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## Centers for Medicare & Medicaid Services

42 CFR Part 483

**Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities for FY 2010; Minimum Data Set, Version 3.0 for Skilled Nursing Facilities and Medicaid Nursing Facilities; Final Rule**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Centers for Medicare & Medicaid Services**

**42 CFR Part 483**

**[CMS–1410–F]**

**RIN 0938–AP46**

# Medicare Program; Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities for FY 2010; Minimum Data Set, Version 3.0 for Skilled Nursing Facilities and Medicaid Nursing Facilities

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

**ACTION:** Final rule.

**SUMMARY:** This final rule updates the payment rates used under the prospective payment system (PPS) for skilled nursing facilities (SNFs), for fiscal year (FY) 2010. In addition, it recalibrates the case-mix indexes so that they more accurately reflect parity in expenditures related to the implementation of case-mix refinements in January 2006. It also discusses the results of our ongoing analysis of nursing home staff time measurement data collected in the Staff Time and Resource Intensity Verification project, as well as a new Resource Utilization Groups, version 4 case-mix classification model for FY 2011 that will use the updated Minimum Data Set 3.0 resident assessment for case-mix classification. In addition, this final rule discusses the public comments that we have received on these and other issues, including a possible requirement for the quarterly reporting of nursing home staffing data, as well as on applying the quality monitoring mechanism in place for all other SNF PPS facilities to rural swing-bed hospitals. Finally, this final rule revises the regulations to incorporate certain technical corrections.

**DATES:** *Effective Date:* This final rule becomes effective on October 1, 2009.

**FOR FURTHER INFORMATION CONTACT:** Ellen Berry, (410) 786–4528 (for information related to clinical issues). Trish Brooks, (410) 786–4561 (for information related to Resident Assessment Protocols (RAPs) under the Minimum Data Set (MDS)). Jeanette Kranacs, (410) 786–9385 (for information related to the development of the payment rates and case-mix indexes). Abby Ryan, (410) 786–4343 (for information related to the STRIVE project). Jean Scott, (410) 786–6327 (for information related to the request for comment on the possible quarterly reporting of nursing home staffing data). Bill Ullman, (410) 786–5667 (for information related to level of care determinations, consolidated billing, and general information).

**SUPPLEMENTARY INFORMATION:** To assist readers in referencing sections contained in this document, we are providing the following Table of Contents.

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## Abbreviations

In addition, because of the many terms to which we refer by abbreviation in this final rule, we are listing these abbreviations and their corresponding terms in alphabetical order below:

ADLs Activities of Daily Living
AIDS Acquired Immune Deficiency Syndrome
AOTA American Occupational Therapy Association
APTA American Physical Therapy Association
ARD Assessment Reference Date
ASHA American Speech-Language-Hearing Association
BBA Balanced Budget Act of 1997, Public Law 105–33
BBRA Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999, Public Law 106–113
BIMS Brief Interview for Mental Status
BIPA Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, Public Law 106–554
CAA Care Area Assessment
CAH Critical Access Hospital

CAM Confusion Assessment Method
CARE Continuity Assessment Record and Evaluation
CAT Care Area Trigger
CBSA Core-Based Statistical Area
CFR Code of Federal Regulations
CMI Case-Mix Index
CMS Centers for Medicare & Medicaid Services
CMSO Center for Medicaid and State Operations
DRA Deficit Reduction Act of 2005, Public Law 109–171
DSM–IV Diagnostic and Statistical Manual of Mental Disorders, 4th Revision
FQHC Federally Qualified Health Center
FR **Federal Register**
FY Fiscal Year
GAO Government Accountability Office
HCPCS Healthcare Common Procedure Coding System
HHA Home Health Agency
HIPPS Health Insurance Prospective Payment System
HIT Health Information Technology
HIV Human Immunodeficiency Virus
IFC Interim Final Rule with Comment Period
IPPS Hospital Inpatient Prospective Payment System
IRF Inpatient Rehabilitation Facility
LTCH Long-Term Care Hospital
MAC Medicare Administrative Contractor
MMACS Medicare/Medicaid Automated Certification System
MDS Minimum Data Set
MIPPA Medicare Improvements for Patients and Providers Act of 2008, Public Law 110–275
MMA Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Public Law 108–173
MMSEA Medicare, Medicaid, and SCHIP Extension Act of 2007, Public Law 110–173
MSA Metropolitan Statistical Area
MS–DRG Medicare Severity Diagnosis-Related Group
NCQA National Committee for Quality Assurance
NF Nursing Facility
NRST Non-Resident Specific Time
NTA Non-Therapy Ancillary
OIG Office of the Inspector General
OMB Office of Management and Budget
OMRA Other Medicare Required Assessment
OSCAR Online Survey Certification and Reporting System
PAC Post-Acute Care
PHQ–9 9-Item Patient Health Questionnaire
PPS Prospective Payment System
QM Quality Measure
RAI Resident Assessment Instrument
RAND RAND Corporation
RAP Resident Assessment Protocol
RAVEN Resident Assessment Validation Entry
RFA Regulatory Flexibility Act, Public Law 96–354
RHC Rural Health Clinic
RIA Regulatory Impact Analysis
RST Resident Specific Time
RUG–III Resource Utilization Groups, Version 3
RUG–IV Resource Utilization Groups, Version 4
RUG–53 Refined 53-Group RUG–III Case-Mix Classification System
SCHIP State Children's Health Insurance Program
SNF Skilled Nursing Facility
SOM State Operations Manual
STM Staff Time Measurement
STRIVE Staff Time and Resource Intensity Verification
TEP Technical Expert Panel
UMRA Unfunded Mandates Reform Act, Public Law 104–4

## I. Background

On May 12, 2009, we published a proposed rule (74 FR 22208) in the **Federal Register** (hereafter referred to as the FY 2010 proposed rule), setting forth updates to the payment rates used under the prospective payment system (PPS) for skilled nursing facilities (SNFs), for fiscal year (FY) 2010. Annual updates to the PPS rates for SNFs are required by section 1888(e) of the Social Security Act (the Act), as added by section 4432 of the Balanced Budget Act of 1997 (BBA) (Pub. L. 105–33, enacted on August 5, 1997), and amended by the Medicare, Medicaid, and State Children's Health Insurance Program (SCHIP) Balanced Budget Refinement Act of 1999 (BBRA) (Pub. L. 106–113, enacted on November 29, 1999), the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) (Pub. L. 106–554, enacted on December 21, 2000), and the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) (Pub. L. 108–173, enacted on December 8, 2003). Our most recent annual update occurred in a final rule (73 FR 46416, August 8, 2008) that set forth updates to the SNF PPS payment rates for FY 2009. We subsequently published a correction notice (73 FR 56998, October 1, 2008) with respect to those payment rate updates.

### *A. Current System for Payment of Skilled Nursing Facility Services Under Part A of the Medicare Program*

Section 4432 of the BBA amended section 1888 of the Act to provide for the implementation of a per diem PPS for SNFs, covering all costs (routine, ancillary, and capital-related) of covered SNF services furnished to beneficiaries under Part A of the Medicare program, effective for cost reporting periods beginning on or after July 1, 1998. In this final rule, we are updating the per diem payment rates for SNFs for FY 2010. Major elements of the SNF PPS include:

- *Rates.* As discussed in section I.F.1 of this final rule, we established per diem Federal rates for urban and rural areas using allowable costs from FY 1995 cost reports. These rates also included a ''Part B add-on'' (an estimate of the cost of those services that, before July 1, 1998, were paid under Part B but furnished to Medicare beneficiaries in a SNF during a Part A covered stay). We adjust the rates annually using a SNF market basket index, and we adjust them by the hospital inpatient wage index to account for geographic variation in wages. We also apply a case-mix adjustment to account for the relative resource utilization of different patient types. This adjustment utilizes a refined, 53-group version of the Resource Utilization Groups, version 3 (RUG–III) case-mix classification system, based on information obtained from the required resident assessments using the Minimum Data Set (MDS) 2.0. Additionally, as noted in the final rule for FY 2006 (70 FR 45028, August 4, 2005), the payment rates at various times have also reflected specific legislative provisions, including section 101 of the BBRA, sections 311, 312, and 314 of the BIPA, and section 511 of the MMA.
- *Transition.* Under sections 1888(e)(1)(A) and (e)(11) of the Act, the SNF PPS included an initial, three-phase transition that blended a facility-specific rate (reflecting the individual facility's historical cost experience) with the Federal case-mix adjusted rate. The transition extended through the facility's first three cost reporting periods under the PPS, up to and including the one that began in FY 2001. Thus, the SNF PPS is no longer operating under the transition, as all facilities have been paid at the full Federal rate effective with cost reporting periods beginning in FY 2002. As we now base payments entirely on the adjusted Federal per diem rates, we no longer include adjustment factors related to facility-specific rates for the coming FY.
- *Coverage.* The establishment of the SNF PPS did not change Medicare's fundamental requirements for SNF coverage. However, because the RUG–III classification is based, in part, on the beneficiary's need for skilled nursing care and therapy, we have attempted, where possible, to coordinate claims review procedures with the existing resident assessment process and case-mix classification system. This approach includes an administrative presumption that utilizes a beneficiary's initial classification in one of the upper 35 RUGs of the refined 53-group system to assist in making certain SNF level of care determinations. In the July 30, 1999 final rule (64 FR 41670), we indicated that we would announce any changes to the guidelines for Medicare level of care determinations related to modifications

in the RUG–III classification structure (*see* section III.B.5 of this final rule for a discussion of the relationship between the current case-mix classification system and SNF level of care determinations, and section III.C.4 for a discussion of this process in the context of the upcoming conversion to version 4 of the RUGs (RUG–IV)).

• *Consolidated Billing.* The SNF PPS includes a consolidated billing provision that requires a SNF to submit consolidated Medicare bills to its fiscal intermediary or Medicare Administrative Contractor for almost all of the services that its residents receive during the course of a covered Part A stay. In addition, this provision places with the SNF the Medicare billing responsibility for physical, occupational, and speech-language therapy that the resident receives during a noncovered stay. The statute excludes a small list of services from the consolidated billing provision (primarily those of physicians and certain other types of practitioners), which remain separately billable under Part B when furnished to a SNF's Part A resident. A more detailed discussion of this provision appears in section III.G of this final rule.

• *Application of the SNF PPS to SNF services furnished by swing-bed hospitals.* Section 1883 of the Act permits certain small, rural hospitals to enter into a Medicare swing-bed agreement, under which the hospital can use its beds to provide either acute or SNF care, as needed. For critical access hospitals (CAHs), Part A pays on a reasonable cost basis for SNF services furnished under a swing-bed agreement. However, in accordance with section 1888(e)(7) of the Act, these services furnished by non-CAH rural hospitals are paid under the SNF PPS, effective with cost reporting periods beginning on or after July 1, 2002. A more detailed discussion of this provision appears in section III.H of this final rule.

*B. Requirements of the Balanced Budget Act of 1997 (BBA) for Updating the Prospective Payment System for Skilled Nursing Facilities*

Section 1888(e)(4)(H) of the Act requires that we provide for publication annually in the **Federal Register**:

1. The unadjusted Federal per diem rates to be applied to days of covered SNF services furnished during the upcoming FY.
2. The case-mix classification system to be applied with respect to these services during the upcoming FY.
3. The factors to be applied in making the area wage adjustment with respect to these services.

Along with other revisions discussed later in this preamble, this final rule provides these required annual updates to the Federal rates.

*C. The Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (BBRA)*

There were several provisions in the BBRA that resulted in adjustments to the SNF PPS. We described these provisions in detail in the SNF PPS final rule for FY 2001 (65 FR 46770, July 31, 2000). In particular, section 101(a) of the BBRA provided for a temporary 20 percent increase in the per diem adjusted payment rates for 15 specified RUG–III groups. In accordance with section 101(c)(2) of the BBRA, this temporary payment adjustment expired on January 1, 2006, upon the implementation of case-mix refinements (*see* section I.F.1. of this final rule). We included further information on BBRA provisions that affected the SNF PPS in Program Memorandums A–99–53 and A–99–61 (December 1999).

Also, section 103 of the BBRA designated certain additional services for exclusion from the consolidated billing requirement, as discussed in greater detail in section III.G of this final rule. Further, for swing-bed hospitals with more than 49 (but less than 100) beds, section 408 of the BBRA provided for the repeal of certain statutory restrictions on length of stay and aggregate payment for patient days, effective with the end of the SNF PPS transition period described in section 1888(e)(2)(E) of the Act. In the final rule for FY 2002 (66 FR 39562, July 31, 2001), we made conforming changes to the regulations at § 413.114(d), effective for services furnished in cost reporting periods beginning on or after July 1, 2002, to reflect section 408 of the BBRA.

*D. The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA)*

The BIPA also included several provisions that resulted in adjustments to the SNF PPS. We described these provisions in detail in the final rule for FY 2002 (66 FR 39562, July 31, 2001). In particular:

• Section 203 of the BIPA exempted CAH swing-beds from the SNF PPS. We included further information on this provision in Program Memorandum A–01–09 (Change Request #1509), issued January 16, 2001, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/a0109.pdf.*

• Section 311 of the BIPA revised the statutory update formula for the SNF market basket, and also directed us to conduct a study of alternative case-mix classification systems for the SNF PPS. In 2006, we submitted a report to the Congress on this study, which is available online at *http://www.cms.hhs.gov/SNFPPS/Downloads/RC_2006_PC-PPSSNF.pdf.*

• Section 312 of the BIPA provided for a temporary increase of 16.66 percent in the nursing component of the case-mix adjusted Federal rate for services furnished on or after April 1, 2001, and before October 1, 2002; accordingly, this add-on is no longer in effect. This section also directed the Government Accountability Office (GAO) to conduct an audit of SNF nursing staff ratios and submit a report to the Congress on whether the temporary increase in the nursing component should be continued. The report (GAO–03–176), which GAO issued in November 2002, is available online at *http://www.gao.gov/new.items/d03176.pdf.*

• Section 313 of the BIPA repealed the consolidated billing requirement for services (other than physical, occupational, and speech-language therapy) furnished to SNF residents during noncovered stays, effective January 1, 2001.

• Section 314 of the BIPA corrected an anomaly involving three of the RUGs that section 101(a) of the BBRA had designated to receive the temporary payment adjustment discussed above in section I.C. of this final rule. (As noted previously, in accordance with section 101(c)(2) of the BBRA, this temporary payment adjustment expired upon the implementation of case-mix refinements on January 1, 2006.)

• Section 315 of the BIPA authorized us to establish a geographic reclassification procedure that is specific to SNFs, but only after collecting the data necessary to establish a SNF wage index that is based on wage data from nursing homes. To date, this has proven to be infeasible due to the volatility of existing SNF wage data and the significant amount of resources that would be required to improve the quality of that data.

We included further information on several of the BIPA provisions in Program Memorandum A–01–08 (Change Request #1510), issued January 16, 2001, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/a0108.pdf.*

*E. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA)*

The MMA included a provision that results in a further adjustment to the SNF PPS. Specifically, section 511 of the MMA amended section 1888(e)(12)

of the Act, to provide for a temporary increase of 128 percent in the PPS per diem payment for any SNF residents with Acquired Immune Deficiency Syndrome (AIDS), effective with services furnished on or after October 1, 2004. This special AIDS add-on was to remain in effect until ''* * * the Secretary certifies that there is an appropriate adjustment in the case mix * * * to compensate for the increased costs associated with [such] residents * * *.'' The AIDS add-on is also discussed in Program Transmittal #160 (Change Request #3291), issued on April 30, 2004, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/r160cp.pdf*. As discussed in the SNF PPS final rule for FY 2006 (70 FR 45028, August 4, 2005), we did not address the certification of the AIDS add-on in that final rule's implementation of the case-mix refinements, thus allowing the temporary add-on payment created by section 511 of the MMA to remain in effect.

For the limited number of SNF residents that qualify for the AIDS add-on, implementation of this provision results in a significant increase in payment. For example, using FY 2007 data, we identified slightly more than 2,700 SNF residents with a diagnosis code of 042 (Human Immunodeficiency Virus (HIV) Infection). For FY 2010, an urban facility with a resident with AIDS in RUG group ''SSA'' would have a case-mix adjusted payment of $252.95 (*see* Table 4) before the application of the MMA adjustment. After an increase of 128 percent, this urban facility would receive a case-mix adjusted payment of approximately $576.73. A further discussion of the AIDS add-on in the context of research conducted during the recent STRIVE study appears in section III.C.5 of this final rule.

In addition, section 410 of the MMA contained a provision that excluded from consolidated billing certain practitioner and other services furnished to SNF residents by rural health clinics (RHCs) and Federally Qualified Health Centers (FQHCs), as discussed in section III.G of this final rule.

### *F. Skilled Nursing Facility Prospective Payment—General Overview*

We implemented the Medicare SNF PPS effective with cost reporting periods beginning on or after July 1, 1998. This PPS pays SNFs through prospective, case-mix adjusted per diem payment rates applicable to all covered SNF services. These payment rates cover all costs of furnishing covered SNF services (routine, ancillary, and capital-related costs) other than costs associated with approved educational activities. Covered SNF services include post-hospital services for which benefits are provided under Part A, as well as those items and services (other than physician and certain other services specifically excluded under the BBA) which, before July 1, 1998, had been paid under Part B but furnished to Medicare beneficiaries in a SNF during a covered Part A stay. A comprehensive discussion of these provisions appears in the May 12, 1998 interim final rule (63 FR 26252).

#### 1. Payment Provisions—Federal Rate

The PPS uses per diem Federal payment rates based on mean SNF costs in a base year (FY 1995) updated for inflation to the first effective period of the PPS. We developed the Federal payment rates using allowable costs from hospital-based and freestanding SNF cost reports for reporting periods beginning in FY 1995. As discussed previously in section I.A of this final rule, the data used in developing the Federal rates also incorporated a ''Part B add-on,'' an estimate of the amounts that would be payable under Part B in the base year for covered SNF services furnished to individuals during the course of a covered Part A SNF stay.

In developing the rates for the initial period, we updated costs to the first effective year of the PPS (the 15-month period beginning July 1, 1998) using a SNF market basket index, and then standardized for the costs of facility differences in case-mix and for geographic variations in wages. In compiling the database used to compute the Federal payment rates, we excluded those providers that received new provider exemptions from the routine cost limits, as well as costs related to payments for exceptions to the routine cost limits. Using the formula that the BBA prescribed, we set the Federal rates at a level equal to the weighted mean of freestanding costs plus 50 percent of the difference between the freestanding mean and weighted mean of all SNF costs (hospital-based and freestanding) combined. We computed and applied separately the payment rates for facilities located in urban and rural areas. In addition, we adjusted the portion of the Federal rate attributable to wage-related costs by a wage index.

The Federal rate also incorporates adjustments to account for facility case-mix, using a classification system that accounts for the relative resource utilization of different patient types. The RUG–III classification system uses beneficiary assessment data from the Minimum Data Set (MDS) completed by SNFs to assign beneficiaries to one of 53 RUG–III groups. The original RUG–III case-mix classification system included 44 groups. However, under incremental refinements that became effective on January 1, 2006, we added nine new groups—comprising a new Rehabilitation plus Extensive Services category—at the top of the RUG hierarchy. The May 12, 1998 interim final rule (63 FR 26252) included a detailed description of the original 44-group RUG–III case-mix classification system. A comprehensive description of the refined 53-group RUG–III case-mix classification system (RUG–53) appeared in the proposed and final rules for FY 2006 (70 FR 29070, May 19, 2005, and 70 FR 45026, August 4, 2005).

Further, in accordance with section 1888(e)(4)(E)(ii)(IV) of the Act, the Federal rates in this final rule reflect an update to the rates that we published in the final rule for FY 2009 (73 FR 46416, August 8, 2008) and the associated correction notice (73 FR 56998, October 1, 2008), equal to the full change in the SNF market basket index. A more detailed discussion of the SNF market basket index and related issues appears in sections I.F.2 and III.F of this final rule.

#### 2. FY 2010 Rate Updates Using the Skilled Nursing Facility Market Basket Index

Section 1888(e)(5) of the Act requires us to establish a SNF market basket index that reflects changes over time in the prices of an appropriate mix of goods and services included in covered SNF services. We use the SNF market basket index to update the Federal rates on an annual basis. In the SNF PPS final rule for FY 2008 (72 FR 43425 through 43430, August 3, 2007), we revised and rebased the market basket, which included updating the base year from FY 1997 to FY 2004. The FY 2010 market basket increase is 2.2 percent, which is based on IHS Global Insight, Inc. second quarter 2009 forecast with historical data through the first quarter 2009.

In addition, as explained in the final rule for FY 2004 (66 FR 46058, August 4, 2003) and in section III.F.2 of this final rule, the annual update of the payment rates includes, as appropriate, an adjustment to account for market basket forecast error. As described in the final rule for FY 2008, the threshold percentage that serves to trigger an adjustment to account for market basket forecast error is 0.5 percentage point effective for FY 2008 and subsequent years. This adjustment takes into account the forecast error from the most recently available FY for which there is

final data, and applies whenever the difference between the forecasted and actual change in the market basket exceeds a 0.5 percentage point threshold. For FY 2008 (the most recently available FY for which there is final data), the estimated increase in the market basket index was 3.3 percentage points, while the actual increase was 3.6 percentage points, resulting in a difference of 0.3 percentage point. Accordingly, as the difference between the estimated and actual amount of change does not exceed the 0.5 percentage point threshold, the payment rates for FY 2010 do not include a forecast error adjustment. Table 1 shows the forecasted and actual market basket amounts for FY 2008.

TABLE 1—DIFFERENCE BETWEEN THE FORECASTED AND ACTUAL MARKET BASKET INCREASES FOR FY 2008

| Index | Forecasted FY 2008 increase * | Actual FY 2008 increase ** | FY 2008 difference *** |
|---|---|---|---|
| SNF | 3.3 | 3.6 | 0.3 |

* Published in **Federal Register**; based on second quarter 2007 IHS Global Insight Inc. forecast (2004-based index).
** Based on the second quarter 2009 IHS Global Insight forecast (2004-based index).
*** The FY 2008 forecast error correction for the PPS Operating portion will be applied to the FY 2010 PPS update recommendations. Any forecast error less than 0.5 percentage points will not be reflected in the update recommendation.

## II. Summary of the Provisions of the FY 2010 Proposed Rule

In the FY 2010 proposed rule (74 FR 22208), we proposed to update the payment rates used under the SNF PPS for FY 2010. We also proposed to recalibrate the case-mix indexes so that they more accurately reflect parity in expenditures related to the implementation of case-mix refinements in January 2006. We also discussed the results of our ongoing analysis of nursing home staff time measurement (STM) data collected in the Staff Time and Resource Intensity Verification (STRIVE) project, and proposed a new RUG–IV case-mix classification model that would use the updated Minimum Data Set (MDS) 3.0 resident assessment for case-mix classification effective FY 2011. In addition, we requested public comment on a possible requirement for the quarterly reporting of nursing home staffing data, and also on applying the quality monitoring mechanism in place for all other SNF PPS facilities to rural swing-bed hospitals. Finally, we proposed to revise the regulations to incorporate certain technical corrections.

