX	1.011	1.014	0.912	51.09	48.48	46.64	40.37
FORT WORTH, TX	0.988	0.972	0.912	49.74	47.18	45.38	39.24
GALVESTON, TX	0.989	0.968	1.407	50.48	47.88	46.05	39.82
HOUSTON, TX	1.021	1.006	1.423	52.15	49.47	47.58	41.15
REST OF TEXAS	0.966	0.884	0.855	47.79	45.29	43.52	37.52
UTAH	0.978	0.900	0.619	48.07	45.56	43.78	37.75
VERMONT	0.974	0.986	0.500	48.75	46.27	44.51	38.55
VIRGIN ISLANDS	0.966	1.006	1.028	49.49	46.99	45.22	39.21
VIRGINIA	0.986	0.940	0.538	48.72	46.19	44.41	38.35
SEATTLE (KING CNTY), WA	1.006	1.079	0.745	51.42	48.84	47.02	40.82
REST OF WASHINGTON	0.983	0.969	0.745	49.26	46.73	44.95	38.87
WEST VIRGINIA	0.964	0.852	1.055	47.64	45.13	43.35	37.32
WISCONSIN	0.982	0.930	1.001	49.15	46.60	44.80	38.68
WYOMING	0.968	0.888	0.758	47.76	45.27	43.50	37.51

\* Payment locality is serviced by two carriers.

NOTE: Work GPCI is the 1/4 work GPCI required by Section 1848(e)(1)(A)(iii) of the Social Security Act. GPCIs rescaled by the following factors to assure budget neutrality: Work = 1.00027; Practice expense = 1.00057; Malpractice = 1.03174.

TABLE II: THERAPY-SPECIFIC ADJUSTED HOURLY SALARY EQUIVALENCY INPUT PRICE INDEXES (BASE PERIOD: FOURTH QUARTER 1995=100.000)						
	Base Period Weights by Therapy Type (1)					Price Proxies
	Physical Therapy	Occupational Therapy	Speech Language Pathology	Respiratory Therapy	Composite Therapy Index	
Total	100.000	100.000	100.000	100.000	100.000	
A. Therapist Compensation	73.672	72.250	71.157	66.670	71.824	
Wages	52.884	51.864	51.079	47.858	51.557	50% ECI Civilian Hospital Workers and 50% ECI Private Professional & Technical Workers' Wages.
Benefits	20.788	20.386	20.078	18.812	20.267	50% ECI Civilian Hospital Workers and 50% ECI Private Professional & Technical Workers' Fringe Benefits.
B. Overhead	26.328	27.750	28.843	33.330	28.176	
Other Wages	8.248	8.694	9.036	10.442	8.828	
Clerical Wages	4.124	4.347	4.518	5.221	4.414	ECI Wages Private Administrative Support Including Clerical. (2)
Managerial Wages	4.124	4.347	4.518	5.221	4.414	ECI Wages Private Executive, Administrative, & Managerial. (2)
Other Benefits	0.898	0.948	0.984	1.138	0.962	
Clerical Benefits	0.449	0.474	0.492	0.569	0.481	ECI Benefits Private Administrative Support Including Clerical. (2)
Managerial Benefits	0.449	0.474	0.492	0.569	0.481	ECI Benefits Private Executive, Administrative, & Managerial. (2)
Office Costs	7.555	7.962	8.276	9.563	8.084	CPI-U Housing.
Other Costs	9.627	10.146	10.547	12.187	10.302	CPI-U All Items Less Food & Energy.
Composite Index Share (3)	0.416	0.264	0.172	0.148	1.000	
1/ Base year weights were developed for each type of therapy offered under arrangement. These weights are multiplied by price index levels to measure composite price change over time.						
2/ ECI = Employment Cost Index. ECIs are fixed-weight indexes which track labor cost, free from the influence of employment shifts among occupations and industries.						
3/ The composite index share represents the proportion that each therapy index type represents of the composite index. These shares were derived from estimates of the 1998 shares of therapy services offered under arrangement by therapy type.						