## III. Analysis and Response to Public Comments on the FY 2010 Proposed Rule

In response to the publication of the FY 2010 proposed rule, we received over 112 timely items of correspondence from the public. The comments originated primarily from various trade associations and major organizations, but also from individual providers, corporations, government agencies, and private citizens.

Brief summaries of each proposed provision, a summary of the public comments that we received, and our responses to the comments appear below.

### *A. General Comments on the FY 2010 Proposed Rule*

In addition to the comments that we received on the proposed rule's discussion of specific aspects of the SNF PPS (which we address later in this final rule), commenters also submitted the following, more general observations on the payment system.

*Comment:* Some commenters noted that while the proposed rule's SNF PPS rate updates would be effective for FY 2010, its proposed conversion of the Resource Utilization Groups (RUGs) from version 3 (RUG–III) to version 4 (RUG–IV) would not take effect until FY 2011. The commenters argued that it is unprecedented to publish such a proposal so far in advance of its anticipated effective date, and that the 60-day public comment period would not afford sufficient time to analyze and comment meaningfully on it. The commenters then suggested that we withdraw the current RUG conversion proposal and reissue it at a later date with a ''more reasonable'' comment period.

*Response:* While it is true that the RUG conversion proposal would not become effective until FY 2011, our decision to include a discussion of it in the FY 2010 proposed rule and to propose to finalize it well in advance of its actual implementation date represents a response to specific requests from the nursing home industry for us to provide as much advance notification as possible of the nature of the proposed RUG–IV revisions, and to provide adequate time for system updates and training necessary to implement any proposed changes that are finalized. Thus, rather than arbitrarily deferring our discussion of this proposal until the FY 2011 rulemaking cycle (which, in any event, would have provided for exactly the same 60-day duration for the public comment period), we decided to include the discussion in the current proposed rule, in order to ensure that providers, States, and other stakeholders and interested parties would have the maximum time available to familiarize themselves with the broad outlines of the new model and to prepare for its implementation. Moreover, even after the close of the FY 2010 proposed rule's public comment period, we fully intend to continue our analysis of the proposed changes that are finalized in this rule, in order to consider the most current data as it becomes available. As an essential part of this ongoing analysis, we will, of course, also continue to welcome input from the various stakeholders and interested parties as we move closer to actual implementation.

*Comment:* We received comments similar to those discussed previously in the August 3, 2007 SNF PPS final rule for FY 2008 (72 FR 43415 through 43416) regarding the need to address certain perceived inadequacies in payment for non-therapy ancillary (NTA) services, including those services relating to the provision of ventilator care in SNFs. We also received comments recommending that we continue to monitor ongoing research, and that we consider alternative case-mix methodologies such as the recent MedPAC proposal that appears on the MedPAC Web site (*see http://www.MedPAC.gov*).

*Response:* As we noted in the proposed rule for FY 2010, we are conducting the analyses preparatory to developing a separate classification method for NTAs. For these analyses, we are using data developed through STRIVE, as well as alternative models such as the conceptual design released first by the Urban Institute and then by MedPAC. However, as noted in our December 2006 Report to Congress (available online at *http://*

*www.cms.hhs.gov/SNFPPS/Downloads/RC_2006_PC-PPSSNF.pdf*), our analysis of NTA utilization has been hindered by a lack of data. Almost all other Medicare institutional providers submit more detailed billing than SNFs on the ancillary services furnished during a Medicare-covered stay. SNFs may currently submit summary data that shows total dollar amounts for each ancillary service category, such as radiology and pharmacy, but are not required to submit more detailed data on drugs and biologicals, the most costly NTA expense category. As we examine the NTA analyses discussed in detail in the FY 2010 proposed rule, we will re-evaluate whether our current data requirements are sufficient to move forward with additional program enhancements. We will also consider whether collecting more detailed claims information on a regular basis will allow us to establish more accurate payment rates for NTA services.

We also believe it is important to monitor ongoing research activities, and work with all stakeholders, including MedPAC, to identify opportunities for future program enhancements. At the same time, we note that the SNF PPS reimbursement structure will be completely examined as part of the Post Acute Care Payment Reform Demonstration (PAC–PRD) project. Under this major CMS initiative, we intend to analyze the costs and outcomes across all post-acute care providers, and the data collected in this demonstration will enable us to evaluate the possibility of establishing an integrated payment model centered on beneficiary needs and service utilization (including the use of non-therapy ancillaries) across settings. In considering future changes to the SNF PPS, it will be important to evaluate how shorter term enhancements contribute to our integrated post acute care strategy.

A discussion of the public comments that we received on the STRIVE project itself appears in section III.C.1 of this final rule.

*B. Annual Update of Payment Rates Under the Prospective Payment System for Skilled Nursing Facilities*

1. Federal Prospective Payment System

This final rule sets forth a schedule of Federal prospective payment rates applicable to Medicare Part A SNF services beginning October 1, 2010. The schedule incorporates per diem Federal rates that provide Part A payment for almost all costs of services furnished to a beneficiary in a SNF during a Medicare-covered stay.

a. Costs and Services Covered by the Federal Rates

In accordance with section 1888(e)(2)(B) of the Act, the Federal rates apply to all costs (routine, ancillary, and capital-related) of covered SNF services other than costs associated with approved educational activities as defined in § 413.85. Under section 1888(e)(2)(A)(i) of the Act, covered SNF services include post-hospital SNF services for which benefits are provided under Part A (the hospital insurance program), as well as all items and services (other than those services excluded by statute) that, before July 1, 1998, were paid under Part B (the supplementary medical insurance program) but furnished to Medicare beneficiaries in a SNF during a Part A covered stay. (These excluded service categories are discussed in greater detail in section V.B.2 of the May 12, 1998 interim final rule (63 FR 26295 through 26297)).

b. Methodology Used for the Calculation of the Federal Rates

The FY 2010 rates reflect an update using the full amount of the latest market basket index. The FY 2010 market basket increase factor is 2.2 percent. A complete description of the multi-step process used to calculate Federal rates initially appeared in the May 12, 1998 interim final rule (63 FR 26252), as further revised in subsequent rules. We note that in accordance with section 101(c)(2) of the BBRA, the previous temporary increases in the per diem adjusted payment rates for certain designated RUGs, as specified in section 101(a) of the BBRA and section 314 of the BIPA, are no longer in effect due to the implementation of case-mix refinements as of January 1, 2006. However, the temporary increase of 128 percent in the per diem adjusted payment rates for SNF residents with AIDS, enacted by section 511 of the MMA (and discussed previously in section I.E of this final rule), remains in effect.

We used the SNF market basket to adjust each per diem component of the Federal rates forward to reflect cost increases occurring between the midpoint of the Federal FY beginning October 1, 2008, and ending September 30, 2009, and the midpoint of the Federal FY beginning October 1, 2009, and ending September 30, 2010, to which the payment rates apply. In accordance with section 1888(e)(4)(E)(ii)(IV) of the Act, we would update the payment rates for FY 2010 by a factor equal to the full market basket index percentage increase. We further adjust the rates by a wage index budget neutrality factor, described later in this section. Tables 2 and 3 reflect the updated components of the unadjusted Federal rates for FY 2010.

TABLE 2—FY 2010 UNADJUSTED FEDERAL RATE PER DIEM URBAN

| Rate Component | Nursing—case-mix | Therapy—case-mix | Therapy—non-case-mix | Non-case-mix |
|---|---|---|---|---|
| Per Diem Amount | $155.23 | $116.93 | $15.40 | $79.22 |

TABLE 3—FY 2010 UNADJUSTED FEDERAL RATE PER DIEM RURAL

| Rate component | Nursing—case-mix | Therapy—case-mix | Therapy—non-case-mix | Non-case-mix |
|---|---|---|---|---|
| Per Diem Amount | $148.31 | $134.83 | $16.45 | $80.69 |

2. Case-Mix Adjustments

a. Background

Section 1888(e)(4)(G)(i) of the Act requires the Secretary to make an adjustment to account for case-mix. The statute specifies that the adjustment is to reflect both a resident classification system that the Secretary establishes to account for the relative resource use of different patient types, as well as resident assessment and other data that the Secretary considers appropriate. In first implementing the SNF PPS (63 FR 26252, May 12, 1998), we developed the

RUG–III case-mix classification system, which tied the amount of payment to resident resource use in combination with resident characteristic information. The STM studies conducted in 1990, 1995, and 1997 provided information on resource use (time spent by staff members on residents) and resident characteristics that enabled us not only to establish RUG–III, but also to create case-mix indexes.

Although the establishment of the SNF PPS did not change Medicare's fundamental requirements for SNF coverage, there is a correlation between level of care and provider payment. One of the elements affecting the SNF PPS per diem rates is the RUG–III case-mix adjustment classification system based on beneficiary assessments using the MDS 2.0. RUG–III classification is based, in part, on the beneficiary's need for skilled nursing care and therapy. As discussed previously in section I.F.1 of this final rule, the SNF PPS final rule for FY 2006 (70 FR 45026, August 4, 2005) refined the case-mix classification system effective January 1, 2006, by adding nine new Rehabilitation Plus Extensive Services RUGs at the top of the original, 44-group system, for a total of 53 groups. This nine-group addition was designed to better account for the higher costs of beneficiaries requiring both rehabilitation and certain high intensity medical services. When we developed the refined RUG–53 system, we constructed new case-mix indexes, using the STM study data that was collected during the 1990s and originally used in creating the SNF PPS case-mix classification system and case-mix indexes. In addition, the RUG–III system was standardized with the intent of ensuring parity in payments under the 44-group and 53-group models. In section III.B.2.b of this final rule, we discuss further adjustments to those new case-mix indexes.

The RUG–III case-mix classification system uses clinical data from the MDS 2.0, and wage-adjusted STM data, to assign a case-mix group to each patient record that is then used to calculate a per diem payment under the SNF PPS. The existing RUG–III grouper logic was based on clinical data collected in 1990, 1995, and 1997. As discussed in section III.C.1, we have recently completed a multi-year data collection and analysis under the STRIVE project to update the RUG–III case-mix classification system for FY 2011. As discussed later in this preamble, we are introducing a revised case-mix classification system, the RUG–IV, based on the data collected in 2006–2007 during the STRIVE project. At the same time, we plan to introduce an updated new resident assessment instrument, the MDS 3.0, to collect the clinical data that will be used for case-mix classification under RUG–IV. We believe that the coordinated introduction of the RUG–IV and MDS 3.0 reflects current medical practice and resource use in SNFs across the country, and will enhance the accuracy of the SNF PPS. Further, we plan to defer implementation of the RUG–IV and MDS 3.0 until October 1, 2010, to allow all stakeholders adequate time for the systems updates and staff training needed to assure a smooth transition. We discuss the RUG–IV methodology, the MDS 3.0, and the stakeholder comments in greater detail in sections III.C and III.D, respectively.

Under the BBA, each update of the SNF PPS payment rates must include the case-mix classification methodology applicable for the coming Federal FY. As indicated in section I.F.1 of this final rule, the FY 2010 payment rates set forth herein reflect the use of the refined RUG–53 system that we discussed in detail in the proposed and final rules for FY 2006.

b. Development of the Case-Mix Indexes

In the FY 2010 proposed rule (74 FR 22208, 22214, May 12, 2009), we discussed the incremental refinements to the case-mix classification system that we introduced effective January 1, 2006. We also discussed the accompanying adjustment that was intended to ensure that estimated total payments under the refined 53-group model would be equal to those payments that would have been made under the 44-group model that it replaced. We then explained that actual utilization patterns under the refined case-mix system differed significantly from the initial projections, and as a consequence, rather than simply achieving parity, this adjustment inadvertently triggered a significant increase in overall payment levels under the refined model, representing substantial overpayments to SNFs. Accordingly, the FY 2010 proposed rule included a proposal to recalibrate the parity adjustment in order to restore the intended parity to the 2006 case-mix refinements on a prospective basis. The comments that we received on this proposal, and our responses, appear below.

*Comment:* Most commenters opposed our proposal to recalibrate the case-mix weights put into place for the refined RUG–53 system. Some commenters expressed the belief that we have overstated the amount of the proposed parity adjustment, by incorrectly identifying increased payments related to treatment of higher case-mix patients with an overpayment related to the use of an incorrect budget neutrality adjustment factor applied in January 2006. They believed that the recalibration proposal should be either withdrawn or significantly reduced to eliminate the effect of real acuity changes. One commenter conducted a detailed analysis of MDS clinical data that included changes in reported activities of daily living (ADLs), infections, falls, medication use, and other clinical conditions to support their conclusions that patient acuity has increased since the start of the SNF PPS and that our recalibration proposal incorrectly ignored the impact of these changes. Another commenter believed that the proposed recalibration could be more accurately calculated using either 2005 data or a combination of 2005 and 2006 data.

*Response:* We agree that, on average, the case-mix indexes for current SNF patients are higher than they were in 2001. In fact, our primary reason for implementing the STRIVE project was to identify changes in patient characteristics, and to adjust the RUG case-mix classification system to reflect the staff time and resource costs needed to reimburse fairly for the type of patients currently being treated in nursing homes. Moreover, in the STRIVE study, we collected 2006–2007 patient and facility staff data in order to update the case-mix classification system. As indicated in detail in the proposed rule, STRIVE data also show significant changes in patient characteristics and facility practice patterns that need to be incorporated into the case-mix methodology to reimburse facilities more accurately.

However, we do not agree that changes in patient acuity levels skewed the results of our recalibration analysis. When we introduced nine new Rehabilitation Plus Extensive Care groups to create the RUG–53 model in January 2006, we made a small, focused adjustment to the case-mix classification of patients receiving both Extensive Care and Rehabilitation services. Under RUG–44, patients receiving both services would be classified into the highest paying group for which they qualified—either Extensive Care or Rehabilitation. Under RUG–53, we created a separate category for this subgroup of patients. As explained in the FY 2006 proposed rule (70 FR 29070, 29077, May 19, 2005), we took the nursing minutes used to create the original RUG–III system, and resorted the records to create three hierarchy categories (Rehabilitation, Extensive Care, and Rehabilitation Plus Extensive) from the two categories that were used

in the RUG–44 model. In making these changes, we did not change any other part of the case-mix classification model. Thus, patient clinical characteristics including ADL scores (used to assign a Rehabilitation RUG group) calculated under the RUG–53 model would be exactly the same as the patient characteristics, including ADL scores, calculated under the RUG–44 model. As we used the same 2006 data set to test for budget neutrality between the two models, ADLs and other components of the case-mix model reflected the same 2006 level of acuity.

In addition, we believe this concern may erroneously equate the introduction of a new classification model with the regular SNF PPS annual update process. Normally, changes in case mix are accommodated as the classification model identifies changes in case mix and assigns the appropriate RUG group. Actual payments will typically vary from projections since case-mix changes, which occur for a variety of reasons, cannot be anticipated in an impact analysis.

However, in January 2006, we did not just update the payment rates, but introduced a new classification model, the RUG–53 case-mix system. As discussed above, the purpose of this refined model was to redistribute payments across the 53 groups while maintaining the same total expenditure level that we would have incurred had we retained the original 44-group RUG model.

In testing the two models, we used 2001 data because it was the best data we had available, and found that using the raw weights calculated for the RUG–53 model, we could expect aggregate payments to decrease as a result of introducing the refinement. To prevent this expected reduction in overall Medicare expenditures, we applied an adjustment to the RUG–53 case-mix weights as described earlier in this section. Later analysis using actual 2006 data showed that, rather than achieving budget neutrality between the two models, expenditures under the RUG–53 model were significantly higher than intended. For FY 2010, we estimate expenditures to be $1.05 billion higher than intended.

As noted previously, we do not agree that updating our analysis using CY 2006 data captured payments related to increased case mix rather than establishing budget neutrality between the two models. First, by using 2006 data to estimate expenditures under both models, we incorporate the same case-mix changes into the estimated expenditure levels for RUG–44 as well as for RUG–53. Second, we believe it is appropriate to standardize the new model for the time period in which it is being introduced. The only reason we used 2001 data in the original calculation is that it was the best data available at the time. The CY 2006 data allowed us to calibrate the RUG–53 model more precisely for its first year of operation.

One commenter recommended using alternative time periods in calculating the budget neutrality adjustment. However, while it might be possible to use some or all of CY 2005 rather than CY 2006 data, using CY 2005 data still requires us to use a projection of the distributional shift to the nine new groups in the RUG–53 group model. We believe that using actual instead of projected data is the most appropriate approach. We also looked at a second recommended alternative, which involved averaging data periods directly before and after implementation of the RUG–53 model; 2005 for the RUG–44 model and 2006 for the RUG–53 model. Again, we believe that using actual utilization data for CY 2006 is more accurate, as actual case mix during the calibration year is the basis for computing the case-mix adjustment. We have determined that using the 2006 data instead of the suggested alternatives is the most appropriate data to adopt.

*Comment:* A few commenters stated that CMS failed to make public all information needed to provide sufficient explanation of the basis for the recalibration. The commenters indicated that the negative $1.05 billion impact of the recalibration should be similar to that proposed in the 2009 proposed rule, and questioned the reasons for the change. Further, the commenters suggested that CMS has failed to provide the public with the aggregate baseline spending values that CMS used in making the initial FY 2006 ''parity'' adjustment and the one that is currently being used in the FY 2010 proposed rule.

*Response:* In the FY 2009 rule, actual data were used to compare payments in 2006 under RUG–44 and RUG–53. At that time it was decided that an adjustment was necessary to recalibrate the CMIs because the adjustments in place since FY 2006, which were supposed to be budget neutral, actually resulted in a 3.3 percent overpayment to SNFs. It was also determined that the adjustment necessary to attain the appropriate 3.3 percent reduction in payments was a 9.68 percent increase to the unadjusted RUG–53 case-mix indexes (73 FR 46422, August 8, 2008), to replace the 17.90 percent adjustment that was in place since 2006. To determine the dollar impact ($780 million) for the FY 2009 rule, the 3.3 percent was applied to the estimated Medicare reimbursement to SNFs in FY 2008, which is net of beneficiary cost-sharing. For the FY 2010 rule, the same data and methodology were used as in the FY 2009 rule, which determined that an overpayment of 3.3 percent has been in place since 2006, requiring an adjustment to the nursing case-mix indexes of 9.68 percent (74 FR 22214, May 12, 2009) to replace the 17.90 percent adjustment. However, we believe that the presentation of the dollar impact would be more accurately reflected by applying the overpayment percentage to total SNF payments, including beneficiary cost-sharing amounts. The reason for using these higher payments to determine the dollar impact is because this is how the impact will play out in actual practice. Specifically, the revised 9.68 percent adjustment to the nursing CMIs is used to calculate total payments to SNFs, which reflect a combination of reimbursement from Medicare along with beneficiary cost-sharing. However, as the daily coinsurance amount for days 21–100 in the SNF is set by law (in section 1813(a)(3) of the Act) at one-eighth of the current calendar year's inpatient hospital deductible amount, the beneficiary cost-sharing is unaffected by the change in payments resulting from the recalibration. This point is best illustrated by way of an example: Total payments to SNFs in FY 2009 are estimated at approximately $31.3 billion, consisting of $25.9 billion in Medicare reimbursement and $5.4 billion in beneficiary cost-sharing.

The impact of the recalibration lowers total payments to SNFs by approximately $1 billion (or 3.3 percent), to about $30.3 billion. Of this $30.3 billion, beneficiary cost-sharing (as determined by the statutory formula) remains unchanged at $5.4 billion, while Medicare reimbursement is reduced to $24.8 billion. Thus, although the determination of the total dollar impact changed, the methodology used to determine the need to recalibrate the CMIs did not change from FY 2009 to FY 2010. The total payments to SNFs that are used to determine the dollar impacts are not explicitly published anywhere, but can be easily estimated by dividing the dollar impacts by the percentage impact. These results can be confirmed by contacting the CMS Office of the Actuary.

*Comment:* Some commenters believed that CMS failed to provide sufficient information for a third party to reproduce CMS's conclusions with regard to the recalibrated parity

adjustment, noting the following specific elements: The baseline used for FY 2010, the CY 2006 days of service for both the RUG–44 and RUG–53 systems, and the separate values for the recalibrated parity adjustment factor and the NTA cost adjustment factor for FY 2010.

*Response:* We do not agree with the commenters' assertion. The methodology used to establish the case-mix adjustments is the same as that described in detail in the FY 2006 SNF PPS proposed rule (70 FR 29077 through 29079, May 19, 2005), the FY 2009 SNF PPS proposed rule (73 FR 25923, May 7, 2008) and the FY 2009 SNF PPS final rule (73 FR 46421–22, August 8, 2008). In addition, the data used to calculate the adjustments are publicly available on the CMS Web site, as explained below. We used the CY 2006 days of service (available in the Downloads section of our Web site at *http://www.cms.hhs.gov/SNFPPS/02_Spotlight.asp*) for both the RUG–44 and RUG–53 systems. We multiplied the CY 2006 days of service by the FY 2008 unadjusted Federal per diem payment rate components (72 FR 43416, August 3, 2007) multiplied by the unadjusted case-mix indexes (available in the Downloads section of our Web site at *http://www.cms.hhs.gov/SNFPPS/09_RUGRefinement.asp*) to establish expenditures under the RUG–44 and RUG–53 systems. The budget neutrality adjustment was determined as the percentage increase necessary for the nursing CMIs to generate estimated expenditure levels under the RUG–53 system that were equal to estimated expenditure levels under the RUG–44 system. We then calculated a second adjustment factor to increase the baseline by an amount that served to offset the variability in NTA utilization.

The separate recalibrated parity adjustment factor and the NTA cost adjustment factor were considered in the calculation of the combined parity adjustment factor of 9.68 in the FY 2009 SNF PPS proposed rule (73 FR 25923, May 7, 2008), the FY 2009 SNF PPS final rule (73 FR 46421–22, August 8, 2008), and the FY 2010 SNF PPS proposed rule (74 FR 22214, May 12, 2009). We presented the total adjustment to the nursing case-mix indexes of 9.68 percent because this reflects all changes to the payment system with respect to the recalibration. The percentage adjustment to the nursing CMIs to maintain parity between the 44-group and 53-group models is a 2.43 percent increase. The adjustment to account for the variability in the non-therapy ancillary utilization is a 7.08 percent increase. The separate adjustments represent interim steps in the calculations, and the final result of 9.68 percent represents the complete change to aggregate payments.

Although the SNF baseline is not explicitly published, the baseline used can be determined by dividing the dollar impacts by the percentage impact. Many commenters used this approach to conduct their own analyses. Some of the commenters contacted CMS to confirm the baseline in use, and this information was provided or verified.

*Comment:* A few commenters believe that CMS failed to explain fully the evaluation done since the FY 2009 final rule to support the decision to proceed with the recalibration for FY 2010.