TABLE III.—REHABILITATION THERAPY INPUT PRICE INDEXES FOR FORECASTING THE INCREASE IN THE COST OF THERAPY SERVICES, CY 1991–2000

Calendar year	Physical therapist index	Occupational therapist index	Speech language pathologist index	Respiratory therapist index	Composite therapist index <sup>1</sup>
<b>Historical</b>					
1991 .....	4.9	4.9	4.9	4.9	4.9
1992 .....	4.2	4.2	4.2	4.1	4.2
1993 .....	3.6	3.6	3.6	3.5	3.6
1994 .....	3.1	3.1	3.1	3.1	3.1
1995 .....	2.6	2.6	2.6	2.6	2.6
1996 .....	2.7	2.8	2.8	2.8	2.8
<b>Forecast<sup>2</sup></b>					
1997 .....	2.4	2.4	2.4	2.4	2.4
1998 .....	2.9	2.9	2.9	2.9	2.9
1999 .....	3.2	3.2	3.2	3.2	3.2
2000 .....	3.4	3.4	3.4	3.4	3.4

Released By: HCFA, OACT, National Health Statistics Group.

<sup>1</sup> The estimated outlays for services rendered in 1998 were used to develop the outlays-weighted composite rehabilitation therapy input price index.

<sup>2</sup> Source: Standard & Poor's DRI HHC 3rd QTR 1997; @USSIM/Trend25yr0897@CISSIM/CONTROL973.

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Table IV: Adjusted Hourly Salary Equivalency  
 Amount Monthly Inflation Factors Using Outlay  
 Weighted Composite Rehabilitation Therapy  
 Input Price Index

Salary Equivalency Period		Period Inflation Factors
Month	Year	
1 April	1998	1.00000
2 May	1998	1.00274
3 June	1998	1.00549
4 July	1998	1.00825
5 August	1998	1.01101
6 September	1998	1.01379
7 October	1998	1.01656
8 November	1998	1.01935
9 December	1998	1.02215
10 January	1999	1.02495
11 February	1999	1.02776
12 March	1999	1.03058
13 April	1999	1.03340
14 May	1999	1.03624
15 June	1999	1.03908
16 July	1999	1.04193
17 August	1999	1.04479
18 September	1999	1.04765
19 October	1999	1.05052
20 November	1999	1.05340
21 December	1999	1.05629
22 January	2000	1.05919
23 February	2000	1.06209
24 March	2000	1.06500
25 April	2000	1.06792
26 May	2000	1.07085
27 June	2000	1.07379
28 July	2000	1.07673
29 August	2000	1.07969
30 September	2000	1.08265
31 October	2000	1.08561
32 November	2000	1.08859
33 December	2000	1.09158
34 January	2001	1.09457
35 February	2001	1.09757
36 March	2001	1.10058

Source: Standard & Poor's DRI HHC 3rd QTR 1997;  
 @USSIM/Trend25YR 0897@CISSIM/CONTROL973



### V. Provisions of the Final Rule

In this final rule, we are revising the methodology for establishing the schedules for the maximum payment for physical therapy and respiratory therapy services. We are revising the determination of reasonable cost for physical therapy and respiratory therapy furnished under arrangements by an outside contractor by rebasing the guideline amounts.

We are also establishing salary equivalency guidelines for speech language pathology and occupational therapy services furnished under arrangements by an outside contractor using the same methodology as we are using for determining reasonable cost for physical therapy and respiratory therapy services.

In addition, we are: (1) Eliminating the exception to the salary equivalency guidelines for a provider that entered into a written binding contract with a therapist or contracting organization prior to the date the initial guidelines are published; (2) applying the salary equivalency guidelines in situations where compensation, at least in part, to a therapist employed by the provider is based on a fee-for-service or on a percentage of income (or commission).

### VI. Summary of Changes in Methodology in the Final Rule

Item description	Proposed rule	Final rule
Estimate of the 75th percentile	10 percent of the mean wage used to estimate the 75th percentile.	12 percent of the mean wage used to estimate the 75th percentile. This accounts for the underlying variability that may not have been quantified in preliminary notice.
Market Basket shares for wages and fringes.	The wage share was developed based on total paid hours rather than actual worked hours. The fringe benefit cost share excluded paid hours not worked due to vacation leave, sick leave, etc.	The wage share was recalculated to include only worked hours. The fringe benefits cost share was allocated paid hours not worked due to vacation leave, sick leave, etc.
Market Basket: Office wages and benefits expense share of costs.	Source: IRS Statistics of Income—1991 cost share.	Source: IRS Statistics of Income—1994 cost share.
Market Basket: Rental space converted to hourly cost of therapy.	Source: Building and Owners' Management Association (BOMA)—1991 aged to 1995 using CPI rental.	Source: BOMA—1995.
Geographic Adjustment Factor	Pre-Reclassified urban portion of Hospital Wage Index.	Geographic Practice Cost Indexes (GPCI) used for physician fee schedule.

### VII. Regulatory Impact

#### A. Background

We have examined the impacts of this final rule as required by Executive Order 12866, the Unfunded Mandate Reform Act, and the Regulatory Flexibility Act (RFA) (Pub. L. 96-354).

#### 1. Executive Order 12866 and RFA

Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects; distributive impacts; and equity). We have determined that this final rule is an economically significant rule under this Executive Order, as discussed in detail under section VII.B below. The RFA requires agencies to analyze options for regulatory relief for small businesses. For purposes of the RFA, States and individuals are not considered small entities. All therapists, however, are treated as small entities.

This final rule (1) revises the methodology for determining salary equivalency guidelines for physical therapy and respiratory therapy services furnished under arrangement; (2) applies the revised methodology for payment of physical therapy and

respiratory therapy services to speech language pathology and occupational therapy services; and (3) establishes revised schedules of salary equivalency guidelines for physical and respiratory therapy services and initial schedules of salary equivalency guidelines for speech language pathology and occupational therapy services. These final guidelines will be used by Medicare fiscal intermediaries to determine the maximum allowable payment for therapy services furnished under arrangements.

As we indicated earlier in the preamble of this final rule, the salary equivalency guidelines for physical and respiratory therapy services furnished under arrangements were last revised in 1983, with provisions for yearly adjustments for inflation. In addition, although the law gives us explicit authority to establish salary equivalency guidelines for speech language pathology and occupational therapy services furnished under arrangements, we have never previously done so. We have, instead, paid for these services using reasonable cost methodologies. We now believe that, if we continue to use these methods to pay for speech language pathology and occupational therapy services furnished under arrangements, we will be paying for costs that are in excess of what Congress

intended under section 1861(v)(5) of the Act.

We estimate that a large number of therapists, especially suppliers of rehabilitation therapy services, will be affected by these revised guidelines, and a substantial number of these entities may be required to make changes in their operations. However, we do not have sufficient available data to estimate how many of each type of entity will be affected. The analysis under section VII.B. below, in combination with the remainder of this preamble, is consistent with the standards for analysis set forth by the RFA and the Executive Order 12866.

#### 2. Congressional Review

Section 804(2) of Title 5, United States Code (as added by section 251 of Public Law 104-121), specifies that a "major rule" is any rule that the Office of Management and Budget finds is likely to result in—

- An annual effect on the economy of \$100 million or more;
- A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or
- Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-

based enterprises in domestic and export markets.

We estimate that the impact of this final rule will be an overall savings from fiscal years 1998 to 2000 of \$260 million. Therefore, this rule is a major rule as defined in Title 5, United States Code, section 804(2).

Because this final rule is considered a major rule, and is required by law, this final rule is subject to congressional review. Therefore, this final rule is being forwarded to Congress for a 60-day review period.

### 3. Unfunded Mandate

The Unfunded Mandate Reform Act of 1995 also requires (in section 202) that agencies prepare an assessment of anticipated costs and benefits for any rule that may result in an annual expenditure by State, local, or tribal governments, in the aggregate, or by both the private sector, of \$100 million. The final rule has no consequential effect on State, local, or tribal governments. We believe the private sector costs of this rule fall below the threshold, as well.