*Response:* The analytic methodology and calculations were explained in detail in the FY 2009 proposed and final rules. In the final rule, we explained that we were deferring rather than withdrawing the recalibration proposal. After the publication of the FY 2009 final rule, we worked with CMS staff and contractors, and reviewed the entire methodology with our actuaries. We reviewed the recalibration approach with the CMS actuaries, asked for an independent review by one of our contractors, and met with an industry representative to discuss the methodology. The calculations were determined to be mathematically correct. The approach was reconsidered along with alternative approaches that we presented in our FY 2009 final rule (73 FR 46423, 46439–40) and those offered by industry. Based on our results from these steps, we determined that our methodology was appropriate and reissued the proposal for FY 2010. In addition, we further considered the effects of the recalibration on beneficiaries, SNF clinical staff, and quality of care, and as explained in the FY 2010 proposed rule (74 FR 22214), we determined that it is appropriate to proceed with the recalibration in FY 2010. As we explained in the FY 2010 proposed rule (74 FR 22214), by recalibrating the CMIs under the 53-group model, we expect to restore SNF payments to their appropriate level by correcting an inadvertent increase in overall payments. Because the recalibration would simply remove an unintended overpayment rather than decrease an otherwise appropriate payment amount, we do not believe that the recalibration should negatively affect beneficiaries, clinical staff, or quality of care, or create an undue hardship on providers. The purpose of the FY 2006 refinements was to reallocate payments so that they more accurately reflect resources used, not to increase or decrease overall expenditures. Thus, we believe that it is appropriate to proceed with the recalibration in order to ensure that we correctly accomplish the purpose of the FY 2006 case-mix refinements and restore payments to their appropriate level.

*Comment:* Several commenters stated that the need for the recalibration arose because CMS initial projections of utilization under the refined case-mix system proved to be inaccurate once actual utilization data became available. They then asserted that in view of this, the proposed recalibration represents a ''forecast error adjustment'' that is not covered under the statutory authority to provide for an appropriate adjustment to account for case mix (section 1888(e)(4)(G)(i) of the Act).

*Response:* It would be incorrect to characterize the proposed recalibration as a ''forecast error adjustment,'' as that term refers solely to an adjustment that compensates for an inaccurate forecast of the annual inflation factor in the SNF market basket, as described in section III.F.2 of this final rule (*see* 42 CFR 413.337(d)(2)). By contrast, the proposed recalibration would serve to ensure that the 2006 case-mix refinements are implemented as intended. As such, it would be integral to the process of providing ''* * * for an appropriate adjustment to account for case mix'' that is based upon appropriate data in accordance with section 1888(e)(4)(G)(i) of the Act.

*Comment:* A number of comments included references to the discussion of the 2006 case-mix refinements in the SNF PPS proposed rule for FY 2006 (70 FR 29079, May 19, 2005), in which we explained that we were ''* * * advancing these proposed changes under our authority in section 101(a) of the BBRA to establish case-mix refinements, and that the changes we are hereby proposing will represent the final adjustments made under this authority'' (emphasis added). The commenters stated that this earlier description of the 2006 case-mix refinements as ''final'' effectively precludes CMS from proceeding with a recalibration, which they characterized as representing a further refinement. Similarly, several commenters also questioned our authority to recalibrate the case-mix system prior to the completion of the STRIVE STM project. In addition, several commenters questioned whether CMS has the authority to impose a budget neutrality requirement on the introduction of a new classification model.

*Response:* We wish to clarify that the actual ''refinement'' that we proposed and implemented in the FY 2006

rulemaking cycle consisted of our introduction of the 9 new Rehabilitation plus Extensive Services groups at the top of the previous, 44-group RUG hierarchy, along with the adjustment recognizing the variability of NTA use, which together fulfilled the provisions of section 101(a) of the BBRA. The accompanying adjustment to the case-mix indexes (CMIs) was merely a vehicle through which we implemented that refinement. Rather than representing a new or further ''refinement'' in itself, the proposed recalibration merely serves to ensure that we correctly accomplish a revision to the CMIs that accompanied the FY 2006 case-mix refinements.

In the FY 2006 final rule (70 FR 45033, August 4, 2005), we addressed the introduction of the refinements within the broader context of ensuring payment accuracy and beneficiary access to care. We pointed out that

> * * * this incremental change is part of this ongoing process that will also include update activities such as the upcoming STM study and investigation of potential alternatives to the RUG system itself. However, the commitment to long term analysis and refinement should not preclude the introduction of more immediate methodological and policy updates.

Finally, the budget neutrality factor was applied to the unadjusted RUG–53 case-mix weights that were introduced in January 2006. As stated above, our initial analyses indicated that payments would be lower under the RUG–53 model. As the purpose of the refinement was to reallocate payments, and not to reduce expenditures, we believe that increasing the case-mix weights to equalize payments under the two models is an appropriate exercise of our broad authority to establish an appropriate case-mix system. We further note that the FY 2006 refinement to the case-mix classification system using adjusted CMIs was implemented through the rulemaking process, and we received no comments on the use of a budget neutrality adjustment at that time.

*Comment:* Some commenters argued against implementing the proposed recalibration by asserting that it is important to maintain Medicare SNF payments at their current levels in order to cross-subsidize what they characterized as inadequate payment rates for nursing facilities under the Medicaid program. Other commenters urged CMS to reconsider the recalibration in light of the potential national impact in a weak economy. A few commenters asserted that the recalibration would have the same impact as the original implementation of the SNF PPS, which they asserted had pushed providers into bankruptcy.

*Response:* We wish to clarify that it is not the appropriate role of the Medicare SNF benefit to cross-subsidize nursing home payments made under the Medicaid program. We note that MedPAC has indicated that it is inappropriate for the Medicare program's SNF payments to cross-subsidize Medicaid nursing facility rates in this manner. Specifically, on page 152 of its March 2008 Report to the Congress on Medicare Payment Policy (which is available online at *http://medpac.gov/documents/Mar08_EntireReport.pdf*), MedPAC stated:

> There are several reasons why Medicare cross-subsidization is not advisable policy for the Medicare program. On average, Medicare payments accounted for 21 percent of revenues to freestanding SNFs in 2006. As a result, the policy would use a minority of Medicare payments to subsidize a majority of Medicaid payments. If Medicare were to pay still higher rates, facilities with high shares of Medicare payments—presumably the facilities that need revenues the least—would receive the most in subsidies from the higher Medicare payments. In other words, the subsidy would be poorly targeted. Given the variation among States in the level and method of nursing home payments, the impact of the subsidy would be highly variable; in States where Medicaid payments were adequate, it would have no positive impact. In addition, increasing Medicare's payment rates could encourage States to reduce Medicaid payments further and, in turn, result in pressure to again raise Medicare rates. It could also encourage providers to select patients based on payer source or to rehospitalize dual-eligible patients so that they qualified for a Medicare-covered, and higher payment, stay.

We agree with MedPAC and, therefore, do not agree with the commenters that cited cross-subsidizing Medicaid as a justification for maintaining Medicare SNF payments at any specific level.

We are also aware of the concerns that reductions in payment levels can have a negative impact on SNFs and the quality of care furnished to nursing home patients across the country. However, in this particular case, we have proposed to correct, on a prospective basis, an overpayment situation that has been in effect since January 2006. To avoid possible negative consequences, we have decided not to go back and recoup the excess expenditures made to SNFs ever since January 2006. Instead, we are limiting the scope of the recalibration to restoring the intended SNF PPS payment levels on a prospective basis only, effective October 1, 2010.

We have also considered the concerns raised by industry representatives that restoring the intended payment levels will result in job losses and add significant burden to health care workers and State governments. CMS cost report and Online Survey Certification and Reporting System (OSCAR) data show that, for the majority of SNFs that operate as freestanding facilities or as parts of chains, there has been little change in staffing or in facility costs since 2006. Therefore, as data do not indicate that the overpayment was used to increase staffing during this time, we do not believe that restoring payments to their intended and appropriate levels should necessarily result in job losses or add significant burden to health care workers and State governments. Further, in its March 2009 Report to the Congress (available online at *http://www.medpac.gov/documents/Mar09_EntireReport.pdf*), MedPAC reports that average Medicare margins have increased for freestanding SNFs since 2005. In 2007, the aggregate Medicare margin for freestanding SNFs was 14.5 percent, up from 13.3 percent in 2006.

A few commenters expressed concern that the recalibration would have the same impact as the original implementation of the SNF PPS in the late 1990s, which they asserted had pushed providers into bankruptcy. However, studies have indicated multiple factors for those nursing home closures. Castle *et al* studied the rate of nursing home closures for 7 years (1999–2005).[1] Those reasons for bankruptcy included internal factors such as quality, organizational factors such as chain membership, and external factors such as competition. Nursing homes most likely to close included those with higher rates of deficiency citations, hospital-based facilities, chain members, small bed size, and facilities located in markets with high levels of competition. A recent study examined nursing homes terminated from the Medicare and Medicaid programs.[2] The study found that the introduction of the prospective case-mix system was not the sole cause of the fiscal instabilities that led these providers to terminate their participation in Medicare. The authors state that some of the fiscal instability was self-inflicted, due to investment

[1] Castle NG, Engberg J, Lave J, Fisher A. *Factors Associated with Increasing Nursing Home Closures*, Health Services Research 44: (3) June 2009, pp. 1088–1109.

[2] Zinn J, Mor V, Feng Z, Intrator O. *Determinants of performance failure in the nursing home industry*, Social Science & Medicine 68: (5), March, 2009, pp. 933–940.

decisions made in an uncertain market and misreading the changing reimbursement environment.

A similar finding had been reported in the March 2002 MedPAC report.[3] MedPAC noted that the ability to service debt was the same under PPS as under cost-based payments. Finally, a 2000 GAO report stated that the bankruptcies resulted from heavy business investments in ancillary service lines and high capital-related costs such as depreciation, interest, and rent.[4]

Research fails to indicate that case-mix reimbursement is a significant contributor to nursing home bankruptcy. Thus, we do not agree with the commenters who asserted that the recalibration of Medicare CMIs to restore budget neutrality on a prospective basis will force providers into bankruptcy, or create the type of fiscal pressure that would negatively affect facility staffing or the quality of care furnished to Medicare beneficiaries. As regards the comment that CMS should reconsider the recalibration in light of the potential impact on a weak economy, we do not believe that a weak economy justifies perpetuating an overpayment.

*Comment:* Several commenters asserted that a shift in patients from Inpatient Rehabilitation Facilities (IRFs) to SNFs results in savings to the Medicare Trust Fund and that the current SNF spending levels are needed to treat higher acuity patients that are now being treated in SNFs rather than IRFs. They asserted that the recalibration adjustment should not be made because SNFs used the money to expand their infrastructures to handle more seriously ill patients who were previously treated in IRFs, and that their actions actually saved Medicare dollars. Specifically, these commenters asserted that a shift of patients from IRFs to SNFs resulted in savings to the Medicare Trust Fund, and that SNFs need to maintain current SNF spending levels to treat this new type of patients. Underlying these comments is the assumption that SNFs are providing care for the same type of patients who would otherwise qualify for the higher IRF payments.

*Response:* We note that a basic principle of the SNF PPS is to pay appropriately for the services provided. CMS data are consistent with the commenters' assertions that many patients formerly being treated in IRFs are now being treated in SNFs or Home Health Agencies (HHAs). In fact, our data show that a portion of patients needing rehabilitation have always been treated at SNFs and HHAs. The CY 2006 distribution used to recalibrate the case-mix adjustments reflects an increase in rehabilitation patients, and probably includes patients who might have been admitted to the higher-paying IRFs prior to CMS enforcement of IRF facility compliance criteria and more intensive medical review of IRF claims. However, we do not agree that these patients represent a higher level of acuity than the type of patients historically treated in SNFs. In fact, the decrease in the number of patients admitted to IRFs reflects that subset of the rehabilitation population that was not appropriate for IRF care. As such, CMS may have overpaid IRFs for more routine orthopedic cases, such as single joint knee replacements. For those former IRF patients who are appropriate for SNF care, we must pay the appropriate rate for the SNF services provided, and cannot use a reduction in IRF overpayments as a reason to increase payments under the SNF PPS. In discussing the proposed recalibration, it is important to bear in mind that recalibrating CMIs would not change the relative nature of higher payments for patients using more staff resources and services.

Accordingly, for the reasons specified in the FY 2010 proposed rule (74 FR 22214–22215), we are finalizing the recalibration of the parity adjustment to the RUG–53 case-mix indexes in order to restore the intended parity in overall payments between the RUG–44 model and the RUG–53 model, and the factor used to recognize variability in NTA utilization, using the methodology described in the FY 2009 proposed and final rules (73 FR 25923, 73 FR 46421–24). Thus, for FY 2010, the aggregate impact of this recalibration would be the difference between payments calculated using the original FY 2006 total CMI increase of 17.9 percent and payments calculated using the recalibrated total CMI increase of 9.68 percent. The total difference is a decrease in payments of $1.05 billion (on an incurred basis) in payments for FY 2010. We also note that the negative $1.05 billion would be partly offset by the FY 2010 market basket adjustment factor of 2.2 percent, or $690 million, with a net result of a negative 1.1 percent update of $360 million for FY 2010. Again, we want to emphasize that we are implementing the recalibration on a prospective basis, which is the strategy that we believe best mitigates the potential impact on providers. By using CY 2006 claims data (which represent actual RUG–53 utilization), rather than FY 2001 claims data, we believe the SNF PPS will better reflect resources used, resulting in more accurate payment.

We list the case-mix adjusted payment rates separately for urban and rural SNFs in Tables 4 and 5, with the corresponding case-mix values. These tables do not reflect the AIDS add-on enacted by section 511 of the MMA, which we apply only after making all other adjustments (wage and case-mix).

TABLE 4—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES AND ASSOCIATED INDEXES, URBAN

| RUG–III category | Nursing index | Therapy index | Nursing component | Therapy component | Non-case mix therapy comp. | Non-case mix component | Total rate |
|---|---|---|---|---|---|---|---|
| RUX | 1.77 | 2.25 | 274.76 | 263.09 | | 79.22 | 617.07 |
| RUL | 1.31 | 2.25 | 203.35 | 263.09 | | 79.22 | 545.66 |
| RVX | 1.44 | 1.41 | 223.53 | 164.87 | | 79.22 | 467.62 |
| RVL | 1.24 | 1.41 | 192.49 | 164.87 | | 79.22 | 436.58 |
| RHX | 1.33 | 0.94 | 206.46 | 109.91 | | 79.22 | 395.59 |
| RHL | 1.27 | 0.94 | 197.14 | 109.91 | | 79.22 | 386.27 |
| RMX | 1.80 | 0.77 | 279.41 | 90.04 | | 79.22 | 448.67 |
| RML | 1.57 | 0.77 | 243.71 | 90.04 | | 79.22 | 412.97 |
| RLX | 1.22 | 0.43 | 189.38 | 50.28 | | 79.22 | 318.88 |
| RUC | 1.20 | 2.25 | 186.28 | 263.09 | | 79.22 | 528.59 |
| RUB | 0.92 | 2.25 | 142.81 | 263.09 | | 79.22 | 485.12 |

[3] Report to the Congress: Medicare Payment Policy, ''Section 2D: Skilled nursing facility,'' March 2002, pp. 85–90.

[4] General Accounting Office. Nursing homes: aggregate Medicare payments are adequate despite bankruptcies. No T–HEHS–00–192. Washington (DC), GAO. September 2000.

TABLE 4—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES AND ASSOCIATED INDEXES, URBAN—Continued

| RUG–III category | Nursing index | Therapy index | Nursing component | Therapy component | Non-case mix therapy comp. | Non-case mix component | Total rate |
|---|---|---|---|---|---|---|---|
| RUA | 0.78 | 2.25 | 121.08 | 263.09 | | 79.22 | 463.39 |
| RVC | 1.14 | 1.41 | 176.96 | 164.87 | | 79.22 | 421.05 |
| RVB | 1.01 | 1.41 | 156.78 | 164.87 | | 79.22 | 400.87 |
| RVA | 0.77 | 1.41 | 119.53 | 164.87 | | 79.22 | 363.62 |
| RHC | 1.13 | 0.94 | 175.41 | 109.91 | | 79.22 | 364.54 |
| RHB | 1.03 | 0.94 | 159.89 | 109.91 | | 79.22 | 349.02 |
| RHA | 0.88 | 0.94 | 136.60 | 109.91 | | 79.22 | 325.73 |
| RMC | 1.07 | 0.77 | 166.10 | 90.04 | | 79.22 | 335.36 |
| RMB | 1.01 | 0.77 | 156.78 | 90.04 | | 79.22 | 326.04 |
| RMA | 0.97 | 0.77 | 150.57 | 90.04 | | 79.22 | 319.83 |
| RLB | 1.06 | 0.43 | 164.54 | 50.28 | | 79.22 | 294.04 |
| RLA | 0.79 | 0.43 | 122.63 | 50.28 | | 79.22 | 252.13 |
| SE3 | 1.72 | | 267.00 | | 15.40 | 79.22 | 361.62 |
| SE2 | 1.38 | | 214.22 | | 15.40 | 79.22 | 308.84 |
| SE1 | 1.17 | | 181.62 | | 15.40 | 79.22 | 276.24 |
| SSC | 1.14 | | 176.96 | | 15.40 | 79.22 | 271.58 |
| SSB | 1.05 | | 162.99 | | 15.40 | 79.22 | 257.61 |
| SSA | 1.02 | | 158.33 | | 15.40 | 79.22 | 252.95 |
| CC2 | 1.13 | | 175.41 | | 15.40 | 79.22 | 270.03 |
| CC1 | 0.99 | | 153.68 | | 15.40 | 79.22 | 248.30 |
| CB2 | 0.91 | | 141.26 | | 15.40 | 79.22 | 235.88 |
| CB1 | 0.84 | | 130.39 | | 15.40 | 79.22 | 225.01 |
| CA2 | 0.83 | | 128.84 | | 15.40 | 79.22 | 223.46 |
| CA1 | 0.75 | | 116.42 | | 15.40 | 79.22 | 211.04 |
| IB2 | 0.69 | | 107.11 | | 15.40 | 79.22 | 201.73 |
| IB1 | 0.67 | | 104.00 | | 15.40 | 79.22 | 198.62 |
| IA2 | 0.57 | | 88.48 | | 15.40 | 79.22 | 183.10 |
| IA1 | 0.53 | | 82.27 | | 15.40 | 79.22 | 176.89 |
| BB2 | 0.68 | | 105.56 | | 15.40 | 79.22 | 200.18 |
| BB1 | 0.65 | | 100.90 | | 15.40 | 79.22 | 195.52 |
| BA2 | 0.56 | | 86.93 | | 15.40 | 79.22 | 181.55 |
| BA1 | 0.48 | | 74.51 | | 15.40 | 79.22 | 169.13 |
| PE2 | 0.79 | | 122.63 | | 15.40 | 79.22 | 217.25 |
| PE1 | 0.77 | | 119.53 | | 15.40 | 79.22 | 214.15 |
| PD2 | 0.72 | | 111.77 | | 15.40 | 79.22 | 206.39 |
| PD1 | 0.70 | | 108.66 | | 15.40 | 79.22 | 203.28 |
| PC2 | 0.66 | | 102.45 | | 15.40 | 79.22 | 197.07 |
| PC1 | 0.65 | | 100.90 | | 15.40 | 79.22 | 195.52 |
| PB2 | 0.52 | | 80.72 | | 15.40 | 79.22 | 175.34 |
| PB1 | 0.50 | | 77.62 | | 15.40 | 79.22 | 172.24 |
| PA2 | 0.49 | | 76.06 | | 15.40 | 79.22 | 170.68 |
| PA1 | 0.46 | | 71.41 | | 15.40 | 79.22 | 166.03 |

TABLE 5—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES AND ASSOCIATED INDEXES, RURAL

| RUG–III category | Nursing index | Therapy index | Nursing component | Therapy component | Non-case mix therapy comp. | Non-case mix component | Total rate |
|---|---|---|---|---|---|---|---|
| RUX | 1.77 | 2.25 | 262.51 | 303.37 | | 80.69 | 646.57 |
| RUL | 1.31 | 2.25 | 194.29 | 303.37 | | 80.69 | 578.35 |
| RVX | 1.44 | 1.41 | 213.57 | 190.11 | | 80.69 | 484.37 |
| RVL | 1.24 | 1.41 | 183.90 | 190.11 | | 80.69 | 454.70 |
| RHX | 1.33 | 0.94 | 197.25 | 126.74 | | 80.69 | 404.68 |
| RHL | 1.27 | 0.94 | 188.35 | 126.74 | | 80.69 | 395.78 |
| RMX | 1.80 | 0.77 | 266.96 | 103.82 | | 80.69 | 451.47 |
| RML | 1.57 | 0.77 | 232.85 | 103.82 | | 80.69 | 417.36 |
| RLX | 1.22 | 0.43 | 180.94 | 57.98 | | 80.69 | 319.61 |
| RUC | 1.20 | 2.25 | 177.97 | 303.37 | | 80.69 | 562.03 |
| RUB | 0.92 | 2.25 | 136.45 | 303.37 | | 80.69 | 520.51 |
| RUA | 0.78 | 2.25 | 115.68 | 303.37 | | 80.69 | 499.74 |
| RVC | 1.14 | 1.41 | 169.07 | 190.11 | | 80.69 | 439.87 |
| RVB | 1.01 | 1.41 | 149.79 | 190.11 | | 80.69 | 420.59 |
| RVA | 0.77 | 1.41 | 114.20 | 190.11 | | 80.69 | 385.00 |
| RHC | 1.13 | 0.94 | 167.59 | 126.74 | | 80.69 | 375.02 |
| RHB | 1.03 | 0.94 | 152.76 | 126.74 | | 80.69 | 360.19 |
| RHA | 0.88 | 0.94 | 130.51 | 126.74 | | 80.69 | 337.94 |
| RMC | 1.07 | 0.77 | 158.69 | 103.82 | | 80.69 | 343.20 |
| RMB | 1.01 | 0.77 | 149.79 | 103.82 | | 80.69 | 334.30 |
| RMA | 0.97 | 0.77 | 143.86 | 103.82 | | 80.69 | 328.37 |
| RLB | 1.06 | 0.43 | 157.21 | 57.98 | | 80.69 | 295.88 |

TABLE 5—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES AND ASSOCIATED INDEXES, RURAL—Continued

| RUG–III category | Nursing index | Therapy index | Nursing component | Therapy component | Non-case mix therapy comp. | Non-case mix component | Total rate |
|---|---|---|---|---|---|---|---|
| RLA | 0.79 | 0.43 | 117.16 | 57.98 | | 80.69 | 255.83 |
| SE3 | 1.72 | | 255.09 | | 16.45 | 80.69 | 352.23 |
| SE2 | 1.38 | | 204.67 | | 16.45 | 80.69 | 301.81 |
| SE1 | 1.17 | | 173.52 | | 16.45 | 80.69 | 270.66 |
| SSC | 1.14 | | 169.07 | | 16.45 | 80.69 | 266.21 |
| SSB | 1.05 | | 155.73 | | 16.45 | 80.69 | 252.87 |
| SSA | 1.02 | | 151.28 | | 16.45 | 80.69 | 248.42 |
| CC2 | 1.13 | | 167.59 | | 16.45 | 80.69 | 264.73 |
| CC1 | 0.99 | | 146.83 | | 16.45 | 80.69 | 243.97 |
| CB2 | 0.91 | | 134.96 | | 16.45 | 80.69 | 232.10 |
| CB1 | 0.84 | | 124.58 | | 16.45 | 80.69 | 221.72 |
| CA2 | 0.83 | | 123.10 | | 16.45 | 80.69 | 220.24 |
| CA1 | 0.75 | | 111.23 | | 16.45 | 80.69 | 208.37 |
| IB2 | 0.69 | | 102.33 | | 16.45 | 80.69 | 199.47 |
| IB1 | 0.67 | | 99.37 | | 16.45 | 80.69 | 196.51 |
| IA2 | 0.57 | | 84.54 | | 16.45 | 80.69 | 181.68 |
| IA1 | 0.53 | | 78.60 | | 16.45 | 80.69 | 175.74 |
| BB2 | 0.68 | | 100.85 | | 16.45 | 80.69 | 197.99 |
| BB1 | 0.65 | | 96.40 | | 16.45 | 80.69 | 193.54 |
| BA2 | 0.56 | | 83.05 | | 16.45 | 80.69 | 180.19 |
| BA1 | 0.48 | | 71.19 | | 16.45 | 80.69 | 168.33 |
| PE2 | 0.79 | | 117.16 | | 16.45 | 80.69 | 214.30 |
| PE1 | 0.77 | | 114.20 | | 16.45 | 80.69 | 211.34 |
| PD2 | 0.72 | | 106.78 | | 16.45 | 80.69 | 203.92 |
| PD1 | 0.70 | | 103.82 | | 16.45 | 80.69 | 200.96 |
| PC2 | 0.66 | | 97.88 | | 16.45 | 80.69 | 195.02 |
| PC1 | 0.65 | | 96.40 | | 16.45 | 80.69 | 193.54 |
| PB2 | 0.52 | | 77.12 | | 16.45 | 80.69 | 174.26 |
| PB1 | 0.50 | | 74.16 | | 16.45 | 80.69 | 171.30 |
| PA2 | 0.49 | | 72.67 | | 16.45 | 80.69 | 169.81 |
| PA1 | 0.46 | | 68.22 | | 16.45 | 80.69 | 165.36 |

3. Wage Index Adjustment to Federal Rates

Section 1888(e)(4)(G)(ii) of the Act requires that we adjust the Federal rates to account for differences in area wage levels, using a wage index that we find appropriate. Since the inception of a PPS for SNFs, we have used hospital wage data in developing a wage index to be applied to SNFs.

In the FY 2010 proposed rule, we proposed to continue that practice, as we continue to believe that in the absence of SNF-specific wage data, using the hospital inpatient wage index is appropriate and reasonable for the SNF PPS. As explained in the update notice for FY 2005 (69 FR 45786, July 30, 2004), the SNF PPS does not use the hospital area wage index's occupational mix adjustment, as this adjustment serves specifically to define the occupational categories more clearly in a hospital setting; moreover, the collection of the occupational wage data also excludes any wage data related to SNFs. Therefore, we believe that using the updated wage data exclusive of the occupational mix adjustment continues to be appropriate for SNF payments.

In the FY 2010 proposed rule, we also proposed to continue using the same methodology discussed in the SNF PPS final rule for FY 2008 (72 FR 43423) to address those geographic areas in which there are no hospitals and, thus, no hospital wage index data on which to base the calculation of the FY 2010 SNF PPS wage index. For rural geographic areas that do not have hospitals and, therefore, lack hospital wage data on which to base an area wage adjustment, we proposed to use the average wage index from all contiguous CBSAs as a reasonable proxy. This methodology is used to construct the wage index for rural Massachusetts. However, we indicated that we would not apply this methodology to rural Puerto Rico due to the distinct economic circumstances that exist there, but instead would continue using the most recent wage index previously available for that area. For urban areas without specific hospital wage index data, we proposed to use the average wage indexes of all of the urban areas within the State to serve as a reasonable proxy for the wage index of that urban CBSA. The only urban area without wage index data available is CBSA (25980) Hinesville-Fort Stewart, GA.

The comments that we received on the wage index adjustment to the Federal rates, and our responses to those comments, appear below.

*Comment:* A commenter requested that CMS develop a method of gathering wage data information that would directly reflect the wages earned in both rural and urban SNF settings.

*Response:* As described above, hospital wage data are used in developing a wage index to be applied to SNFs. All hospitals, both rural and urban, are used to establish the hospital wage data used to construct the SNF PPS wage index. Therefore, we believe that the SNF PPS wage index adequately captures earned wages across both urban and rural settings. Further, as discussed in greater detail below, we have been unable to develop a SNF-specific wage index due to ''* * * the volatility of existing SNF wage data and the significant amount of resources that would be required to improve the quality of that data'' (73 FR 46426, August 8, 2008).

*Comment:* Several commenters asked CMS to consider adopting certain wage index policies in use under the acute IPPS, such as reclassification, because SNFs compete in a similar labor pool as acute care hospitals. In addition, a few commenters recommended that CMS develop a SNF-specific wage index. One commenter requested that we revisit the use of CBSA labor market areas and

develop an alternative that better captures Statewide labor market trends.

*Response:* The regulations that govern the SNF PPS currently do not provide a mechanism for allowing providers to seek geographic reclassification. Moreover, as we have explained in the past (most recently, in the SNF PPS final rule for FY 2009 (73 FR 46416, 46426, August 8, 2008), while section 315 of the Benefits Improvement and Protection Act of 2000 (BIPA, Pub. L. 106–554) does authorize us to establish such a reclassification methodology under the SNF PPS, it additionally stipulates that such reclassification cannot be implemented until we have collected the data necessary to establish a SNF-specific wage index. This, in turn, has proven to be infeasible due to ''* * * the volatility of existing SNF wage data and the significant amount of resources that would be required to improve the quality of that data'' (73 FR 46426, August 8, 2008). We continue to believe that these factors make it unlikely for such an approach to yield meaningful improvements in our ability to determine facility payments, or to justify the significant increase in administrative resources as well as burden on providers what this type of data collection would involve.

In addition, we reviewed the Medicare Payment Advisory Commission's (MedPAC) wage index recommendations as discussed in MedPAC's June 2007 report entitled, ''Report to Congress: Promoting Greater Efficiency in Medicare.'' Although some commenters recommend that we adopt the IPPS wage index policies such as reclassification and floor policies, we note that MedPAC's June 2007 report to Congress recommends that Congress ''repeal the existing hospital wage index statute, including reclassification and exceptions, and give the Secretary authority to establish new wage index systems.'' We believe that adopting the IPPS wage index policies (such as reclassification or floor) would not be prudent at this time, because MedPAC suggests that the reclassification and exception policies in the IPPS wage index alters the wage index values for one-third of IPPS hospitals. In addition, MedPAC found that the exceptions may lead to anomalies in the wage index. By adopting the IPPS reclassification and exceptions at this time, the SNF PPS wage index could become vulnerable to problems similar to those that MedPAC identified in their June 2007 Report to Congress. However, we will continue to review and consider MedPAC's recommendations on a refined or alternative wage index methodology for the SNF PPS in future years.

We also note that section 106(b)(2) of the Medicare Improvements and Extension Act (MIEA) of 2006 (which is Division B of the Tax Relief and Health Care Act (TRHCA) of 2006, Public Law 109–432, collectively referred to as ''MIEA–TRHCA'') required the Secretary of Health and Human Services, taking into account MedPAC's recommendations on the Medicare wage index classification system, to include in the FY 2009 IPPS proposed rule one or more proposals to revise the wage index adjustment applied under section 1886(d)(3)(E) of the Act for purposes of the IPPS. To assist CMS in meeting the requirements of section 106(b)(2) of MIEA–TRHCA, in February 2008, CMS awarded a Task Order under its Expedited Research and Demonstration Contract, to Acumen, LLC. Acumen, LLC conducted a study of both the current methodology used to construct the Medicare wage index and the recommendations reported to Congress by MedPAC. Part One of Acumen's final report, which analyzes the strengths and weaknesses of the data sources used to construct the CMS and MedPAC indexes, is available online at *http://www.acumenllc.com/reports/cms*. MedPAC's recommendations are presented in the FY 2009 IPPS final rule (*http://edocket.access.gpo.gov/2008/pdf/E8-17914.pdf*). We plan to continue monitoring wage index research efforts and the impact or influence they may have for the SNF PPS wage index.

Moreover, in light of all of the pending research and review of wage index issues in general, we believe that it would be premature at this time to initiate revisiting the use of CBSA labor market areas and review of a SNF-specific wage index.

Therefore, in this final rule, we will continue to use hospital wage data exclusive of the occupational mix adjustment to calculate the SNF PPS wage index adjustment, and we are finalizing the wage index and associated policies as proposed in the SNF PPS proposed rule for FY 2010 (74 FR 22217–22219, May 12, 2009).

To calculate the SNF PPS wage index adjustment, we apply the wage index adjustment to the labor-related portion of the Federal rate, which is 69.840 percent of the total rate. This percentage reflects the labor-related relative importance for FY 2010, using the revised and rebased FY 2004-based market basket. The labor-related relative importance for FY 2009 was 69.783, as shown in Table 16. We calculate the labor-related relative importance from the SNF market basket, and it approximates the labor-related portion of the total costs after taking into account historical and projected price changes between the base year and FY 2010. The price proxies that move the different cost categories in the market basket do not necessarily change at the same rate, and the relative importance captures these changes. Accordingly, the relative importance figure more closely reflects the cost share weights for FY 2010 than the base year weights from the SNF market basket.

We calculate the labor-related relative importance for FY 2010 in four steps. First, we compute the FY 2010 price index level for the total market basket and each cost category of the market basket. Second, we calculate a ratio for each cost category by dividing the FY 2010 price index level for that cost category by the total market basket price index level. Third, we determine the FY 2010 relative importance for each cost category by multiplying this ratio by the base year (FY 2004) weight. Finally, we add the FY 2010 relative importance for each of the labor-related cost categories (wages and salaries, employee benefits, non-medical professional fees, labor-intensive services, and a portion of capital-related expenses) to produce the FY 2010 labor-related relative importance. Tables 6 and 7 show the Federal rates by labor-related and non-labor-related components.

TABLE 6—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES FOR URBAN SNFS BY LABOR AND NON-LABOR COMPONENT

| RUG–III category | Total rate | Labor portion | Non-labor portion |
|---|---|---|---|
| RUX | 617.07 | 430.96 | 186.11 |
| RUL | 545.66 | 381.09 | 164.57 |
| RVX | 467.62 | 326.59 | 141.03 |
| RVL | 436.58 | 304.91 | 131.67 |
| RHX | 395.59 | 276.28 | 119.31 |
| RHL | 386.27 | 269.77 | 116.50 |

TABLE 6—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES FOR URBAN SNFS BY LABOR AND NON-LABOR COMPONENT—Continued

| RUG–III category | Total rate | Labor portion | Non-labor portion |
|---|---|---|---|
| RMX | 448.67 | 313.35 | 135.32 |
| RML | 412.97 | 288.42 | 124.55 |
| RLX | 318.88 | 222.71 | 96.17 |
| RUC | 528.59 | 369.17 | 159.42 |
| RUB | 485.12 | 338.81 | 146.31 |
| RUA | 463.39 | 323.63 | 139.76 |
| RVC | 421.05 | 294.06 | 126.99 |
| RVB | 400.87 | 279.97 | 120.90 |
| RVA | 363.62 | 253.95 | 109.67 |
| RHC | 364.54 | 254.59 | 109.95 |
| RHB | 349.02 | 243.76 | 105.26 |
| RHA | 325.73 | 227.49 | 98.24 |
| RMC | 335.36 | 234.22 | 101.14 |
| RMB | 326.04 | 227.71 | 98.33 |
| RMA | 319.83 | 223.37 | 96.46 |
| RLB | 294.04 | 205.36 | 88.68 |
| RLA | 252.13 | 176.09 | 76.04 |
| SE3 | 361.62 | 252.56 | 109.06 |
| SE2 | 308.84 | 215.69 | 93.15 |
| SE1 | 276.24 | 192.93 | 83.31 |
| SSC | 271.58 | 189.67 | 81.91 |
| SSB | 257.61 | 179.91 | 77.70 |
| SSA | 252.95 | 176.66 | 76.29 |
| CC2 | 270.03 | 188.59 | 81.44 |
| CC1 | 248.30 | 173.41 | 74.89 |
| CB2 | 235.88 | 164.74 | 71.14 |
| CB1 | 225.01 | 157.15 | 67.86 |
| CA2 | 223.46 | 156.06 | 67.40 |
| CA1 | 211.04 | 147.39 | 63.65 |
| IB2 | 201.73 | 140.89 | 60.84 |
| IB1 | 198.62 | 138.72 | 59.90 |
| IA2 | 183.10 | 127.88 | 55.22 |
| IA1 | 176.89 | 123.54 | 53.35 |
| BB2 | 200.18 | 139.81 | 60.37 |
| BB1 | 195.52 | 136.55 | 58.97 |
| BA2 | 181.55 | 126.79 | 54.76 |
| BA1 | 169.13 | 118.12 | 51.01 |
| PE2 | 217.25 | 151.73 | 65.52 |
| PE1 | 214.15 | 149.56 | 64.59 |
| PD2 | 206.39 | 144.14 | 62.25 |
| PD1 | 203.28 | 141.97 | 61.31 |
| PC2 | 197.07 | 137.63 | 59.44 |
| PC1 | 195.52 | 136.55 | 58.97 |
| PB2 | 175.34 | 122.46 | 52.88 |
| PB1 | 172.24 | 120.29 | 51.95 |
| PA2 | 170.68 | 119.20 | 51.48 |
| PA1 | 166.03 | 115.96 | 50.07 |

TABLE 7—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES FOR RURAL SNFS BY LABOR AND NON-LABOR COMPONENT

| RUG–III category | Total rate | Labor portion | Non-labor portion |
|---|---|---|---|
| RUX | 646.57 | 451.56 | 195.01 |
| RUL | 578.35 | 403.92 | 174.43 |
| RVX | 484.37 | 338.28 | 146.09 |
| RVL | 454.70 | 317.56 | 137.14 |
| RHX | 404.68 | 282.63 | 122.05 |
| RHL | 395.78 | 276.41 | 119.37 |
| RMX | 451.47 | 315.31 | 136.16 |
| RML | 417.36 | 291.48 | 125.88 |
| RLX | 319.61 | 223.22 | 96.39 |
| RUC | 562.03 | 392.52 | 169.51 |
| RUB | 520.51 | 363.52 | 156.99 |
| RUA | 499.74 | 349.02 | 150.72 |
| RVC | 439.87 | 307.21 | 132.66 |
| RVB | 420.59 | 293.74 | 126.85 |
| RVA | 385.00 | 268.88 | 116.12 |
| RHC | 375.02 | 261.91 | 113.11 |

TABLE 7—RUG–53—CASE-MIX ADJUSTED FEDERAL RATES FOR RURAL SNFS BY LABOR AND NON-LABOR COMPONENT—Continued

| RUG–III category | Total rate | Labor portion | Non-labor portion |
|---|---|---|---|
| RHB | 360.19 | 251.56 | 108.63 |
| RHA | 337.94 | 236.02 | 101.92 |
| RMC | 343.20 | 239.69 | 103.51 |
| RMB | 334.30 | 233.48 | 100.82 |
| RMA | 328.37 | 229.33 | 99.04 |
| RLB | 295.88 | 206.64 | 89.24 |
| RLA | 255.83 | 178.67 | 77.16 |
| SE3 | 352.23 | 246.00 | 106.23 |
| SE2 | 301.81 | 210.78 | 91.03 |
| SE1 | 270.66 | 189.03 | 81.63 |
| SSC | 266.21 | 185.92 | 80.29 |
| SSB | 252.87 | 176.60 | 76.27 |
| SSA | 248.42 | 173.50 | 74.92 |
| CC2 | 264.73 | 184.89 | 79.84 |
| CC1 | 243.97 | 170.39 | 73.58 |
| CB2 | 232.10 | 162.10 | 70.00 |
| CB1 | 221.72 | 154.85 | 66.87 |
| CA2 | 220.24 | 153.82 | 66.42 |
| CA1 | 208.37 | 145.53 | 62.84 |
| IB2 | 199.47 | 139.31 | 60.16 |
| IB1 | 196.51 | 137.24 | 59.27 |
| IA2 | 181.68 | 126.89 | 54.79 |
| IA1 | 175.74 | 122.74 | 53.00 |
| BB2 | 197.99 | 138.28 | 59.71 |
| BB1 | 193.54 | 135.17 | 58.37 |
| BA2 | 180.19 | 125.84 | 54.35 |
| BA1 | 168.33 | 117.56 | 50.77 |
| PE2 | 214.30 | 149.67 | 64.63 |
| PE1 | 211.34 | 147.60 | 63.74 |
| PD2 | 203.92 | 142.42 | 61.50 |
| PD1 | 200.96 | 140.35 | 60.61 |
| PC2 | 195.02 | 136.20 | 58.82 |
| PC1 | 193.54 | 135.17 | 58.37 |
| PB2 | 174.26 | 121.70 | 52.56 |
| PB1 | 171.30 | 119.64 | 51.66 |
| PA2 | 169.81 | 118.60 | 51.21 |
| PA1 | 165.36 | 115.49 | 49.87 |

Section 1888(e)(4)(G)(ii) of the Act also requires that we apply this wage index in a manner that does not result in aggregate payments that are greater or less than would otherwise be made in the absence of the wage adjustment. For FY 2010 (Federal rates effective October 1, 2009), we apply an adjustment to fulfill the budget neutrality requirement. We meet this requirement by multiplying each of the components of the unadjusted Federal rates by a budget neutrality factor equal to the ratio of the weighted average wage adjustment factor for FY 2009 to the weighted average wage adjustment factor for FY 2010. For this calculation, we use the same 2007 claims utilization data for both the numerator and denominator of this ratio. We define the wage adjustment factor used in this calculation as the labor share of the rate component multiplied by the wage index plus the non-labor share of the rate component. The budget neutrality factor for this year is 1.0010. The wage index applicable to FY 2010 is set forth in Tables A and B, which appear in the Addendum of this final rule.

*Comment:* One commenter estimated SNF reimbursements using both the FY 2010 SNF wage index in the proposed rule and in the absence of a wage index using simulation. The commenter found that SNF reimbursement was about $400 million lower with the wage index adjustment than without it. The commenter believes that CMS is incorrectly adjusting for the wage index and that payments during the 2002–2009 timeframe are more than $2 billion too low.

*Response:* The intent of the wage index budget neutrality factor is to make sure that aggregate payments using the updated wage index are not greater or less than aggregate payments would be using the previous year's wage index. Because the wage index is based on the pre-floor, pre-reclassified, no occupational mix hospital wage index, the weighted average wage index would be equal to 1.0000 for hospitals. However, there are often multiple SNFs within a wage area with varying utilization levels. The weighted average wage index across all SNF providers may not be equal to 1.0000 for any given fiscal year, so payments could go up or down as a result of their application. Estimation of payments relies on the combination of the geographic wage index value for providers along with their distribution of service days. The change in the wage index values along with the utilization within each urban or rural area determines the change in aggregate payments related to the previous year and, therefore, the budget neutrality factor. The application of the budget neutrality factor ensures that aggregate payments will not increase or decrease due to the year-to-year change in the wage index. Therefore, we do not accept the methodology applied by the commenter, and believe that the 1.0010 budget neutrality factor will ensure equal payments after updating to the FY 2010 SNF PPS wage index, prior to any other policy changes.

In the SNF PPS final rule for FY 2006 (70 FR 45026, August 4, 2005), we adopted the changes discussed in the Office of Management and Budget (OMB) Bulletin No. 03–04 (June 6, 2003), available online at *http://www.whitehouse.gov/omb/bulletins/b03-04.html*, which announced revised definitions for Metropolitan Statistical Areas (MSAs), and the creation of Micropolitan Statistical Areas and Combined Statistical Areas. In addition, OMB published subsequent bulletins regarding CBSA changes, including changes in CBSA numbers and titles. As indicated in the FY 2008 SNF PPS final rule (72 FR 43423, August 3, 2007), this and all subsequent SNF PPS rules and notices are considered to incorporate the CBSA changes published in the most recent OMB bulletin that applies to the hospital wage data used to determine the current SNF PPS wage index. The OMB bulletins may be accessed online at *http://www.whitehouse.gov/omb/bulletins/index.html*.

In adopting the OMB Core-Based Statistical Area (CBSA) geographic designations, we provided for a 1-year transition with a blended wage index for all providers. For FY 2006, the wage index for each provider consisted of a blend of 50 percent of the FY 2006 MSA-based wage index and 50 percent of the FY 2006 CBSA-based wage index (both using FY 2002 hospital data). We referred to the blended wage index as the FY 2006 SNF PPS transition wage index. As discussed in the SNF PPS final rule for FY 2006 (70 FR 45041), subsequent to the expiration of this 1-year transition on September 30, 2006, we used the full CBSA-based wage index values, as now presented in Tables A and B in the Addendum of this final rule.

4. Updates to the Federal Rates

In accordance with section 1888(e)(4)(E) of the Act, as amended by section 311 of the BIPA, the payment rates in this final rule reflect an update equal to the full SNF market basket, estimated at 2.2 percentage points. We continue to disseminate the rates, wage index, and case-mix classification methodology through the **Federal Register** before the August 1 that precedes the start of each succeeding FY.

5. Relationship of RUG–III Classification System to Existing Skilled Nursing Facility Level-of-Care Criteria

As discussed in § 413.345, we include in each update of the Federal payment rates in the **Federal Register** the designation of those specific RUGs under the classification system that represent the required SNF level of care, as provided in § 409.30. This designation reflects an administrative presumption under the refined RUG–53 system that beneficiaries who are correctly assigned to one of the upper 35 of the RUG–53 groups on the initial 5-day, Medicare-required assessment are automatically classified as meeting the SNF level of care definition up to and including the assessment reference date on the 5-day Medicare required assessment.

A beneficiary assigned to any of the lower 18 groups is not automatically classified as either meeting or not meeting the definition, but instead receives an individual level of care determination using the existing administrative criteria. This presumption recognizes the strong likelihood that beneficiaries assigned to one of the upper 35 groups during the immediate post-hospital period require a covered level of care, which would be less likely for those beneficiaries assigned to one of the lower 18 groups.

In this final rule, we are continuing the designation of the upper 35 groups for purposes of this administrative presumption, consisting of all groups encompassed by the following RUG–53 categories:

- Rehabilitation plus Extensive Services;
- Ultra High Rehabilitation;
- Very High Rehabilitation;
- High Rehabilitation;
- Medium Rehabilitation;
- Low Rehabilitation;
- Extensive Services;
- Special Care; and,
- Clinically Complex.

A discussion of the relationship of the proposed RUG–IV classification system to existing SNF level of care criteria appears in section III.C.4 of this final rule.

6. Example of Computation of Adjusted PPS Rates and SNF Payment

Using the hypothetical SNF XYZ described in Table 8, the following shows the adjustments made to the Federal per diem rate to compute the provider's actual per diem PPS payment. SNF XYZ's 12-month cost reporting period begins October 1, 2009. SNF XYZ's total PPS payment would equal $30,635. We derive the Labor and Non-labor columns from Table 6 of this final rule.