### 4. Rural Hospital Impact

Section 1102(b) of the Act requires us to prepare a regulatory impact analysis for any final rule that may have a significant impact on the operations of a substantial number of small rural hospitals. Such an 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 a Metropolitan Statistical Area and has fewer than 50 beds. We are not preparing a rural hospital impact statement because we have determined, and we certify, that this final rule will not have a significant economic impact on the operations of a substantial number of small rural hospitals.

### B. Anticipated Effects

#### 1. Effects on the Medicare Trust Funds

The final guidelines are based upon a provider's reasonable cost for an employee therapist furnishing therapy services. This cost includes the prevailing salary levels for therapists, prevailing market area fringe benefits, as well as a share of the other expenses that could be attributed to an employee therapist. The estimated savings to the Medicare Trust Funds result from the differences in the final guidelines relative to current rates of payment after behavioral offsets for increased add-ons, volume, intensity, mix of services, and other revenue enhancement behaviors have occurred.

We developed an estimate on the effect of the revised guidelines on the Medicare Trust Funds using all available data. We had limited data sources with which to develop hourly salary rates and other expense factors as well as to develop a projection of the effect of the revised guidelines on the Medicare Trust Funds for revised versus existing levels. We are limited because the Medicare cost reports and claims data do not furnish us with data on hourly rates paid to therapists and other relevant expense and net revenue data. Therefore, we based the hourly salary rates and the effect of the revised guidelines on the Medicare Trust Funds on the best data available to us from HCFA sources and the therapy industry. The hourly salary rates were based on a blend of hospital and SNF survey data sources. The impact analysis was based on billing data from HCFA's Decision Support Access Facility (DSAF) files and SNF cost report data from the Hospital Cost Reporting Information System file as well as industry sources.

Based upon various data sources for 1993, 1994, and 1995, we formed a baseline in order to project the volume of services in future years for each of the four therapy types. For each therapy type, we then found the difference between the current rate and the revised rate, and multiplied that difference by the projected volume in order to estimate the savings or additional outlays that this proposed rule would have.

When trend factors from the DRI/McGraw Hill third quarter 1997 forecast of the HCFA rehabilitation therapist input price index are used, we estimate the revised guidelines for April 1998 will increase the current national or aggregate guidelines per hour for physical therapy by about 35 percent and the national or aggregate guidelines for respiratory therapy by about 10 percent. At the same time, the guidelines for occupational therapy and speech language pathology will decrease estimated current aggregate rates by about 40 percent and about 25 percent, respectively.

Our projected savings per year are based on the difference between current and estimated total costs after a standard behavioral adjustment is applied for lower proposed prices relative to current payments under current payment rules.

We followed the Office of the Actuary (OACT) standard practice of allowing an offset of 35 to 50 percent for behavioral changes when we estimated the savings resulting from lowered prices. In recent years, suppliers of therapy services have bundled physical therapy, occupational

therapy, and speech language pathology (but not respiratory therapy) when they have contracted to furnish therapy services to SNFs. The 35 percent behavioral offset allows for changes in behavior that generate increased revenue to the suppliers at the lower average price for the bundle of services. The behavioral offset was not applied to respiratory therapy services because revised prices are higher than current regulation prices and the respiratory therapy industry contracts separately with the SNF industry. We chose the lower end of the range because services are provided in the facility based on time in facility, not fee-for-service, thus there are substantially fewer opportunities for revenue enhancing behavior. Suppliers are estimated to compensate for about one-third of the reduction in prices by a combination of increased add-ons, volume, intensity, change in mix, and a shift in the site of service or a change in options for reimbursement. Suppliers might shift from being suppliers where payment is controlled by salary equivalency guidelines to being providers where payment is on a reasonable cost basis not subject to guidelines (unless as providers they also contract for therapy services); or they may increase the volume of services in physical therapy where guideline amounts are higher; or they may use less experienced and, therefore, lower salaried therapists. Other revenue enhancement practices may emerge which cannot be fully anticipated. Using this offset, the 3 year impact of the guidelines for 1998 through 2000 for therapy services under arrangements is estimated to be a savings of \$170 million for Medicare Part A and \$90 million for Medicare Part B.

Although we moved from using the hospital wage index in the proposed rule to the GPCI in the final rule, there was a negligible effect on the savings estimate in making this change. Because of the Balanced Budget Act of 1997 provisions, we revised our savings estimates from the proposed rule. These estimates are presented in the table below.

Due to the Balanced Budget Act of 1997, these guidelines become obsolete as new payment methodologies are implemented for the various providers of services. By the end of fiscal year 2000, these guidelines will have no effect, as all providers will be subject to new payment methodologies. In other words, as a result of the statutory provisions in the Balanced Budget Act of 1997, the salary equivalency guidelines will no longer be in effect by the end of fiscal year 2000.

## SALARY EQUIVALENCY: SAVINGS ESTIMATES

Federal fiscal year	Estimated savings after offset (in millions, rounded)		
	Part A	Part B	Total
1998 .....	\$90	\$50	\$140
1999 .....	60	40	100
2000 .....	20	0	20
Totals .....	170	90	260

The savings include coinsurance and are before the Part B premium offset.

This applies the 35 percent offset to physical therapy, occupational therapy, and speech language pathology only and no offset to respiratory therapy.

Estimates are based on an effective date of April 1, 1998.

## 2. Effects on Providers

We expect that these salary equivalency guidelines will provide adequate payments for all classes of efficient providers. It is possible that certain inefficient therapy suppliers may be unwilling to contract with providers at the salary equivalency rates, expanding the market for more efficient therapy suppliers. We also understand that certain therapy suppliers were requiring providers to purchase a bundled package of physical therapy, occupational therapy, and speech language pathology services. By requiring this bundling of services, suppliers were able to make substantial profits because, even though there was an hourly payment limit on the physical therapy services, there were no guidelines for the speech-language pathology and occupational therapy services. Consequently, the suppliers marked up the speech-language pathology and occupational therapy services. The guidelines for speech-language pathology and occupational therapy services may eliminate suppliers profiting from excessively high prices for occupational therapy and speech language pathology. We expect that providers will continue to provide therapy services at the published rates. We expect that providers will be able to furnish the same array of beneficiary services they furnish under current guidelines amounts or payment on a reasonable cost basis.

## 3. Effects on Beneficiaries

We believe that the impact of these guidelines on Medicare beneficiaries will be minimal. Beneficiaries may be slightly affected by the guidelines for physical therapy, speech language pathology, and occupational therapy services. With respect to physical therapy services, the Medicare Part B coinsurance amounts associated with these services that must be paid by beneficiaries (20 percent of the provider's charges to the beneficiary)

may increase if providers increase charges for those services. The charges may increase because physical therapy hourly amounts recognized by Medicare fiscal intermediaries to determine the maximum allowable cost of those services will increase in this final rule over the previous schedules of guidelines. However, the Medicare program does not dictate a provider's charge structure. We do expect charges to be reasonably related to cost. Conversely, beneficiary coinsurance will be reduced for speech language pathology and occupational therapy services because Medicare payment rates for these services will be reduced by the establishment of guidelines in this final rule and the provider's charges to the beneficiary may also decrease. Because respiratory therapy provided in comprehensive outpatient rehabilitation facilities under arrangements is a Part B service, Medicare Part B coinsurance amounts related to those services that must be paid by beneficiaries may increase if providers increase charges for those services. This may also occur because respiratory therapy hourly amounts recognized by Medicare fiscal intermediaries to determine the maximum allowable cost of those services will increase in this final rule over the previous schedules of guidelines. We believe that the guideline amounts are adequate so that therapy suppliers should continue to contract with providers to furnish services to beneficiaries. Since we are now introducing new guideline amounts for occupational therapy and speech language pathology, if providers are passing along the therapy companies higher charges, then we would expect providers' charges may be lower for those services.