TABLE 8—RUG–53—SNF XYZ: LOCATED IN CEDAR RAPIDS, IA (URBAN CBSA 16300); WAGE INDEX: 0.8984

| RUG group | Labor | Wage index | Adj. labor | Non-labor | Adj. rate | Percent adj. | Medicare days | Payment |
|---|---|---|---|---|---|---|---|---|
| RVX | $326.59 | 0.8984 | $293.41 | $141.03 | $434.44 | $434.44 | 14 | $6,082.00 |
| RLX | 222.71 | 0.8984 | 200.08 | 96.17 | 296.25 | 296.25 | 30 | 8,888.00 |
| RHA | 227.49 | 0.8984 | 204.38 | 98.24 | 302.62 | 302.62 | 16 | 4,842.00 |
| CC2 | 188.59 | 0.8984 | 169.43 | 81.44 | 250.87 | *571.98 | 10 | 5,720.00 |
| IA2 | 127.88 | 0.8984 | 114.89 | 55.22 | 170.11 | 170.11 | 30 | 5,103.00 |
| Total | | | | | | | 100 | 30,635.00 |

* Reflects a 128 percent adjustment from section 511 of the MMA.

*C. Resource Utilization Groups, Version 4 (RUG–IV)*

1. Staff Time and Resource Intensity Verification (STRIVE) Project

In the FY 2010 proposed rule (74 FR 22208, 22220, May 12, 2009), we noted that the SNF PPS uses the Resource Utilization Group (RUG) to which a resident is assigned to make a case-mix adjustment to that resident's payment amount, in order to reflect the relative resource intensity that would typically be associated with the resident's clinical condition. In this context, we discussed our STRIVE project, which we conducted to help ensure that the SNF PPS payment rates reflect current practices and resource needs. The following sections discuss the comments that we received on this issue and related topics, along with our responses.

a. Data Collection

To help ensure that the SNF PPS payment rates reflect current practices

and resource needs, CMS sponsored a national nursing home time study, STRIVE, which began in the Fall of 2005. Information collected in STRIVE includes the amount of time that staff members spend on residents and information on residents' physical and clinical status derived from MDS assessment data. As noted in the FY 2010 proposed rule (74 FR 22208, 22221, May 12, 2009), identifying the level of staff resources needed to provide quality care to nursing home patients was a primary objective. For this reason, nursing homes with poor survey histories or pending enforcement actions were excluded from the sample. In addition, nursing homes with poor quality indicator (QI) or quality measure (QM) scores were also excluded, as were nursing homes with low occupancy rates, large proportions of private pay or pediatric patients, and nursing homes that were undergoing hardships (such as fires or floods) that would prevent participation in the study. The comments that we received on this issue, and our responses, appear below.

Sampling Methodology

A number of commenters addressed issues regarding the sampling methodology of the STRIVE project. These comments fell into several major categories:

- Sample size and margin of error.
- Random nature of the sample.
- Representativeness of the sample and data collection process.

Sample Size and Margin of Error

*Comment:* Several commenters recognized CMS's efforts in collecting significantly more data than that gathered in the 1990 sample used initially to develop RUG–III, and the 1995/1997 sample used to revise RUG–III and establish the current CMIs that are the basis for current Medicare rates. However, a number of comments asserted that the precision was too low (that is, the margin of error too high) to make reliable estimates for use in setting payment rates. More specifically, these commenters stated that the overall margins of error for the sample that were presented at several TEP meetings appeared unrealistically low. These commenters recommended that CMS should abandon the time study methodology, which relies on a sample-based special study, and develop a methodology that uses population-based administrative data.

*Response:* At several TEP meetings, estimates of the overall margin of error for Medicare and non-Medicare cases were presented. It is worth noting that these analyses were interim work products and were developed during the course of our analyses to give stakeholders the most current information available as early as possible to help them evaluate the RUG–IV model. To the comment that asserted these estimates were unrealistically low and that we must have failed to consider correctly the sample design when they were calculated, we note that these estimates actually did account for the sample design (both stratification and clustering), but were adjusted in two ways: (a) We developed procedures to remove variance associated with case mix, and (b) we presented a weighted variance estimate that was based upon all of the individual RUG groups and which weighted more prevalent groups more heavily than less prevalent groups (since these would be more often used in making payments). Basically, we attempted to compute the margin of error for the ''typical'' or ''average'' RUG group after removing the effect of case mix.

Upon further review, as noted by a few commenters, we found minor flaws in the methodology, and have updated our analysis. As shown below, we believe that the simplest and most informative overall measure of the precision of the sample is the margin of error associated with the nursing and therapy overall means. Table 9 below presents relevant values from the STRIVE study and from the prior 1995/97 time study.

TABLE 9

| Parameter | STRIVE | 1995/97 time study | Percent improvement |
|---|---|---|---|
| Nursing Time: | | | |
| Number of cases (weighted) | 9,766 | 3,933 | |
| Mean wage-weighted time | 135.2 | 228.3 | |
| Standard error of mean | 3.1 | 7.2 | |
| Coefficient of variation of mean | 2.3% | 3.2% | 26.7 |
| Margin of error (percent of mean) | ±4.6% | ±6.2% | 26.8 |
| Therapy Time: | | | |
| Number of cases (weighted) | 1,510 | 1,133 | |
| Mean wage-weighted time | 144.0 | 86.0 | |
| Standard error of mean | 5.5 | 3.5 | |
| Coefficient of variation of mean | 3.8% | 4.0% | 4.6 |
| Margin of error (percent of mean) | ±7.6% | ±8.0% | 4.7 |

**Note:** Coefficient of variation of the mean = (std error of mean)/(mean) * 100.

For each of these studies, the table above presents statistics for mean nursing time (based upon all residents in the sample) and for therapy time (based upon all residents who received any therapy time). For each of these datasets, the table presents the number of cases (raw, unweighted counts), the mean of the wage-weighted minutes, the standard error of the mean, the margin of error associated with the mean, and the margin of error expressed as a percentage of the mean.

We note that for both nursing and therapy time, the methodology used to wage-weight time differed between the two studies. (A detailed discussion of the wage-weighting protocols is presented below.) Therefore, the means, standard errors, and margins of error cannot be directly compared between the two studies. We have, therefore, computed the margin of error as a percentage of the mean to allow such comparison.

It can be seen that in the STRIVE sample, the margin of error for the nursing time is about ±4.6 percent of mean nursing time, compared with ±6.2 percent in the earlier study. This represents a 26.8 percent improvement in precision over the earlier study. For therapy time, the STRIVE margin of error is ±7.6 percent, a 4.7 percent improvement over the earlier study. With regard to therapy time, the

improvement is modest because of the relatively large number of cases in the 1995/97 time study that had therapy time. We believe this is because the sample that was used for the earlier study was largely aimed at identifying and enlisting nursing homes that had Medicare residents and provided therapy.

Thus, the STRIVE sample is larger and has considerably more precision for nursing time than the earlier time study. The results of the earlier study have served as the basis for Medicare and Medicaid rate setting since 1998 and the new results should, if anything, lead to more accuracy than the data collected more than 10 years ago. We believe that the ability to distinguish more precisely and accurately between patient characteristics and varying degrees of acuity with the time study methodology outweighs the issues of ease of collection and analysis of population-based administrative data.

*Comment:* Some commenters said the sample sizes for some individual RUG groups were very low. Several commenters focused on sampling error due either to bias or to small sample sizes that they believed weakened the STRIVE study. One respondent questioned the small sample size, and claimed that an overall sample size of 500,000 (compared with STRIVE's sample of under 10,000) would be necessary to ensure reasonable precision in all RUG groups. While they also stated that the margins of error associated with overall mean nursing and therapy times provide a useful metric for comparing the STRIVE study with the 1995/97 time study, several comments expressed concerns about the precision of individual RUG group means as opposed to the means for the entire sample. They observed that the margin of error for such small RUG groups was so large as to make the mean staff time estimates unusable for those groups.

*Response:* While a sample size of 500,000 might be appropriate for a large-scale academic research project or medical trial, the STRIVE project was specifically designed to update the RUG case-mix classification system to reflect current resource utilization in nursing homes across the country. As many commenters pointed out, patient characteristics have changed and patient acuity levels have increased since the introduction of the SNF PPS in 1998. For STRIVE, as for many other CMS analytic projects, there is a tradeoff between timeliness of results, cost, and small cell size. In fact, using the sample size guideline recommended by the commenter, it is unlikely that many if not most of the programmatic changes incorporated into the Medicare program since its inception in 1966 could have been successfully introduced.

It is true that the sample sizes for some RUG groups are small and that the margins of errors for these RUG groups means are large. However, there are several reasons why we believe that the precision is sufficient for rate setting:

- Some comments appeared to suggest that only Medicare cases were used to produce the group means and CMIs that were used for rate setting. Because Medicare residents comprised only about 14 percent of the total weighted STRIVE sample, this would have exacerbated problems with small sample sizes. In fact, however, we used the entire sample of valid cases (that is, all cases that passed our accuracy edits), not just Medicare cases, to produce these group means and CMIs. Thus, the RUG group sample sizes were considerably larger than some comments suggested.
- Therapy CMIs are based upon mean therapy times for the therapy categories, not the means for individual therapy groups. That is, mean therapy times are calculated for the RU, RV, RH, RM, and RL categories and therapy CMIs are computed based upon these category means. The therapy CMI for a category is then used to calculate the therapy payment rate applied to all of that category's subgroups. For example, the RU therapy CMI and corresponding rate are applied across the RUX, RUL, RUC, RUB, and RUA groups. Because the therapy CMIs and therapy rate components are computed at the category level, the sample sizes are considerably larger than some comments suggest.
- We recognized that the nursing time sample sizes were quite small for some individual RUG groups, especially those with tertiary splits (based on nursing rehabilitation and depression) and for the ''Rehabilitation plus Extensive'' groups. To address this problem, we used regression-based estimation procedures to develop group means and CMIs for these groups. For example, the individual combined Rehabilitation-Extensive Services RUG–IV groups (for example, RUX) had very small sample sizes, with weighted sample sizes varying from less than 1 to 12 cases. Clearly, this was an insufficient number of cases in these individual groups to obtain reliable individual group means or reliable CMIs based on individual group means. Therefore, we developed a regression model to estimate the overall average increase in nursing time for providing extensive services to residents receiving rehabilitation, controlling for level of therapy and ADL dependence. The estimated average increase due to extensive services was based on comparison of all Rehabilitation-Extensive Services residents (49 sample weighted cases) versus all Rehabilitation-only residents (1,261 sample weighted cases). The nursing time estimate for each Rehabilitation-Extensive Services group was then calculated as the nursing time mean for Rehabilitation-only residents with the same level of rehabilitation and ADL dependence plus the estimated average increase due to extensive services. For example, the nursing time estimate for RUX was calculated as the mean for RUC plus the average extensive services increase. This estimate is based on much larger sample sizes and is, therefore, much more reliable than individual Rehabilitation-Extensive Services group means. Similar models and adjustments were made for the depression and restorative therapy splits.
- The RUG–IV model, like previous RUG models, is structured and contains implicit assumptions about the ordering of group means. One assumption is that within a category, payment rates will increase as the ADL score (and ADL dependence) increases. A second assumption is that within a corridor of ADL scores, payment rates will decrease as one moves down the hierarchy. Exceptions to these constraints are called rate inversions and are to be avoided because of the perverse incentives they can create (for example, when a resident qualifies for more than one group and would produce a higher payment in a lower group with fewer services being provided). A considerable effort was made to examine the individual group means, CMIs, and rates for possible inversions, and to make adjustments where necessary to fix these inversions. Inversions were fixed employing the regression models described above and by smoothing techniques (for example, computing the weighted mean of two groups that had a small inversion and using that weighted mean as the basis for computing the rate for those two groups). Some of the observed inversions were in groups with small sample sizes and may have been the result of imprecise estimates of the group means. The smoothing and estimation procedures described above produced payment rates that, with a few exceptions, conformed with the RUG model's hierarchical constraints. Most exceptions where rate inversions remained involved the following rare groups (with sample weighted number

of cases in parenthesis): RHL (8 cases), RML (10 cases), RLX (0 cases), RLB (21 cases), and RLA (24 cases)). The only inversions involving larger groups were LD1 and CD1 versus PD2. Because the means, CMIs, and rates were constrained as discussed above, and were adjusted where necessary to conform with these constraints, the impact of any statistical imprecision due to small sample sizes was mitigated.

• Finally, regarding those comments which stated that the lack of sampling precision associated with some RUG groups meant that the STRIVE results were too imprecise to be used with confidence for rate setting, we note that the logic of PPS models is that they successfully predict cost, and that payment rates that are based on those models will be accurately aligned with actual cost. The net result will be that providers will be paid in proportion to the cost of providing care to their residents. Nevertheless, PPS models do not perfectly predict cost, and there is error inherent in using such PPS models. This is true of the diagnosis-related group (DRG) model used for acute hospitals, the case-mix group (CMG) model used for inpatient rehabilitation hospitals, and the home health resource group (HHRG) model used for home health care. It has been recognized since the late 1980s that these models are not perfect predictors of cost. In fact, in 2002, a Report to Congress (''Prospective Payment System for Inpatient Services in Psychiatric Hospitals and Exempt Units,'' available online at *http://www.cms.hhs.gov/InpatientPsychFacilPPS/downloads/rptcongress.pdf)* discussed the historical limitations of PPS systems generally in terms of predicting resource use, and a June, 2008 MedPAC report (available online at *http://www.medpac.gov/documents/Jun08_EntireReport.pdf*) noted that PPS models do not perfectly predict cost. Thus, all of the Medicare PPS models account for only a portion of the variance associated with cost. Our analysis shows that, with sampling weights applied and using the full sample, the RUG–IV model accounts for 41.5 percent of the variance in nursing time. This statement does not mean that the RUG–IV model should not be used for rate setting. In fact, using the STRIVE sample, the RUG–IV variance explanation is higher than the 29.1 percent variance calculated for RUG–III.

As discussed above, there will always be a certain amount of error associated with payment rates. For the SNF PPS, much of this inaccuracy is ''averaged out'' when payment is made to a facility for a large number of days and for multiple residents. That small sample sizes and some degree of sampling error may contribute to this overall estimation error does not mean that rate setting cannot be performed with an acceptable level of accuracy.

Random Nature of the STRIVE Sample

*Comment:* Several commenters argued that the STRIVE sample is not random, making it unreliable for projecting patient acuity in the development of the new RUG–IV system. One commenter suggested that, while there is insufficient information to make a conclusive finding on this point, the potential exists that the STRIVE sample is fatally flawed due to the presence of bias.

A few commenters noted that at the last stage of the design, facilities had to be sub-sampled if the facilities were too large to be observed in their entirety. Due to a lack of PDAs and data monitors, data collection was limited to a portion of the facility, be it one or more floors, or one or more units. The subsample was selected by the project staff in consultation with facility management. The commenters stated that the subsampling was not conducted using any randomization method, and may have introduced bias to the sample and data collection.

Generally, several commenters argued that because the STRIVE sampling plan relied upon voluntary participation, sample selection was not random and may have introduced sampling biases.

*Response:* Selection of the STRIVE sample involved a number of steps, and we have acknowledged in public documentation and at several TEP meetings that non-random selection was used, by necessity, at several steps in this process. Specifically, States volunteered for selection and were not selected randomly. Nursing homes volunteered to participate and were, therefore, not selected randomly. Finally, in larger facilities where the entire nursing home could not be studied, nursing units within the nursing home were selected based upon a pre-determined protocol, rather than using a random procedure.

While we sought to utilize random processes where possible (for example, the list of facilities that were invited to participate in the study in each State was generated using a random procedure), the nature of this study precluded the use of strictly random selection. Because CMS did not have the authority to compel any State or nursing home to participate in the study, it was impossible to use a strictly random procedure for selecting States or nursing homes. Further, in larger nursing homes where all nursing units could not be included in the study, it was not possible to select nursing units randomly for inclusion in the study, because this could have introduced difficult logistical problems for data monitors if the selected nursing units were located on different floors of a building or different buildings on a campus.

It was, therefore, apparent from the outset of the study that the sampling design would have to accommodate non-random selection procedures. Potential problems that could be introduced by the use of non-random selection were addressed in several ways.

First, random procedures were used whenever possible, such as for generating lists of facilities that were invited to participate in the study. Second, where random processes were not feasible, we developed protocols that described exactly how selection was to occur. For example, we used a detailed decision tree to select nursing units in larger facilities. This protocol was uniform across nursing homes and applied by the project staff who managed the study. Use of these protocols eliminated important types of bias (for example, selecting a nursing unit because it was deemed more efficient or of better quality). Third, we directly assessed the study's sampling error and quantified its precision statistically. Fourth, we developed sampling weights based on the sample design that adjust the sample for over- or under-sampling and produced sample estimates that were not biased by the design itself. A number of analyses were performed comparing the STRIVE sample with national OSCAR and MDS databases to determine the degree to which the sample was representative (that is, the degree to which the sample resembled the population on important variables). The results of these analyses are described later in this final rule.

Sample Representativeness

*Comment:* Some commenters questioned the overall representativeness of the STRIVE sample, stating it was biased due to a number of factors. Commenters stated that CMS had not made sufficient information available to show that the sample can be relied upon to generalize nationally. Commenters also questioned whether the actual sample being smaller than the original project goal affected the sample representativeness, and questioned whether the sample methodology had taken these differences from the planned design into account. In addition, a commenter

asserted that CMS has not presented any evaluation or validation of the study in the publicly available documents.

Another bias factor mentioned by commenters was geographic location. Specifically, the commenters indicated that the STRIVE sample size was too small to be nationally representative, that important States were omitted from the sample, and that the 15 States that were included in the sample were not representative of the nation. It was also noted that in four States, we drew facilities from only a portion of the State and that this could have introduced additional geographic bias. In order to demonstrate the potential biases introduced by these geographic selections, several comments included analyses showing statistically significant differences in claims, OSCAR, and MDS data between the 15 States that were included in the sample and the remaining States in the nation. Commenters were concerned that no data were collected from the Mid-Atlantic or New England regions, California and Oregon, or in the area the commenter characterized as the ''entire mid-section'' of the country. One commenter noted that the initial STRIVE collection methodology was tested in one center in Maryland and that none of the preliminary data from that center were considered.

Some commenters argued that there is greater relative resource use with significantly higher costs in those missing States than in the STRIVE States, as well as the nation overall. The commenters indicated that the operating characteristics of the facilities in the STRIVE States do not appear to be representative of the characteristics of the facilities in the other States.

Another commenter questioned CMS's reference to Canadian data, given the significant differences in the health systems between the two countries. The commenter asked CMS to explain how and why Canadian data were used, and how such data can be considered representative of New England States, the Mid-Atlantic States, the Southeastern States, and California.

One commenter asserted that the participating States were not representative of SNFs nationwide, and that the STRIVE sample likely may be weighted in a manner that reflects care patterns in rural areas and facilities more than in urban facilities. The commenter argued that the STRIVE sample only included 2 of the 7 States with a high urban ratio (the District of Columbia, and 4 Florida facilities) where more than 90 percent of facilities are in an urban region. The commenter believed that selecting the majority of the participating States from the remaining 44 States (where the urban-to-rural ratio is about 70 percent to 30 percent) biased the sample.

One commenter submitted a regression analysis suggesting that the RUG costs, both overall and by RUG–53 category, are different in STRIVE States when compared to non-STRIVE States, indicating that the STRIVE relative weight structure could be non-representative. The commenter believed that the perceived lack of representativeness calls into question the validity and appropriateness of the updated weights and the re-categorization of residents who were key to the STRIVE project and critical to the design of RUG–IV. In addition, several commenters asserted patients evaluated in the STRIVE sample may not be representative of the actual acuity of most SNF residents nationwide.

Finally, a commenter claimed that CMS failed to make publicly available sufficient information to allow for an external evaluation of the impact. As a result, the commenter concluded that it is not known how much bias might have been added to the estimators of the mean staff time due to these nonsampling errors. The commenter recommended performing further analysis of the current sample before implementing the RUG–IV model, in order to determine whether and to what extent the sample might have been affected by these potential biases.

*Response:* In response to these comments, we note first that it would have been best to base the sample on either a random selection of States or on all States in the nation. However, as noted above, this was not possible given the study's resources and the voluntary nature of the study. We note also that the sample included both populous and small States, predominantly urban and predominantly rural States, and States that were spread geographically across the country. Thus, we disagree with commenters that believe the study's sample size and geographic scope were insufficient or led to undue bias.

Of course, in any sample that includes less than all of the States (or indeed, less than all facilities throughout the country), it is always possible to question whether the sample is sufficiently representative of the nation as a whole. While some commenters suggested that selecting facilities in only 2 of the 7 States with the highest urban-to-rural ratios might have understated STRIVE acuity levels, it is equally possible that oversampling the States with atypical population distributions could have resulted in the opposite effect. However, whether the STRIVE sample is representative can be and was tested by comparing data from STRIVE with national data to determine the degree to which the sample statistics match with national statistics. Some commenters noted that the data and analyses that were previously presented were insufficient to judge the degree of sampling bias that was present. We have, therefore, performed supplemental analysis which will be presented later in this section.

It is true, as some commenters noted, that our actual sample size of 205 nursing homes was smaller than the goal of 238 nursing homes that was set at the beginning of the study. While it is always preferable to have a larger sample size, we were unable, given available time and resources, to achieve the initial goal. During the planning phase of the study, we projected the expected margins of error using various sample sizes, including the size that was actually achieved. All things being equal, precision is always better when the sample size is larger, but we determined that the incremental precision that would have been achieved with 238 facilities was small and that the sample size that was actually achieved was sufficient to meet the analytic goals of the study.

Regarding the comment that questioned CMS's reference to Canadian data, we note that in fact, the Canadian data were not merged with the STRIVE sample at all. Instead, we worked with Canadian officials who were developing their own STM study based on our efforts: CAN–STRIVE. We have shared data and discussed findings as a way of testing the accuracy of our own findings. For example, patients with similar characteristics and care needs required similar staff resources for treatment. In addition, the CAN–STRIVE project reports that applying our RUG–IV model to their data results in a variance explanation of weighted nursing time of 35.4 percent. This represents an independent and highly successful validation of the RUG–IV model. Far from being an inappropriate misuse of data, we believe that this inter-governmental collaboration actually serves to further the interests of both Canada and the United States. Similarly, data from 2 facilities, including 1 in Maryland, that were used to pilot test the data collection process, were used to determine facility training needs and to finalize data collection procedures. These pilot facilities were crucial in testing protocols and, as a result of honest and open staff feedback, in modifying some of our original data collection methods. Since the data collection process was still under

development, we did not include the staff time data in the STRIVE data.