## 4. Effects on Therapists and Therapist Companies

These salary equivalency guidelines will have varying impacts on the four categories of therapists. Speech

language pathologists and occupational therapists working for contract suppliers should be minimally affected, since the suppliers typically bundle all therapy services when negotiating rates (including overhead) with providers. Physical therapists acting as suppliers or employed by supplying therapy companies may be affected positively because physical therapy hourly rates recognized by Medicare fiscal intermediaries to determine the maximum allowable cost of those services will increase in this final rule and, therefore, providers may contract with physical therapists at a higher amount. Also, providers may contract with therapy companies at a higher amount and they, in turn, may pay the therapists higher salaries. Similarly, respiratory therapists acting as therapy suppliers or employed by therapy suppliers may be positively affected because respiratory therapy hourly amounts recognized by Medicare fiscal intermediaries to determine the maximum allowable cost of those services will increase in this final rule and, therefore, providers may contract with respiratory therapy suppliers at a higher amount. Also providers may contract with therapy companies at a higher amount and they, in turn, may pay the therapists higher salaries.

We recognize that a large percentage of providers have contracts with therapy companies that may dominate a market area. We understand that because the contracted physical therapy services have been limited by the guidelines, some of these therapy companies have been requiring providers to sign up for three therapy services, that is, physical, occupational and speech language pathology services, but were overcharging providers for speech language pathology and occupational therapy services. These therapy companies may incorrectly claim that the introduction of these guidelines for contracted speech language pathology and occupational therapy services may

put them out of business. Our rates are designed to reflect adequate rates for all classes of efficient suppliers. Even though we do not pay contracted therapy companies directly, unless they also act as providers, and (with the exception of independent physical therapists and occupational therapists) contracted therapy services are one of the few Medicare services that have not been targeted in earlier deficit reduction laws.

Other changes in behavior might include a change in the type of therapy offered (perhaps substituting physical therapy for occupational therapy and increasing the volume of services furnished in physical therapy, which has a higher guideline amount), use by suppliers of less experienced (and therefore lower salaried) therapists, a shift by suppliers from furnishing therapy services under arrangements to furnishing therapy services under agreement, in which the therapy company bills Medicare directly as a provider under Part B. In the latter case, the providers are paid under Part B on a reasonable cost basis and are not subject to salary equivalency guidelines unless they contract for therapy services.

Inefficiently run rehabilitation therapy companies may cut expenses and become more efficient, as is happening in much of the rest of the economy. More efficient companies may expand or enter the market, picking up the therapy services volume which less efficient suppliers may leave unserved. Therapists' productivity could increase. Overhead is a likely candidate for expense reduction. In addition, profit margins may be reduced, but still be at or above competitive rates for efficient firms. Individual therapy suppliers may already have lower overhead than corporate suppliers. Multi-therapy companies may adjust their service mix away from therapy types for which they are inefficient producers and expand the therapy types for which they are efficient producers.

Due to these salary equivalency guidelines, some therapists who work for inefficient rehabilitation therapy suppliers may have compensation levels above competitive rates and may find that their yearly salary and fringe benefit increases lag those of therapists employed in other more competitive settings of the local therapist labor market. A deceleration in wage increases for workers with excessively high compensation levels will continue until wages in various settings, after compensating non-wage differences, are roughly comparable for each therapy type. Those therapists whose employers

curtail furnishing services under arrangements with providers may either furnish therapy for those same employers as employees of rehabilitation agencies that will bill Medicare directly as providers, change employers to those efficiently run companies that expand their contracted therapy services, or become self-employed and contract directly with providers to furnish therapy services under arrangements. Therapists who are employed by efficient rehabilitation therapy suppliers where salaries are in line with those of other therapists (after adjustments for compensating non-wage differentials) in the local labor market should notice no substantial effect. The expected effects described above result in a better functioning, more efficient health care system.

#### C. Alternatives Considered

Section 1861(v)(5) of the Act requires HCFA to determine the reasonable cost of services furnished to Medicare beneficiaries "under an arrangement" with a provider of services by therapists or other health-related personnel. Other alternatives to implementing the salary equivalency program are to continue paying for therapy services, furnished under arrangements, using current reasonable cost methodologies or to use alternative data sources to establish the salary equivalency guidelines in this final rule.