Finally, in response to the commenters' concerns about our evaluation and validation of the study, a validation methodology was built into the STRIVE study. With the large sample size obtained, we reserved one third (3,253 observations) for validation: We did not use these reserved observations at all in the derivation of the RUG–IV classification. After the RUG–IV system was fully developed, we then tested it on the validation sample. Such a cross-validation procedure is standard statistical practice to ensure that a statistical model is not ''over-fitted,'' meaning that some of the relationships that appear to be statistically significant are merely noise. Cross-validation allows us to verify that the model will perform well in practice, will replicate well, and will have reasonably accurate predictive ability. The results showed that the derived system described in the proposed rule was robust. For example, the variance explanation of nursing time (sample weighted) of the RUG–IV system fitted to the derivation sample was 41.8 percent, while in the validation sample, the same statistic was 41.4 percent. Because the results have been cross-validated within the original STRIVE sample, we do not consider a separate validation study to be necessary, nor was a separate study part of the original STRIVE design. Further, the results of the CAN–STRIVE project, reported above, serve as a second type of model validation.

*Comment:* Some commenters asserted the sample was biased due to voluntary self-selection of nursing homes that agreed or refused to participate in the study. Commenters questioned the selection of facilities based on the number of facilities the data monitors were able to visit, indicating the sample size within the State was driven by resource constraints on how many facilities could be visited, which could introduce bias.

Another voluntary sampling issue raised by the commenters was the selection of facilities until enough facilities agreed to participate. Bias could be introduced here when such factors as resources or staff availability could influence the decision of a facility to agree or not agree to participate.

A few commenters questioned the high non-response rate. The commenters noted that of the 837 sampled facilities, 100 were dropped by State agencies or CMS regional offices. Of the 737 eligible facilities, 523 were invited to participate, 214 (about 40 percent) agreed to participate, and 205 (about 39 percent) actually participated in the study. The STRIVE sample survey literature indicates that voluntary response samples are biased, as people with strong opinions or atypical institutions tend to respond.

*Response:* As with geographic selection, we would have preferred a design where self-selection was not a factor. However, as noted above, CMS did not have the authority to require participation in the study if a facility was randomly selected for inclusion. As discussed in published documentation, only 40.9 percent of the facilities invited to participate in STRIVE agreed to be part of the study. This acceptance rate is not surprising considering participation required a fairly large commitment of time and resources on the part of the nursing home. Like those who commented on this issue, we were concerned that this self-selection might have introduced biases. In particular, we were concerned that only those facilities with better staffing levels might agree to participate because of the time involved in being part of the study.

We tested this possibility using OSCAR staffing data. Staffing data were cleaned using standard CMS algorithms to remove erroneous data, and were matched to the STRIVE data. For each nursing home in the database, both STRIVE and non-STRIVE, we computed the number of staff minutes per resident day for RNs, LVNs, and aides separately. Table 10 shows the mean minutes per resident day by staff type for the following groups of STRIVE nursing homes in the first 3 rows: (1) STRIVE nursing homes that were eliminated from consideration by State and Regional staff, (2) STRIVE nursing homes that were invited but declined to participate, and (3) STRIVE nursing homes that participated in the study. We also show three national groups of nursing homes: (4) All nursing homes nationally that passed the QI/QM and survey deficiency quality data screens, (5) all nursing homes nationally that failed the quality data screens, and (6) all nursing homes nationally. Note that the number of facilities shown in Rows 1, 2, and 3 of the table are slightly lower than those in previously published documentation, because not all STRIVE facilities could be matched to OSCAR data.

TABLE 10

| Row | Group | Mean minutes per resident day | | | | |
|---|---|---|---|---|---|---|
| | | Nursing homes | RNs | LVNs | Aides | Total |
| | **STRIVE Nursing Homes** | | | | | |
| 1 | Eliminated by States and regions | 90 | 32.2 | 49.3 | 144.9 | 226.4 |
| 2 | Declined to participate | 287 | 37.4 | 46.8 | *136.5 | *220.7 |
| 3 | Participated | [1] 198 | 34.4 | 54.7 | 146.7 | 235.9 |
| | **National Nursing Homes** | | | | | |
| 4 | Passed quality data screens | 13,419 | 38.2 | 47.4 | 141.3 | 226.9 |
| 5 | Excluded by quality data screens | 1,149 | 38.1 | 51.8 | 138.6 | 228.6 |
| 6 | All facilities | 14,636 | 38.2 | 47.8 | 141.1 | 227.1 |

**Notes:**
[1] There were 205 nursing homes that participated in the STRIVE study, but only 198 could be matched to OSCAR data.
*Asterisks indicate statistically significant differences between the values in Rows 1, 2, or 3 compared with corresponding values in Row 4.

The proper basis for comparison between the STRIVE sample groups and the nation is Row 4: Facilities that passed the quality data screens. As part of the design, we excluded about 8 percent of all nursing homes nationally from the sampling frame that had very poor QI, QM, or survey deficiency histories (Row 5). Since these nursing

homes were not in the sampling frame, we would not necessarily expect the staffing levels of STRIVE nursing homes to match their staffing levels. Therefore, statistical comparisons were made between corresponding values in Rows 1, 2, and 3 and the values in Row 4. Asterisks indicate values that are significantly different ($p < 0.05$) from the values in Row 4.

The three groups of STRIVE nursing homes matched the national statistics in Row 4 fairly well. Nursing homes that declined to participate (Row 2) had significantly lower aide and total time, but the staff times for nursing homes that completed the study were not significantly different from the nation. Therefore, we conclude that the factors related to self-selection did not create a sample that was biased (upwards) in staff time.

We do not agree with the comment that resource constraints on the number of facilities that data monitors could visit may have introduced another source of bias. When a State agreed to participate in the study, an evaluation was made of the number of facilities that the data monitors would be able to visit. The sample size for the State was agreed upon before the sample was drawn. These resource constraints, therefore, could not have produced a sample bias.

*Comment:* A few commenters expressed concern that the STRIVE project did not specifically address short-stay patients. They were concerned that, when collecting data, we excluded short-stay patients from the study and only used data for patients with lengths of stay of 7 or more days. They indicated that short-stay patients, especially those with hospital readmission, tend to be unstable and have higher acuity and resource utilization.

*Response:* The purpose of the STRIVE project was to update the existing RUG–III case-mix classification system that was introduced on July 1, 1998. While the RUG–III model does not include a separate classification structure for short-stay patients, short-stay patients were included in the original study. Similarly, when collecting the STRIVE data, we included a variety of patients from new admissions to longer-term or chronic patients. For each unit in the test sample, we included patients who were admitted prior to or on the study start date, and who remained in the facility for the two days on which we collected nursing staff time data. The nursing staff time for these patients was included in the STRIVE data. The confusion may have arisen because we limited the collection of therapy data to patients who were nursing home patients for the entire 7 days when therapy data were collected.

During the past few years, we have been conducting analyses on episodes of care (that are separate from STRIVE) and are concerned that episodes of care increasingly show repeated transfers between acute and post acute care. We agree with the commenters that these short-stay admissions appear to be more costly, but we have not yet determined the reasons for these transfers. It is not clear whether the primary reasons for frequent readmission to an acute care setting reflect hospital discharge patterns, SNF care practices, or a combination of both. Until more research is available, we do not believe it would be appropriate to establish a separate payment structure for short-term patients. In the future, we hope to include an analysis of short-stay patients as part of other post-acute health care reform initiatives. In this way, we can make appropriate adjustments as we develop the next generation of post acute care payment systems.

*Comment:* A few other commenters who questioned the omission of short-stay patients suggested that the omission of this sizable and expensive population would likely skew both nursing time and the nursing index, while raising questions about the appropriateness of the reclassification of SNF residents within the RUG hierarchy. These commenters submitted data that they believed showed the following:

- This short-stay SNF resident population has substantially higher acuity and substantially higher resource utilization.
- Very short stay SNF residents account for over 21.0 percent of SNF stays.
- The omission of this critical population may well have underestimated and skewed the reclassification of SNF residents and the nursing and therapy weights that underlie the proposed RUG–IV system.
- Given that these very short stay, higher acuity residents generally would not be captured in the STRIVE data, the conclusion of the STRIVE project concerning resource utilization of SNF residents who received extensive services in the hospital may be wrong.

*Response:* It is true that some patients with very short stays (discharge within two days of admission) were not included in the final STRIVE results. This occurred because residents were excluded unless complete nursing time was available for both days of the nursing time study in a facility. If a resident was admitted or discharged on a nursing time study day, then only incomplete nursing time data were available for that day, and inclusion of the resident would have resulted in an underestimation of nursing time. This led to exclusion of residents with a length of stay of 2 days or less (as well as any other residents seen in the first or last 2 days of their longer stay).

However, we do not believe that excluding patients with stays of 2 days or less skewed the nursing time and nursing case-mix weights. The STRIVE methodology only excluded nursing facility stays with lengths of stay of 1 or 2 days. Other short SNF stays (for example, length of stay of 3 days) were included in all analyses.

We note that the results submitted by one commenter indicating that short-stay SNF residents have higher acuity were based on the MS–DRG CMIs for the cost of hospital care preceding the SNF stay rather than on the cost of the SNF stay itself, and that using the hospital cost as a proxy for the SNF cost might not be accurate. Further, the hospital CMIs do not show ''substantially higher resource utilization'' for short stays excluded by STRIVE (1 to 2 days) versus short stays included by STRIVE (for example, 3 to 7 days). The MS–DRG CMI decrease for 3- to 7-day stays versus 1- to 2-day stays is 2.9 percent for short-stay SNF patients readmitted to the hospital, 4.1 percent for short-stay SNF patients who die in the SNF after a short stay, and 3.0 percent for short-stay SNF patients who are discharged to another setting. While the hospital acuity for the very short 1- to 2-day stays is somewhat higher than 3- to 7-day stays, it certainly is not ''substantially higher.''

Again, we were very concerned by the assertion that very short stays involving 21 percent of all SNF stays were excluded, and after reviewing the data carefully, we found the claim to be at least partially inaccurate. The 21 percent of stays refers to stays involving 1 to 7 days. STRIVE only excluded 1- to 2-day stays, and this comprises only 5.4 percent of all SNF stays. Even this 5.4 percent of stays greatly overestimates the actual impact of the excluded stays. The excluded very short stays of 1 to 2 days represent only 0.2 percent of all SNF paid days of service for a year. We do not believe that excluding these stays has much impact at all on (a) patterns of resident classification, (b) the nursing and therapy weights underlying RUG–IV, or (c) the resulting payments to providers. However, we do believe that additional research is needed to determine the reasons for the high

volume of discharges within the first 7 days of SNF admission.

Finally, exclusion of very short 1- to 2-day stays does not invalidate STRIVE project results concerning resource utilization of SNF residents who received extensive services in the hospital. Pre-admission hospital services were captured for residents who were admitted 1 to 6 days before the nursing staff time study, as long as they were not discharged during that 2-day study. The STRIVE results included over 500 residents who were assessed for extensive services received in the hospital within 7 days prior to SNF admission. Thus, the exclusion of very short 1- to 2-day stays did not preclude valid analysis of pre-admission extensive services.

*Comment:* A few commenters stated that we should have stratified by the type of assessment for each resident (5-, 14-, 30-, 60-, 90-day, quarterly, annual, *etc.*), and indicated that not doing so could have introduced biases. One commenter referenced MedPAC's analysis that resource use and case-mix can frequently vary by provider type, noting that in California, hospital-based SNFs tend to provide more medically-intensive services to a more acutely ill and injured patient population than do freestanding SNFs. The commenter indicated that in the proposed rule, it is unclear that CMS measured STRIVE data differences between hospital-based and freestanding SNFs, and argued that if these differences remain unmeasured and unaccounted for, they will ultimately lead to less accurate payment under RUG–IV and perpetuate the persistent decline of hospital-based SNFs.

*Response:* We note that it would not have been possible to perform such stratification given our study design. Once a nursing home and its nursing units were selected for inclusion in the study, all residents within those nursing units were included in the study regardless of any other characteristic, including the type of assessment that was due next. Because the sample-weighted STRIVE sample represents a cross-section of nursing home residents nationally, we believe that the sample should approximate the national distribution with regard to the type of assessment that is due next for each resident.

Moreover, while we recognize that hospital-based, proprietary, and nonprofit SNFs have some different facility characteristics, CMS does not have the authority to create separate classification models by provider type. During the STRIVE project, we did collect data on all 3 provider types for future analysis. In this way, we can continue to monitor the accuracy of our payment system and adjust for changes in patient acuity and staff resource needs.

*Comment:* Some commenters alleged that the sample under-represented Medicare residents, specifically those in a Medicare Part A stay. They asserted that the number of weighted Medicare cases in the STRIVE sample represented only 14.1 percent of the sample, while Medicare cases comprise 35 percent of national MDS data.

*Response:* This statistic apparently was derived from an analysis of the national MDS database in which each assessment was classified as PPS or non-PPS and in which the percent of assessments that were PPS was considered to be identical to the percent of residents who are Medicare residents. However, we believe this 35 percent figure is misleading for two reasons. First, we have performed work where we have matched Medicare Part A claims with MDS data, and have observed that a fairly large proportion of assessments that have a PPS reason for assessment are not actually linked with a SNF stay. Thus, depending upon MDS PPS assessments to identify Medicare residents leads to an overestimate of the number of those residents. Second, if the comment was based upon an analysis of a longitudinal data set, for example, a year's worth of MDS data, rather than a cross-section, the Medicare percentage will be further inflated. One reason for this is that Medicare residents have shorter lengths of stay and higher turnover than non-Medicare residents and, therefore, are over-represented when data are analyzed longitudinally. In addition, Medicare residents have more assessments per resident than non-Medicare residents, because PPS assessments must be completed more frequently than OBRA assessments. Therefore, the longitudinal approach will over-represent the number of Medicare residents present on any given day.

In order to produce counts that can be validly compared with the STRIVE data, an MDS snapshot must be produced that represents the latest assessment for each resident who is active on a given day. As part of our sampling process, we built a snapshot file for March 1, 2006 and matched Part A claims with this file. Based upon this analysis, we estimated that about 13.5 percent of nursing home residents are in SNF stays, which closely matches the national estimate from the STRIVE sample (14.1 percent).

*Comment:* One commenter presented a series of tables that compared STRIVE statistics on a number of MDS variables with corresponding statistics from the MDS national database. These tables broke down both the STRIVE sample and the national statistics by Medicare versus non-Medicare, and purported to show not only that Medicare distributions were different from non-Medicare distributions, but that the STRIVE distributions were different from the national distributions, thereby demonstrating significant bias in the STRIVE sample.

The commenter stated that unlike the change from RUG–44 to RUG–53, the estimate of distribution of days under the proposed RUG–IV is not directly calculated based on a linked MDS/claims data file, but rather, inferred using the STRIVE data to estimate the distribution of paid days in each of the RUG–66 groups. The commenter questioned the accuracy of the payment impact analysis based on these estimated distributions.

*Response:* For the reasons described previously, we believe that the commenter's analyses are flawed in how they classified the national data as Medicare/non-Medicare. While we acknowledge that there are clinical differences between Medicare and non-Medicare residents, these analyses appeared to reflect the premise that all STRIVE analyses were based upon Medicare residents only and that the results are, therefore, misleading when applied to the nation, stating, ''STRIVE uses the Medicare portion of the sample to refine the existing Resource Utilization Group (RUG) classification system.'' However, this statement is incorrect. STRIVE RUG development used both Medicare and non-Medicare cases, relying upon a ⅔ development sample and a ⅓ validation sample that included both types of cases. Furthermore, the calculation of mean nursing and therapy times that served as the basis for CMI calculation was based upon all valid cases. The only time that we limited analysis to Medicare cases was in producing the transition matrix used in estimating RUG–IV Medicare days of service from actual RUG–III paid days of service. All other development and rate setting analyses used both Medicare and non-Medicare cases.

It is true, as noted in the comments, that the fiscal estimates hinge upon the Medicare transition matrix. Ideally, fiscal estimates would be based upon an existing national assessment database. However, RUG–IV classifications cannot be performed on existing MDS 2.0 data, and MDS 3.0 will not be implemented for over a year, so the only way to make financial projections based on currently

available data is with the transition matrix.

We do not agree, however, that this is a critically flawed methodology. While there may be instances in which estimates for individual RUG–IV groups are not precisely accurate, any estimation errors should be random, with estimates for some groups being too high and others being too low compared with actual values. When estimates are made across all groups, however, these random estimation errors will tend to offset each other, and the overall estimates will have much greater precision.

Further, the fiscal impact estimates have other sources of error (for example, changes in provider behavior, changes in the cost of specific services, *etc.*) that cannot be remedied even if a national MDS 3.0 database were available. Estimation error due to the STRIVE transition matrix is likely to be a relatively small portion of the total error. Therefore, we believe that the overall fiscal estimates are as precise as possible, given the uncertainties associated with implementing a new payment model.

Finally, we recognize the difficulty of implementing changes to a payment system that cannot be verified by a review of historical data. In this case, we estimated changes to the distribution of paid days across the RUG–IV model, because the RUG–IV grouper utilizes clinical data that will not be collected until we introduce the MDS 3.0. In adopting this methodology, we recognize that there is a tradeoff between timely updating of the case-mix system to ensure more accurate distribution of SNF PPS payments and the potential weakness of using estimated data. For this reason, we have committed to post-implementation monitoring of the accuracy of the system calibration. We will, if needed, recalibrate the CMIs in the RUG–IV model using actual data if our analyses indicate that an adjustment is needed.

*Comment:* A number of commenters expressed concern about overall sample bias, specifically questioning how accurately the STRIVE sample represents residents nationally. One commenter stated the patient mix in the STRIVE sample is not representative of the national SNF Medicare cases, and thus, is not reliable in developing the RUG–IV system. The commenter asserted that based on the information available, it is readily apparent that the STRIVE sample is not representative and cannot be used as a basis for redefining the RUG system. The commenter argued that comparisons of behavioral and activity-level responses between STRIVE Medicare cases and Minimum Data Set 2.0 (''MDS'') Medicare cases reveal a significant disparity, and offered the following as examples:

- The activities of daily living (''ADL'') Index component for Self-Performance item G1aa (Bed Mobility Self-Performance) reveals a significant difference between the STRIVE Medicare cases and MDS Medicare cases for the Extensive Assistance category.
- Similarly, the ADL Index component for Self-Performance item G1ba (Transfer Self-Performance) shows a significant difference between the STRIVE Medicare cases and MDS Medicare cases for the Extensive Assistance categories.
- The ADL Index component for Self-Performance item G1ha (Eating Self-Performance) shows a significant difference between the STRIVE Medicare cases and MDS Medicare cases for the Extensive Assistance category.
- Finally, the ADL Index component for Self-Performance item G1ia (Toilet Use Self-Performance) shows a significant difference between the STRIVE Medicare cases and MDS Medicare cases for the Extensive Assistance category.

Thus, the commenter stated that the comparison of behavioral and activity-level responses between STRIVE Medicare cases and MDS Medicare cases provides additional support for the commenter's conclusion that there are serious issues with the representativeness of the STRIVE sample.

*Response:* As discussed above, we acknowledge that there were factors in the sampling procedures which, though unavoidable, may have introduced sampling bias. To test this, we assembled a snapshot database of MDS data and compared the results with the STRIVE sample on selected variables.

Table 11 compares STRIVE statistics for the entire sample with national MDS statistics. For these comparisons, a cross-section of MDS data was selected, which contained the latest assessment for every resident who was active in a nursing home on a given date. March 1, 2006 was selected for this analysis, so that the data would be as contemporaneous as possible with the STRIVE data. Variables important to case-mix determination were selected for analysis. Chi-square tests were performed to determine whether the distribution of scores on each variable deviated significantly from the national distribution. The columns in Table 11 show the MDS variable, the number and percent of cases for each value of the variable for the nation and for STRIVE, and an indicator of whether or not the chi-square test showed the STRIVE distribution to be significantly different from the national distribution.

TABLE 11

| MDS variable | Value | MDS national snapshot | | STRIVE: sample weighted | | Signif diff ($p < 0.05$) |
|---|---|---|---|---|---|---|
| | | Freq | Pcnt | Freq | Pcnt | |
| G1AA (bed mobility self-performance) | 0. Independent | 393,296 | 28.4% | 2,724 | 27.9% | Yes. |
| | 1. Supervision | 86,778 | 6.3 | 612 | 6.3 | |
| | 2. Limited assist | 241,342 | 17.4 | 1,638 | 16.8 | |
| | 3. Extens assist | 438,795 | 31.7 | 2,871 | 29.4 | |
| | 4. Total depend | 224,203 | 16.2 | 1,918 | 19.6 | |
| | 8. Did not occur | 634 | 0.0 | 2 | 0.0 | |
| | Total | 1,385,048 | 100.0 | 9,766 | 100.0 | |
| G1BA (transferring self-performance) | 0. Independent | 271,891 | 19.6 | 1,600 | 16.4 | Yes. |
| | 1. Supervision | 96,985 | 7.0 | 602 | 6.2 | |
| | 2. Limited assist | 258,049 | 18.6 | 1,946 | 19.9 | |
| | 3. Extens assist | 432,545 | 31.2 | 3,115 | 31.9 | |
| | 4. Total depend | 313,808 | 22.7 | 2,410 | 24.7 | |
| | 8. Did not occur | 11,817 | 0.9 | 93 | 0.9 | |