We rejected the first alternative because, if we continue to pay for speech language pathology and occupational therapy services furnished under arrangements using reasonable cost methodologies, we will be paying for costs that are in excess of what Congress intended under section 1861(v)(5) of the Act, to the detriment of the Medicare Trust Funds. In the case of physical therapy and respiratory therapy services, current salary equivalency guidelines may reflect less than a provider's reasonable costs in furnishing these services.

As we indicated in our discussion of data sources we used to establish the guidelines (see section III.B. of this final rule), we were unable to find a sole or primary source of data on hourly rates paid to therapists by providers that is timely and statistically valid. Because the BLS hospital wage industry surveys were not timely, we were unable to use that data as our sole source as in prior guideline notices. The rehabilitation therapy industry submitted survey data to HCFA that they believe support higher guideline amounts than are in the final rule. Although the survey data were submitted to HCFA in order to determine its appropriateness for use in

determining new guideline amounts as provided in § 413.106(b)(6), it did not meet the requirements in the final rule. Nevertheless, we evaluated the data. As indicated in Section II.A. of this preamble, we decided to blend select hospital and SNF data sources so that the wages and salary parts of this final rule have been determined using a "best estimate" approach, giving equal weight, but not preferential status to each data source. We decided on the "best estimate" approach because we were unable to find a sole or primary source that met our criteria of reliability, validity, and representativeness.

#### D. Conclusion

Federal Medicare expenditures have grown at an extraordinary rate in recent years. A study commissioned by the National Association for Support of Long-Term Care indicates that 75 percent of all therapy services under arrangements were furnished in SNFs. We also project that the 65 and over population will nearly double by the year 2025. We believe that the salary equivalency guidelines in this final rule are in the public interest since they balance the needs of Medicare program beneficiaries, taxpayers, providers of therapy services, and suppliers who furnish therapy services under arrangements.

In accordance with the provisions of Executive Order 12866, this final rule was reviewed by the Office of Management and Budget.

#### VIII. Collection of Information Requirements

Under the Paperwork Reduction Act of 1995 (PRA), agencies are required to provide a 60-day notice in the **Federal Register** and solicit public comment before a collection of information requirement is submitted to the Office of Management and Budget (OMB) for review and approval. In order to fairly evaluate whether an information collection should be approved by OMB, section 3506(c)(2)(A) of the PRA requires that we solicit comment on the following issues:

- Whether the information collection is necessary and useful to carry out the proper functions of the agency;
- The accuracy of the agency's estimate of the information collection burden;
- The quality, utility, and clarity of the information to be collected; and
- Recommendations to minimize the information collection burden on the affected public, including automated collection techniques.

However, the information collection requirements referenced in this rule as

outlined in §§ 413.106(e) and 413.106(f) are currently approved under the PRA. In particular, these requirements are currently captured in each of HCFA's provider cost report information collections.

Section 413.106(e) requires a provider of therapy services to supply its intermediary with documentation that supports additional costs incurred for services furnished by an outside supplier.

Section 413.106(f) requires that before an exception to the application of the guidelines may be granted, the provider must submit appropriate evidence, in accordance with instructions issued in section 1414 of the Provider Reimbursement Manual, to its intermediary to substantiate its claim.

Organizations and individuals desiring to submit comments on any of these information collection and recordkeeping requirements, should direct them directly to the following:

Health Care Financing Administration,  
Office of Information Services,  
Information Technology Investment  
Management Group, Division of  
HCFA Enterprise Standards, Room  
C2-26-17, 7500 Security Boulevard,  
Baltimore, MD 21244-1850. ATTN:  
HCFA-1808-F

and  
Office of Management and Budget,  
Office of Information and Regulatory  
Affairs, Room 10235, New Executive  
Office Building, Washington, DC  
20503, ATTN.: Allison Herron Eydt,  
HCFA Desk Officer

#### List of Subjects in 42 CFR Part 413

Health facilities, Kidney diseases,  
Medicare, Puerto Rico, Reporting and  
recordkeeping requirements.