TABLE 11—Continued

| MDS variable | Value | MDS national snapshot | | STRIVE: sample weighted | | Signif diff (p < 0.05) |
|---|---|---|---|---|---|---|
| | | Freq | Pcnt | Freq | Pcnt | |
| | Total | 1,385,095 | 100.0 | 9,766 | 100.0 | |
| G1HA (eating self-performance) | 0. Independent | 599,025 | 43.2 | 3,556 | 36.4 | Yes. |
| | 1. Supervision | 327,129 | 23.6 | 2,448 | 25.1 | |
| | 2. Limited assist | 128,760 | 9.3 | 1,046 | 10.7 | |
| | 3. Extens assist | 123,645 | 8.9 | 1,019 | 10.4 | |
| | 4. Total depend | 206,050 | 14.9 | 1,696 | 17.4 | |
| | 8. Did not occur | 478 | 0.0 | 1 | 0.0 | |
| | Total | 1,385,087 | 100.0 | 9,766 | 100.0 | |
| G1IA (toileting self-performance) | 0. Independent | 206,103 | 14.9 | 1,048 | 10.7 | Yes. |
| | 1. Supervision | 79,396 | 5.7 | 450 | 4.6 | |
| | 2. Limited assist | 215,647 | 15.6 | 1,548 | 15.9 | |
| | 3. Extens assist | 451,917 | 32.6 | 3,338 | 34.2 | |
| | 4. Total depend | 427,881 | 30.9 | 3,181 | 32.6 | |
| | 8. Did not occur | 4,154 | 0.3 | 200 | 2.1 | |
| | Total | 1,385,098 | 100.0 | 9,766 | 100.0 | |
| Verbal/physical abuse | No | 1,373,940 | 99.2 | 9,737 | 99.3 | No. |
| | Yes | 11,173 | 0.8 | 66 | 0.7 | |
| | Total | 1,385,113 | 100.0 | 9,802 | 100.0 | |
| K5A (perenteral/IV) | No | 1,343,588 | 98.3 | 9,634 | 98.3 | No. |
| | Yes | 22,972 | 1.7 | 163 | 1.7 | |
| | Total | 1,366,560 | 100.0 | 9,798 | 100.0 | |
| K5B (feeding tube) | No | 1,295,170 | 93.7 | 9,036 | 92.2 | Yes. |
| | Yes | 87,738 | 6.3 | 762 | 7.8 | |
| | Total | 1,382,908 | 100.0 | 9,798 | 100.0 | |
| P1AC (IV medication) | No | 1,255,886 | 91.7 | 9,138 | 93.3 | Yes. |
| | Yes | 113,052 | 8.3 | 661 | 6.7 | |
| | Total | 1,368,938 | 100.0 | 9,799 | 100.0 | |
| P1AG (oxygen therapy) | No | 1,198,577 | 87.6 | 8,656 | 88.3 | Yes. |
| | Yes | 170,392 | 12.4 | 1,143 | 11.7 | |
| | Total | 1,368,969 | 100.0 | 9,799 | 100.0 | |
| P1AI (suctioning) | No | 1,354,628 | 99.0 | 9,595 | 97.9 | Yes. |
| | Yes | 14,356 | 1.0 | 203 | 2.1 | |
| | Total | 1,368,984 | 100.0 | 9,799 | 100.0 | |
| P1AJ (tracheostomy care) | No | 1,355,834 | 99.0 | 9,618 | 98.2 | Yes. |
| | Yes | 13,150 | 1.0 | 181 | 1.8 | |
| | Total | 1,368,984 | 100.0 | 9,799 | 100.0 | |
| I1A (diabetes mellitus) | No | 971,074 | 71.0 | 6,824 | 69.6 | Yes. |
| | Yes | 397,044 | 29.0 | 2,975 | 30.4 | |
| | Total | 1,368,118 | 100.0 | 9,799 | 100.0 | |
| I1V (hemiplegia/hemiparesis) | No | 1,231,378 | 90.0 | 8,807 | 89.9 | No. |
| | Yes | 137,410 | 10.0 | 993 | 10.1 | |
| | Total | 1,368,788 | 100.0 | 9,799 | 100.0 | |
| I1Z (quadriplegia) | No | 1,358,262 | 99.2 | 9,722 | 99.2 | No. |
| | Yes | 10,531 | 0.8 | 77 | 0.8 | |
| | Total | 1,368,793 | 100.0 | 9,799 | 100.0 | |
| M2A (stage 3 or 4 pressure ulcer) | No | 1,346,209 | 97.2 | 9,419 | 96.4 | Yes. |

TABLE 11—Continued

| MDS variable | Value | MDS national snapshot | | STRIVE: sample weighted | | Signif diff (p < 0.05) |
|---|---|---|---|---|---|---|
| | | Freq | Pcnt | Freq | Pcnt | |
| | Yes | 38,827 | 2.8 | 348 | 3.6 | |
| | Total | 1,385,036 | 100.0 | 9,767 | 100.0 | |

While several of the variables that were analyzed showed no significant difference, there were significant differences between the sample and the nation on a number of other variables. On the ADLs, for example, there was a consistent trend for residents in the sample to show slightly more dependence than residents nationally. On each of the ADLs, the percent of STRIVE cases in the ''total dependence'' category exceeded the national percentage by between 1.7 and 3.4 percentage points. Conversely, the percent of residents in the ''independent'' category was lower for the STRIVE sample by between 0.5 and 6.8 percentage points. The picture was mixed on the services items that displayed significant differences. Among these items, the STRIVE residents were slightly more likely to receive feeding tubes, suctioning, and tracheostomy care, but less likely to receive IV medications or oxygen therapy. Slightly more STRIVE residents had diabetes mellitus and Stage 3 or 4 pressure ulcers than was seen nationally.

The overall picture from these comparisons is that the STRIVE sample has somewhat higher acuity than the nation. This could have been due to the last stage in the sample selection process, where nursing units within larger nursing homes were selected for inclusion in the study. In selecting units for inclusion, the protocol used by data monitors tended to favor SNF units and other specialty units that likely had higher acuity. Because of a lack of data that would have allowed for correction of this bias, it is possible that a greater proportion of higher-acuity residents were included in the sample, and that the sample weights did not correct for this.

However, the impact of this bias should be small. First, while those differences displayed above were statistically significant due to the large sample sizes involved, they were not substantial. Second, the RUG–III and RUG–IV classification models are designed specifically to classify residents into groups with similar acuity levels; for example, ADL scores are used explicitly to subdivide residents falling into each of the major hierarchical groups. While the impact of this bias might have been to place slightly more residents into heavier care nursing groups, this bias should have been corrected when using national days of service (from claims data) to standardize the RUG–IV distribution.

We note that even if the STRIVE sample's RUG distribution exactly matched the national cross-sectional distribution, this cross-sectional distribution must be standardized against the national days of service distribution, which accumulates paid days over an entire year. To the extent that the distribution of residents, even if perfectly representative of the nation, does not match the distribution of paid days, this standardization step is necessary. Thus, standardizing the RUG distribution to paid days should remove the relatively small amount of bias that was observed above.

Data Collection Process

*Comment:* Some commenters noted the process for collecting therapy data from the participating sites resulted in several problems, highlighting inconsistencies in training, data-collection methods, and oversight for the therapists submitting data that they asserted affected the accuracy of the study. Commenters were concerned that the assessment instrument and accompanying ''instruction manual'' used in STRIVE was changed during the study. The implication was that any changes that were made could have weakened or invalidated the study.

*Response:* The STRIVE data collection effort spanned approximately 18 months. During that period, we updated our training materials based on feedback from participating facility staff. Updating and fine tuning the training materials and project protocols is a standard method used to ensure the collection of the most accurate data possible. We do not believe these changes weakened the effectiveness of the study. In fact, we would be more concerned about the reliability of any study where the project staff made no effort to enhance their training efforts over such a long collection period.

As stated in our discussion of the collection and adjustment of therapy minutes, our analysis indicated that therapy minutes were underreported. When the therapists reported staff time data, we found it to be reasonably accurate. The problem was that therapists did not consistently report the services that they provided to patients. The omissions in the data collection process do not appear to be related to changes in the training process. We provided training and technical assistance to all therapists who participated in the study. STRIVE staff were available either onsite or by phone during the entire study, and the facility staff received copies of the training materials. While direct oversight of therapists' data collection for the entire 7-day time study period was not feasible, ample training and resource materials were available to guide them. However, some therapists simply did not submit data for the entire 7-day time study period. Again, we do not believe the underreporting can be associated with changes in the training manuals or in the data collection procedures.

*Comment:* One commenter noticed that the proposed rule does not list physical therapist assistants as a SNF staff participant in the STRIVE project. The commenter asked us for clarification in the final rule confirming the inclusion of physical therapist assistants in the STRIVE project.

*Response:* In the proposed rule, we inadvertently neglected to list physical therapy assistants and occupational therapy assistants as participating in the STRIVE study. We noted this error on our Web site at *http://www.cms.hhs.gov/SNFPPS/02_Spotlight.asp.* Physical therapy assistants and occupational therapy assistants did, in fact, participate in the STRIVE study, which included their resource times.

MDS 3.0 Data

*Comment:* A few commenters questioned our ability to assess the impact of the proposed RUG–IV model, as national claims data are not available for either the RUG–IV grouper or the MDS 3.0. Similarly, they were concerned that stakeholders could not

fully assess the impact of the proposed changes. These commenters recommended delaying the implementation of RUG–IV for 2 years, allowing for the collection of actual MDS 3.0 data to undertake a detailed impact analysis, and appropriately adjust the SNF PPS so that the transition from RUG–III to RUG–IV is budget neutral.

*Response:* We recognize the difficulty of precisely calibrating a new case-mix model using estimated data. However, by waiting for actual data to become available, we risk perpetuating systems that become progressively less able to target payments accurately to acuity levels.

In this instance, we worked closely with our MDS development team to integrate payment needs into the structure of the MDS 3.0 assessment. We also made available a RUG–IV grouper and our estimates on the distribution of patient days to allow stakeholders to assess the impact of the new case-mix model.

Finally, we have made provision for correcting discrepancies in the estimates used to introduce the RUG–IV model. In this final rule, we have committed to monitoring the accuracy of our projections and, when actual data becomes available, to recalibrate the system to ensure that the conversion to RUG–IV was budget neutral. This recalibration would be data driven, and could result in either payment increases or decreases. Therefore, we do not agree that the introduction of the RUG–IV case-mix system should be delayed beyond October 1, 2010.

b. Developing the Analytical Database

In the FY 2010 proposed rule (74 FR 22208, 22221, May 12, 2009), we noted that information acquired through the STRIVE research pointed to the need for modifications to the RUG–IV model in a number of specific areas, which we discuss in the following sections.

i. Concurrent Therapy

Concurrent therapy is the practice of one professional therapist treating multiple patients at the same time while the patients are performing different activities. In the SNF Part A setting, concurrent therapy is distinct from group therapy, where one therapist provides the same services to everyone in the group. In a concurrent model, the therapist works with multiple patients at the same time, each of whom can be receiving different therapy treatments. For concurrent therapy, there are currently no MDS coding restrictions regarding either the number of patients that may be treated concurrently, or the amount or percentage of concurrent therapy time that can be included on the MDS, whereas with group therapy there are limitations, as discussed in the July 30, 1999 SNF PPS final rule (64 FR 41662).

In the FY 2010 proposed rule (74 FR 22208, 22222, May 12, 2009), we noted a significant shift in the provision of therapy from individual one-on-one treatment to a concurrent basis. We stated that given that Medicare and Medicaid patients are among the frailest and most vulnerable populations in nursing homes, we believed that the most appropriate mode of providing therapy would usually be individual, and not concurrent therapy. We indicated that concurrent therapy should never be the sole mode of delivering therapy to a SNF patient; rather, it should be used as an adjunct to individual therapy when clinically appropriate. Further, we expressed concern that the current method for reporting concurrent therapy on the MDS creates an inappropriate payment incentive to perform concurrent therapy in place of individual therapy, because the current method permits concurrent therapy time provided to a patient to be counted in the same manner as individual therapy time. Accordingly, we proposed that, effective with the introduction of RUG–IV, concurrent therapy time provided in a Part A SNF setting would no longer be counted as individual therapy time for each of the patients involved; rather, for each discipline, we would require allocating concurrent therapy minutes among the individual patients receiving it before reporting total therapy minutes on the MDS 3.0. The comments that we received on this issue, and our responses, appear below.

*Comment:* Several commenters stated that the data reported in the proposed rule showing concurrent therapy as representing a majority of the delivery of all therapy services are inconsistent with industry data. Some stated they were not able to replicate the STRIVE findings that two-thirds of therapy provided is concurrent. A few reported that when they ''polled'' their rehabilitation staff, the estimates they received were that approximately 33 percent of therapy is delivered concurrently.

*Response:* In order to determine whether the STRIVE results may have overstated the amount of concurrent therapy, we re-examined the raw data and methodology we used to distinguish between individual and concurrent therapy. We determined that the amount of concurrent therapy that we reported in the March 2009 TEP and later cited in the proposed rule was overstated, and that the amount of concurrent therapy based on the ''time-slice'' method discussed later in this section of the final rule is actually 28.26 percent. Nevertheless, we continue to believe that concurrent therapy should be allocated when assigning a RUG–IV classification. The SNF PPS is based on resource utilization and costs. When a therapist treats two patients concurrently for an hour, it does not cost the SNF twice the amount (or 2 hours of the therapist's salary) to provide those services. The therapist would appropriately receive one hour's salary for the hour of therapy provided, regardless of whether the therapist treated one patient individually or two patients concurrently for that hour. Therefore, as proposed, we will utilize allocated concurrent therapy minutes to establish the RUG–IV group to which patients are assigned. In addition, we will require the therapist to track and report the three different delivery modes of therapy (individual, concurrent, and group) on the MDS 3.0, as explained later in this section.

*Comment:* Most commenters agreed with CMS that concurrent therapy is a legitimate mode of delivering therapy services, based on individual care needs as determined by the therapist's professional judgment. Many commenters stated that when used appropriately, concurrent therapy produces positive patient outcomes and does not result in poor quality of care, while others reported there are no studies to support that concurrent therapy is inferior to individual. Several commenters stated that the patients are fully engaged throughout the entire concurrent therapy session with the therapist directly supervising both patients, and some reported that rest periods are a necessary part of treatment and concurrent therapy allows the therapist to be more efficient. However, there were others who reported that the therapist is not always directly supervising with the patient in line-of-sight, and in fact, some commenters reported that therapists would leave the treatment area to conduct other tasks or treatments and that patients are not always engaged.

*Response:* We did not propose to eliminate concurrent therapy. We agree that the there are times when patients may interact with one another during a concurrent session, and that these interactions may be beneficial. However, as noted by some commenters, this may not always be the case. We are concerned that some commenters reported that therapists do not always have the patient in line-of-

sight (and may actually leave the treatment area). In fact, some commenters reported that the patient is not always engaged during the entire concurrent time, and that there are potentially instances when treatment decisions are influenced by facility or provider productivity requirements. We agree that the delivery of therapy services should be based on the therapist's professional and clinical judgment solely according to the individual needs of each patient. Considering the potential for inappropriate care, and that in some cases, patients may not be fully interacting with each other or the therapist throughout the concurrent therapy session, we believe that allocating concurrent therapy minutes is appropriate.

*Comment:* Several commenters stated that CMS does not have the authority to dictate the practice of therapy and, therefore, cannot instruct therapists to allocate concurrent therapy.

*Response:* We agree that CMS does not have the authority to dictate clinical practice. However, we do have the authority and the responsibility to determine coverage and payment policy, that is, the scope of services that will be paid for by the Medicare program under the SNF PPS and the manner in which those services will be reported and paid. We again acknowledge that concurrent therapy may be an appropriate mode to provide therapy services under certain circumstances, but we also note that the SNF PPS is based on resource utilization and costs. When a therapist treats two patients concurrently for an hour, it does not cost the SNF twice the amount (or 2 hours of the therapist's salary) to provide those services. The therapist would appropriately receive one hour's salary for the hour of therapy provided, regardless of whether the therapist treated one patient individually or two patients concurrently for that hour. Therefore, as proposed, we will use allocated concurrent therapy minutes to establish the RUG–IV group to which the patient is assigned. In addition, we will require the therapist to report concurrent therapy minutes on the MDS 3.0, as discussed later in this section.

*Comment:* We received a large number of comments on the potential effects of the proposed allocation of concurrent therapy. Many of the commenters agreed that therapy time should be allocated, and offered a variety of justifications, such as: Abuse of therapy being reported; therapists being coerced to maximize minutes (and, therefore, reimbursement); lack of existing research to support the efficacy of concurrent therapy; and, the need to use Medicare funds appropriately and as intended. In fact, one commenter requested that allocation of concurrent therapy begin in FY 2010, prior to implementation of RUG–IV. Another commenter believed that an increased use of individual therapy would have a positive impact on their SNFs by raising the SNF case mix and, therefore, attracting patients with more advanced therapy needs to their facilities. Many commenters believed that concurrent therapy, when provided appropriately, is a valid method for providing therapy that has many benefits (for example, psychosocial and educational), and that patients motivate and learn from each other. Additionally, many commenters agreed that concurrent therapy should be an adjunct to individual therapy.

Many other commenters opposed any allocation whatsoever for concurrent therapy. Some of those commenters argued that allocation would, in effect, reduce the therapy provided to patients. Others expressed concern that some patients would not receive therapy at all in parts of the country (particularly rural areas) where therapists are scarce. Some believed that by allocating therapy, CMS would actually incur a greater cost to the Medicare program, as there would be a greater rate of re-hospitalizations. Others stated that allocating concurrent therapy would increase labor costs to SNFs and, thus, would ''force'' contract therapy providers to increase their charges to SNFs.

*Response:* As stated in the proposed rule, we believe that concurrent therapy can represent a legitimate mode of delivering therapy services when used properly based on individual care needs as determined by the therapist's professional judgment; should be an adjunct to individual therapy, not the primary mode of delivering care; and should represent an exception rather than the standard of care. As noted previously, we did not propose to eliminate concurrent therapy altogether. Rather, we proposed to allocate the minutes of the therapist's time when providing concurrent therapy among the patients to accurately reflect the therapist's time treating patients.

We do not agree that allocating concurrent therapy minutes means that patients will not receive needed therapy. Assuming that concurrent therapy is being used appropriately, the allocation requirements do not change the actual provision of services. The only change is in the way the therapist records the time he or she spends with each patient. In fact, we believe therapists will continue to provide therapy services in a combination of individual, concurrent, and group as appropriate based on the therapist's professional judgment of the individual's needs and in accordance with Medicare coverage requirements. Similarly, the requirement to track concurrent therapy does not, in and of itself, increase labor costs to SNFs. We are aware, however, that by allocating concurrent therapy minutes to assign the RUG–IV category, the total number of therapist staff minutes may not be sufficient to keep a patient in the same therapy group for payment purposes. For example, under RUG–III, a patient receiving a combination of 325 individual and (unallocated) concurrent therapy minutes would be assigned to a RUG–III High Rehabilitation group. Under RUG–IV, the patient might be classified into a lower-paying therapy group if the adjusted therapist time falls below the 325-minute threshold needed to qualify for High Rehabilitation. We regard it as likely that providers will ask therapists to modify their treatment plans to make sure that patients qualify for the higher therapy groups. However, this type of behavioral adjustment, even if it increases labor cost, may not be reflective of actual patient need. We also see no imperative in this reporting change that would ''force'' contract therapy providers to increase their charges to SNFs. However, the specific details of contractual arrangements between SNFs and therapy contractors are essentially private business arrangements that are outside the scope of this rule. Finally, we are extremely concerned that some commenters believe that allocating therapy minutes will result in poor patient outcomes, such as underutilization and rehospitalizations. While we believe these negative outcomes are unlikely, we intend to alert our Survey and Quality Monitoring staff to the possibility so that we can monitor facility practices to ensure quality care for all SNF residents.

*Comment:* A few commenters requested CMS to provide specific guidelines on when concurrent therapy may occur, such as limiting the number of patients that can be seen concurrently. Of those commenters that favored setting a numerical limit, a majority recommended allowing the therapist to treat no more than two patients concurrently. A few suggested a maximum of three or four patients for concurrent therapy, while others stated that treating three or four patients at the same time should instead constitute group therapy. Some suggested that we apply a cap similar to the one that

already exists for group therapy (in which we limit the number of individuals and the amount to be coded on the MDS). One commenter stated that if the requirements set forth in the Medicare Benefit Policy Manual (Pub. L. 100–2), chapter 8, section 30.4.1.1 are met, then the therapy services are skilled and the mode of therapy delivered does not matter (individual, concurrent, or group). On the other hand, some requested that CMS work with the professional and industry associations and stakeholders to develop criteria and guidelines. One commenter stated that concurrent therapy is neither individual nor group therapy and, therefore, should not be allowed.

*Response:* As we explained in the proposed rule (74 FR 22222), concurrent therapy can represent a legitimate mode of delivering therapy services when used properly based on individual care needs as determined by the therapist's professional judgment; should be an adjunct to individual therapy, not the primary mode of delivering care; and should represent an exception rather than the standard of care.

We agreed with those commenters who supported placing some limits on concurrent therapy. Commenters who supported concurrent therapy almost unanimously stated that when concurrent therapy is properly delivered, patients are fully engaged during the entire treatment time and that the therapist is able to direct the entire treatment session for each participant. We believe that in order for the therapist to be able to direct the entire treatment session and ensure that the patients are fully engaged, the number of participants should be limited to two. We agree with the commenters who pointed out that, once a clinician has to divide his/her time between three or more patients, the therapist's ability to direct the entire treatment session for each individual and ensure that the patients are fully engaged can become problematic. In addition, in order for a therapist to direct the entire treatment session of both participants and ensure that they are fully engaged, the therapist must have line-of-sight of both patients. Both the American Physical Therapy Association (APTA) and the American Occupational Therapy Association (AOTA) recommended limiting concurrent therapy to two patients. In fact, the AOTA reports in their comment on the FY 2010 SNF PPS proposed rule, and on their Web site at *http://www.aota.org/Practitioners/Reimb/Pay/Medicare/FactSheets/37784.aspx*, that they have been advising their members to limit the provision of concurrent therapy in this manner for some time: ''For a number of years, AOTA has been informally advising members that the number of patients should be limited to 2 as a best practice standard.'' We believe the clinical knowledge and expertise of the therapy associations is a proper benchmark for determining the allowable number of patients during a concurrent session, and we agree that a therapist (or assistant) should treat no more than two patients concurrently. At this time, we do not agree that CMS should impose a specific cap, similar to the one for group therapy, on the amount of concurrent therapy to be coded on the MDS. However, we are revising the MDS, as noted later in this section, to capture therapy data by mode of therapy. We will then be able to analyze the data on therapy, including the delivery mode, and will be able to better understand the rates of provision and develop other requirements as deemed appropriate, including but not limited to a cap on concurrent therapy. Therefore, under RUG–IV, in order to code minutes on the MDS, the following criteria must be met:

- Individual therapy; or
- Concurrent therapy consisting of no more than 2 patients (regardless of payer source), both of whom must be in line-of-sight of the treating therapist (or assistant); or
- Group therapy consisting of 2 to 4 patients (regardless of payer source), who are performing similar activities, and are supervised by a therapist (or assistant) who is not supervising any other individuals.

In instances that involve a therapist treating 3 or more patients that do not meet the definition of group therapy, that is, similar activities are not being performed by the participants, then for purposes of MDS reporting, the definition of concurrent therapy is not met and, thus, those therapy minutes may not be coded.

We agree that requirements set forth in the Medicare Benefit Policy Manual (Pub. L. 100–2), chapter 8, section 30.4.1.1 should be met for medical review purposes. However, as stated previously, from a payment perspective, the SNF PPS is based on resource utilization and costs. When a therapist treats two patients concurrently for an hour, it does not cost the SNF twice the amount (or 2 hours of the therapist's salary) to provide those services. The therapist would appropriately receive one hour's salary for the hour of therapy provided, regardless of whether the therapist treated one patient individually or two patients concurrently for that hour. Therefore, Medicare should pay for the one hour of the therapist's time.

Furthermore, the criteria set forth in section 30 for skilled nursing facility level of care must be met in order for a beneficiary to meet the requirements for a SNF Part A stay. These requirements are:

- The patient requires skilled nursing services or skilled rehabilitation services, that is, services that must be performed by or under the supervision of professional or technical personnel (*see* §§ 30.2–30.4); are ordered by a physician and the services are rendered for a condition for which the patient received inpatient hospital services or for a condition that arose while receiving care in a SNF for a condition for which he received inpatient hospital services;
- The patient requires these skilled services on a daily basis (*see* § 30.6);
- As a practical matter, considering economy and efficiency, the daily skilled services can be provided only on an inpatient basis in a SNF (*see* § 30.7.); and
- The services must be reasonable and necessary for the treatment of a patient's illness or injury, that is, be consistent with the nature and severity of the individual's illness or injury, the individual's particular medical needs, and accepted standards of medical practice. The services must also be reasonable in terms of duration and quantity.