42 CFR part 413 is amended as set  
forth below:

#### PART 413—PRINCIPLES OF REASONABLE COST REIMBURSEMENT; PAYMENT FOR END-STAGE RENAL DISEASE SERVICES; OPTIONAL PROSPECTIVELY DETERMINED PAYMENT FOR SKILLED NURSING FACILITIES

1. The authority citation for part 413  
continues to read as follows:

**Authority:** Secs. 1102, 1861(v)(1)(A), and  
1871 of the Social Security Act (42 U.S.C.  
1302, 1395x(v)(1)(A), and 1395hh).

2. Section 413.106(c)(5) is  
redesignated as (c)(6) and republished, a  
new paragraph (c)(5) is added,  
paragraph (f)(1) is removed and  
paragraphs (f)(2), (3), and (4) are  
redesignated as (f)(1), (2), and (3) and  
republished to read as follows:

#### § 413.106 Reasonable cost of physical and other therapy services furnished under arrangements.

\* \* \* \* \*

##### (c) Application. \* \* \*

(5) If therapy services are performed  
in situations where compensation to a  
therapist employed by the provider is  
based, at least in part, on a fee-for-  
service or on a percentage of income (or  
commission), the guidelines will apply.  
The entire compensation will be subject  
to the guidelines in cases where the  
nature of the arrangements is most like  
an under "arrangement" situation,  
although technically the provider may  
treat the therapists as employees. The  
intent of this section is to prevent an  
employment relationship from being  
used to circumvent the guidelines.

(6) These provisions are applicable to  
individual therapy services or  
disciplines by means of separate  
guidelines by geographical area and  
apply to costs incurred after issuance of  
the guidelines but no earlier than the  
beginning of the provider's cost  
reporting period described in paragraph  
(a) of this section. Until a guideline is  
issued for a specific therapy or  
discipline, costs are evaluated so that  
such costs do not exceed what a prudent  
and cost-conscious buyer would pay for  
the given service.

\* \* \* \* \*

(f) *Exceptions:* The following  
exceptions may be granted but only  
upon the provider's demonstration that  
the conditions indicated are present:

(1) *Exception because of unique  
circumstances or special labor market  
conditions.* An exception may be  
granted under this section by the  
intermediary if a provider demonstrates  
that the costs for therapy services  
established by the guideline amounts  
are inappropriate to a particular

provider because of some unique  
circumstances or special labor market  
conditions in the area. The provider's  
request for an exception, together with  
substantiating documentation, must be  
submitted to the intermediary each year,  
no later than 150 days after the close of  
the provider's cost reporting period. If  
the circumstances giving rise to the  
exception remain unchanged from a  
prior cost reporting period, however, the  
provider need only submit evidence of  
the intermediary 150 days after the close  
of its cost reporting period to establish  
that fact.

(2) *Exception for services furnished by  
risk-basis HMO providers.* For special  
rules concerning services furnished to  
an HMO's enrollees who are Medicare  
beneficiaries by a provider owned or  
operated by a risk-basis HMO (see  
§ 417.201(b) of this chapter) or related to  
a risk-basis HMO by common  
ownership or control (see § 417.205(c) of  
this chapter).

(3) *Exception for inpatient hospital  
services.* Effective with cost reporting  
periods beginning on or after October 1,  
1983, the costs of therapy services  
furnished under arrangements to a  
hospital inpatient are exempted from the  
guidelines issued under this section if  
such costs are subject to the provisions  
of § 413.40 or part 412 of this chapter.  
The intermediary will grant the  
exception without request from the  
provider.

\* \* \* \* \*

(Catalog of Federal Domestic Assistance  
Program No. 93.773 Medicare—Hospital  
Insurance Program and Program No. 93.774,  
Medicare—Supplementary Medical  
Insurance Program)

Dated: January 16, 1998.

**Nancy-Ann Min Deparle,**

*Administrator, Health Care Financing  
Administration.*

Dated: January 22, 1998.

**Donna E. Shalala,**

*Secretary.*

[FR Doc. 98-2154 Filed 1-29-98; 8:45 am]

BILLING CODE 4120-01-P