We also believe that, when appropriate, therapy services should be treated uniformly across the PAC settings and under Parts A and B. We intend to work with the professional organizations and within the various CMS components to analyze and explore the various issues that affect therapy services in the various provider types and payment systems.

We realize that establishing guidelines, requirements, and criteria for therapy services is a complex matter regardless of setting. For instance, we must be cognizant of multiple issues that may affect the delivery of therapy services to patients, such as:

- Patient rights (patient preference for a particular treatment method (for example, individually and not with others, either concurrently or in a group setting), and whether this preference is honored);
- Infection precautions (whether therapists follow standard infection control practices when treating more than one patient at time);
- Facility layout (logistical feasibility of treating multiple patients and maintaining proper and adequate supervision).

*Comment:* A few commenters stated that when the RUG–III model was developed, all modes of therapy were being provided, and the minutes and staff time were weighted to reflect concurrent therapy. Some commenters reported that concurrent therapy became the norm after the inception of the SNF PPS, and that individual therapy was previously the primary mode of therapy being delivered.

*Response:* We do not disagree that the different modes of therapy were being provided prior to SNF PPS. For the purpose of this final rule, we are considering how the current distribution of therapy time affects the accuracy of the payments that will be made under the RUG–IV model. For RUG–IV, we are using the therapist's time (individual minutes, concurrent therapy minutes allocated, and the group therapy minutes unallocated with 25 percent cap) to establish the minimum therapy minutes for each of the rehabilitation categories. We do not believe that Medicare payments should exceed the cost of the services rendered. As stated previously, when a therapist provides concurrent therapy services for an hour, no matter how many patients he or she treats, the therapist is only providing and being paid for an hour of time. Payments made to the SNF under the SNF PPS should reflect that same principle. As we did not propose to change the method in which group therapy minutes are used in RUG–IV classification and the amount of group therapy being provided is low, therapists will still be allowed to count the entire group session for each patient (as long as they maintain the patient limitation and supervision requirements) in accordance with the 25 percent cap. However, we will monitor therapy provided in the group setting, analyze data associated with group therapy, and, if needed, address any issues at a later time.

*Comment:* Some commenters suggested updating the MDS 3.0 in order to record the three modes of therapy: individual, concurrent, and group. Some believed that this would allow a method to track and analyze the amount of concurrent therapy being provided. One commenter suggested developing a ''take back'' if concurrent therapy exceeded 50 percent of the therapy time. One commenter urged CMS to consider a documentation method that would not be burdensome. Another commenter stated that tracking concurrent therapy would be tedious. Another commenter stated that providers would be vulnerable to post-payment audits and denials if CMS did not develop documentation instructions. Lastly, one commenter stated that reporting the therapist time and not the resident time would alter the ''patient-centric'' intent of the MDS.

*Response:* Under Medicare Part B therapy services, CMS has issued documentation requirements. When these requirements were developed, CMS worked closely with the Medicare contractors, professional therapy associations, and multiple components within CMS. We intend to address therapy documentation issues for SNF PPS in a similar fashion to determine the most appropriate documentation requirements. We will update the MDS 3.0 so that the assessor codes the actual total patient minutes associated with the three modes of delivering therapy services (individual, concurrent, and group) and, thereby, reports them separately (thus keeping the MDS patient-centric). We believe that requiring providers to report total therapy time by mode of therapy on the MDS 3.0 will not pose a significant burden for providers, as providers will not be required to allocate concurrent therapy minutes before recording them on the MDS, but instead will only be required to identify those minutes as concurrent. This method of reporting will allow us to track and analyze the amount of each type of therapy being provided and determine appropriate reimbursement. Under RUG–IV, the recording of therapy minutes on the MDS will be as follows:

- *Individual*—Report entire amount of individual therapy.
- *Concurrent*—Report the entire unallocated minutes of concurrent therapy.
- *Group*—Report the entire unallocated minutes of group therapy (as long as the patient limitation is not exceeded and the supervision requirement is maintained).

This method for recording therapy minutes will reflect the resident's entire time receiving therapy. However, as stated earlier, we will assign the RUG–IV category based on allocated concurrent therapy minutes and maintain the 25 percent cap on group therapy. The RUG–IV data specifications will account for these requirements.

We do not agree with the suggestion to implement a ''take back'' policy at this time. However, as the MDS 3.0 will require the therapist to code the minutes for each mode of therapy being delivered, we will be able to analyze the data and, if need be, address any issues in the future. Thus, we will update our policy based on data, not on a pre-defined limit. In addition, we will need to conduct further analysis to determine an appropriate amount of allowed concurrent therapy, as well as the appropriate fiscal penalty if we were to implement a ''take back'' policy.

*Comment:* Several commenters argued that allocating concurrent minutes to the RUG–IV model and then also applying CMIs represents a ''double hit.'' Others characterized concurrent therapy allocation as a method of cost control.

*Response:* As stated in the proposed rule (74 FR 22222–23), and as discussed above, allocating concurrent therapy time reflects resource use more accurately for this type of therapy. Patients are classified into RUGs based on average resource use, and allocating therapy minutes allows for better measurement of resource use, more accurate RUG classification, and application of more appropriate CMIs. For example, when a therapist treats 2 patients concurrently for an hour, a full hour of therapy time is counted for each of the 2 patients under existing procedures. However, the therapist is not actually providing 2 hours of his/her time to treat the patients; rather, the therapist is providing a total 1 hour of therapy time. Thus, rather than representing a ''double hit'' or a method of cost control, allocating concurrent therapy minutes to the RUG–IV model results in more accurate payment under the SNF PPS, and allows for a more appropriate reflection of resources used. Further, as stated in the proposed rule, we maintained budget neutrality with the implementation of RUG–IV, which also serves to refute the characterization of allocating concurrent therapy as a cost control method.

*Comment:* One commenter agreed that the role of therapy aides is to provide support services to the therapists and, thus, disagreed with our concern that placing limits on concurrent therapy could result in an inappropriate substitution of therapy aides for therapists and assistants and that the RAI manual should be updated. In addition, a commenter requested that we maintain the policy that therapy provided by therapy students should continue to be counted on the MDS.

*Response:* We would also like to reiterate that therapy aides are expected to provide support services to the therapists and cannot be used to provide skilled therapy services. As we stated in the proposed rule, based on the STRIVE data, it appears therapy aides are being used appropriately. However, as we stated, we intend to monitor the use of therapy aides, and if necessary, propose changes to MDS reporting requirements in the future. Further, we agree that, as set forth previously in the correction

notice for the FY 2000 SNF PPS final rule (64 FR 60122, November 4, 1999), providers should record minutes of skilled therapy provided by a therapy student on the MDS when the student is in the therapist's line-of-sight.

Therefore, as we proposed in the FY 2010 proposed rule, effective with RUG–IV, we will use allocated concurrent therapy minutes to establish the RUG–IV group to which the patient is assigned. In addition, as discussed above, a therapist (or assistant) will be permitted to treat no more than two patients concurrently. In addition, we will require the therapist to report the three different delivery modes of therapy (individual, concurrent, and group) on the MDS 3.0 in the manner discussed above.

ii. Adjustments to STRIVE Therapy Minutes

Under the SNF PPS, while nursing services are fully reimbursed using a prospective case-mix adjusted algorithm, payment for therapy services is more closely linked to the amount of therapy actually received at a particular time. In the FY 2010 proposed rule (74 FR 22208, 22223, May 12, 2009), we noted that the STRIVE analysis included an examination of therapy services reimbursed under RUG–III, and we included a detailed explanation of the STRIVE therapy data collection methodology. The comments that we received on this subject, and our responses, appear below.

*Comment:* Several commenters questioned the collection and the analysis of therapy time, including the utilization of the unsupervised recording of therapy times during the collection of data on weekends.

*Response:* During the STRIVE study, we made every effort to train staff and provide data monitors to assist staff when questions or problems arose. However, very few onsite facility studies, including STRIVE, can provide monitoring on a 24-hour, 7-days-a-week basis. In general, the staff at the participating facilities worked hard to collect the staff time accurately, especially for the days where data were collected on an automated basis. It is apparent from our analysis that the therapy data were partially compromised by incomplete recording of therapy times during the days where the data were collected manually on paper forms. We believe we have provided sufficient information in both the proposed rule (74 FR 22223–25) and the TEP slides (available online at *http://www.cms.hhs.gov/SNFPPS/10_TimeStudy.asp*), and especially at the TEP meeting on March 11, 2009, on how we have identified this potential problem, and have adjusted the therapy time used in our analysis to address it. Information provided at the TEP meeting demonstrated that these adjustments had little impact on the RUG–IV case-mix indexes, and corresponded with the results in STRIVE facilities that had more complete therapy data collection. At the same time, the adjustments appeared to adjust therapy time successfully in more problematic facilities (where therapy time was much lower and appeared to be incomplete on days where staff used the paper tool versus days using PDAs), so that residents were distributed among therapy groups more consistently with the national pattern from Medicare claims than they would have been if unadjusted data were used.

We do recognize from the comments that one of the statistics provided in the proposed rule and in Slide #33 of the March 11 TEP presentation was incorrect: the percentage of all time collected that was concurrent therapy. Our contractor located a mistake made in the computation for this statistic alone that substantially inflated this percentage. As noted previously, the correct percentage of concurrent time is 28.26 percent. This error only affected the calculations performed to produce this one slide; the numbers used in all other analyses, the allocation of concurrent time, the derivation of RUG–IV, and the released public database were correct.

After this error was found, all calculations concerning concurrent therapy were reviewed. Our initial method of allocating concurrent time was to combine all resident time records for a staff member where there was any continuous overlap among the residents. These records were then used to calculate the time in therapy for each resident involved and the unduplicated staff time involved. The staff time was then allocated to each resident in proportion to resident time in therapy, yielding the allocated concurrent time for each resident. This method led to minor inaccuracies when a resident left an ongoing concurrent therapy group or a new resident entered an ongoing concurrent therapy group.

Based on the comments that we received, we reviewed our allocation method described above, and developed a more sensitive method based on a ''time slice'' approach. A staff member's time was divided into 1-minute ''time slices.'' When there was only one resident in a 1-minute time slice, the entire minute was assigned to that resident as individual therapy time. If there were multiple residents, the minute was divided equally among the residents as concurrent therapy time. All current time for a specific resident under the treatment of a specific staff member was then accumulated, separately as individual and concurrent time. This more accurate allocation caused only minor changes for individual residents, and had very little impact on aggregate results. The results referenced in this final rule incorporate these changes.

The two methods are contrasted in the following example. Assume that the therapist has a session of 30 minutes involving three residents. The first resident (''A'') arrives at the beginning of the session and stays for the entire 30 minutes. The second resident (''B'') arrives 10 minutes after the session begins and stays until the end (that is, 20 minutes). The third resident (''C'') arrives 20 minutes after the session begins and also stays until the session's end (that is, 10 minutes). The original research used a proportional method, in which each resident's time was considered as a percentage of the total person-minutes. This can be seen in Table 12. ''Resident A'' received 30 minutes of therapy, Resident B 20 minutes, and Resident C 10 minutes, for a total of 60 person-minutes. The proportional method would thus compute Resident A as having 30/60 (that is, 50 percent) of the 30-minute session time, or 15 minutes. The other two residents' times would be calculated similarly.

TABLE 12

| Resident | Proportional method | | | Time slice method | | | |
|---|---|---|---|---|---|---|---|
| | Resident time in therapy | Proportion of resident time | Allocated time | Slice 1 | Slice 2 | Slice 3 | Total |
| A | 30 | 50.00% | 15.00 | 10.00 | 5.00 | 3.33 | 18.33 |
| B | 20 | 33.33 | 10.00 | 0.00 | 5.00 | 3.33 | 8.33 |

TABLE 12—Continued

| Resident | Proportional method | | | Time slice method | | | |
|---|---|---|---|---|---|---|---|
| | Resident time in therapy | Proportion of resident time | Allocated time | Slice 1 | Slice 2 | Slice 3 | Total |
| C | 10 | 16.67 | 5.00 | 0.00 | 0.00 | 3.33 | 3.33 |
| Total | 60 | 100.00 | 30.00 | | | | 30.00 |
| Session length | 30 | | | 10.00 | 10.00 | 10.00 | |

We now determined that a more accurate approach would be to divide the session into ''slices,'' beginning when a resident joins or leaves the session. The minutes in each time slice are divided equally among all the residents receiving therapy during that time slice. In the example above, the first slice would consist of the first 10 minutes of the session, the second slice is minutes 11–20 of the session, and the third slice is minutes 21 to 30. As only one person is receiving therapy in the first slice, Resident A is credited with all 10 minutes of that slice (which is now reported as ''individual'' therapy time). In the second slice, there are two residents, so both Resident A and B each receive half of the 10 minutes in that slice, or 5 minutes each. Finally, in the third slice, there are three residents receiving therapy, so each receives a third of 10 minutes, or 3.33 minutes each. Summing across all three slices, Resident A is credited with 10 + 5 + 3.33 minutes, or 18.33 minutes of time. This example demonstrates that the improved methodology does make minor differences in time allocation, although the total allocated therapy time is not affected. Moreover, the two methods will provide identical results when all individuals receive therapy for the full session. Thus, the recomputation of therapy sessions using the time slice methodology, while more accurate, made only minor changes for individual residents.

*Comment:* Several commenters questioned the adjustment performed on therapy minutes, raising two issues: The first relates to ''forcing the data to approximate existing distributions of therapy times across RUG–53 categories,'' by which nothing new is learned. The second regards the paper survey data as part of the calculation of therapy weights and the commenters' opinion that it should be considered invalid and should not be used. While acknowledging the need to adjust the therapy minutes data, the commenter added that the proposed retroactive therapy data adjustments bring into question the accuracy and usefulness of the STRIVE data, especially in light of the small sample size. The commenter believed that these issues also affect the reorganization of residents within the RUG hierarchy, and invalidate the therapy and nursing weights and the subsequent budget neutrality adjustment. In addition, the commenter observed that retroactively adjusting the therapy minutes collected directly from therapists treating SNF patients appears contrary to the purpose and design of the time study, which was real-time, bedside measurement of the resources provided to SNF patients.

*Response:* While we are confident that the analyses conducted during the study are sufficient to adjust the therapy data for use in the RUG–IV model, we understand the commenters' concerns. As we have described in detail, the process used to adjust the therapy minutes (imputation of data elements that are missing or incorrect) is a standard statistical practice, with many methods available; thus, we do not believe it is contrary to the purpose and design of the time study. In STRIVE, changes in therapy minutes had little effect on the therapy CMIs of therapy groups as, once in a group, any statistical average will be relatively stable. However, revising the therapy times did have a substantial effect on the classification of individual residents. This was significant, as only those not meeting the RUG–IV therapy criteria would be eligible for the non-therapy categories from Extensive Services down through Reduced Physical Function, and the research to determine which characteristics differentiated the nursing time of these individuals would be properly focused. Alternately stated, while adjusting the therapy time did not substantially affect the CMI of the rehabilitation groups, it did change the classification of individual residents and was critical to proper analysis. Contrary to the assertions of these commenters, we believe that failure to adjust the therapy minutes would have had a negative impact on the classification of residents requiring complex medical care. Without the adjustment, we believe the therapy minutes would have been underreported, resulting in inaccurate classification of residents, with some residents inappropriately classified in lower-level RUGs. Thus, we are confident that our efforts to adjust for underreporting of therapy minutes actually increased the accuracy of the RUG–IV case-mix classification model.

Our approach to adjusting therapy addressed our concern that, in some facilities, therapists under-reported resident therapy time on weekends and other ''non-PDA'' days, including days where there was no supervision, either by STRIVE data monitors or by staff at the participating facility, of the data collection. However, at least a quarter of the facilities did report patterns of therapy time that appeared reasonable. We took care to include these times, even if paper based, when they seemed appropriate.

We found that the data obtained from facilities where the data collection had been most complete, closely matched the therapy time extrapolated to the entire week from the 3-day period where data had been collected electronically. A final comparison was made to verify the therapy minutes reported on the MDS that was completed during the time study. Again, the reported minutes were consistent with the extrapolation procedure we used. In addition, the RUG distribution, after the adjustment of therapy time, more closely matches the expected therapy RUG national distribution. This comparison was aimed solely at validating the accuracy of our adjustment procedures by comparing our study's RUG–III distribution with the known national distribution. It did not constrain in any way our ability to test alternative approaches to RUG classification. Thus, we are confident that the procedures we used to adjust for data collection were appropriate, and that the therapy analyses conducted during STRIVE accurately reflect therapy utilization overall. Accordingly, we do not believe that it is necessary to discard the paper surveys as the commenter suggested. However, we are also cognizant of the importance of therapy services in the RUG model, and plan to continue our analyses as part of our implementation and post-utilization monitoring of the RUG–IV system.

*Comment:* One commenter observed that no adjustments were made for variation in State practice laws with respect to supervision of physical therapy assistants, occupational therapy assistants and aides, and that due to an acute shortage of therapists in many rural communities, there is a tendency to use more therapy assistants under therapist supervision to the extent that State law allows such practices.

*Response:* While the commenter is correct that we did not examine State practice acts, we did collect data on the use of therapy assistants in nursing homes. To the best of our knowledge, all States recognize and license or certify therapy assistants. We found that the use of therapy assistants has increased significantly since the 1995/1997 time studies. We consider the use of therapy assistants to be appropriate to deliver therapy services when under the supervision of a therapist and within the scope of practice allowed by State law. We presume that the increasing use of therapy assistants is partially related to a current labor shortage for therapists, and partially related to payment incentives rewarding efficient delivery of care. The applicable State regulations governing aides are more heterogeneous. However, in the STRIVE study, we found that aides are being appropriately utilized to furnish support services to the licensed/certified therapists, a role that would be allowed in most if not all States.

*Comment:* One commenter expressed concern about extrapolating 3 days of therapy to 7. The commenter stated that it is inappropriate because weekend days and weekdays are not similar, and that Mondays and Fridays differ from mid-week (Tuesdays through Thursdays) due to admissions and meetings.

*Response:* We agree that it would have been inappropriate to directly extrapolate 3 days of therapy to 7, because 2 of those days (Saturday and Sunday) generally have very low amounts of therapy. However, we did not take the approach described by the commenter. Our adjustment procedure made use only of those weekend days that were actually reported; we never imputed a weekend therapy session. The only adjustment that we made to weekend sessions was to assume that the duration of those sessions matched the average duration of weekday sessions reported for the resident.

Generally, most participating SNFs provide therapy 5 days a week, and only a small subset provide therapy on weekends. Therefore, we agree with the commenter that weekend days and weekdays differ in the amount of therapy provided. However, the STRIVE study took this into account and gave credit only for weekend therapy when it was reported on the paper data collection tool. We did not extrapolate weekday therapy time to the weekend days, and agree with the commenter that such a practice would be inappropriate.

Although we noticed a significant reduction in therapy time when data were collected with the paper tool, we believe this is due to the data collection method and does not indicate a consistent pattern of significantly less therapy being delivered on Mondays or Fridays due to admissions and meetings. In several facilities, PDA data collection was used on Wednesday through Friday rather than Tuesday through Thursday. When the PDA was used on Friday, 21 percent of all therapy time was recorded for Friday. This is close to the 23 percent of time reported for Thursday. When paper data collection was used on Friday, only 12 percent of all therapy time was recorded, indicating a loss of data with the paper collection. If admissions and meetings were the cause of a significant decrease in therapy time, we would expect to see this pattern for all Fridays. Therefore, we believe that our adjustment methodology is a more accurate reflection of the services actually provided during the study.

**iii. ADL Adjustments**

RUG–IV, like RUG–III, uses a scale measuring Activities of Daily Living (ADLs) to identify residents with similar levels of physical function. This scale is used to sub-divide (''split'') each of the major hierarchical categories except Extensive Services. It is also used as part of the qualification criteria for many of the RUG–IV hierarchical categories (Extensive Services, Special High, Special Low, and Cognitive Performance and Behavioral Symptoms), and is used as part of the specific criteria for classifying patients to RUGs within certain categories. In the FY 2010 proposed rule (74 FR 22208, 22225–26, May 12, 2009), we proposed revisions to the RUG–IV ADL Index that reflect both clinical and statistical considerations, with the aim of scoring similarly those residents with similar function. The comments that we received on this issue, and our responses, appear below.

*Comment:* Many commenters agreed with the ADL adjustments, stating that the scale is more sensitive to functional status and allows for a finer analysis of changes in functional status over time. In addition, they agreed with standardizing the ADL index across the various levels of the RUG hierarchy.

Some commenters stated that the ADL scale does not capture provider burden as only 4 ADL areas are used in the calculation, and suggested that other ADL activities such as dressing and bathing should be included. A few commenters were concerned that by starting the ADL score at '0,' some providers may perceive a '0' as requiring no staff time, and that this may cause providers to discharge patients early, refuse to admit certain patients, or not provide the needed supervision or assistance. One commenter stated ''The staff time required to provide 'limited' assistance with bed mobility, transferring, toileting, and/or eating does not vary significantly enough from the staff time required to provide 'extensive' assistance for the same ADL activities.'' One commenter stated that changing the coding of ''Activity Did Not Occur During the Entire 7 Day Period'' from a code of (8) to a code of (0) for both self-performance and staff support was logical because the activity did not occur and, therefore, no resources were used to support the activity. However, one commenter expressed concern regarding the ADL score of ''0'' when the component ADL activity did not occur during the entire 7-day period, and suggested that it should be modified to take into consideration end-of-life situations. For patients in these situations, the commenter stated the ADL score may be low, but the level of resources to care for the resident may be significant, which would not be reflected in their ADL score.

*Response:* We agree that the new ADL scale is more sensitive and that standardization of the ADL index across all RUG hierarchies will improve our ability to measure functional status accurately. We did include other ADL areas during our analysis of STRIVE data including, but not limited to, bathing, dressing, and ambulation, as we did with the original analyses that established the RUG–III case-mix methodology. In both studies, we found that eating, bed mobility, transfers, and toileting were the strongest predictors of resource use, and included these four ADLs in the case-mix system. However, the resource time associated with all ADLs is captured in the nursing minutes assigned to each time study resident, and is reflected in payments under the SNF PPS. In addition, we do not believe that a change in the MDS coding requirements will result in premature discharge of patients or that a score of ''0'' will be incorrectly interpreted as indicating no need for care. First, we will provide instructions on the

meaning of the ADL codes in the MDS manual. Second and more importantly, a decision that a patient is able to be discharged should be based on clinical judgment, and should follow standardized facility operating protocols rather than be determined by an ADL index score recorded on an MDS.

Thus, we do not agree with the commenter's conclusion that the change in coding ADLs will have a negative impact on the care provided to patients in nursing homes. However, we will incorporate training on the new ADL index in our upcoming ''train-the-trainer'' sessions to mitigate concerns on the new scale and interpretation of its purpose.

We do not agree with the commenter who stated that there is no significant difference in staff resource time when providing limited assistance compared to extensive assistance. STRIVE data demonstrate a difference in staff resources among the various levels of assistance that are provided to nursing home residents. We do, however, agree that if resources are not provided for an ADL, then the ADL index should not reflect that care was rendered. It is important to note that the ADL index is based on the 4 late-loss ADL areas and, therefore, while one ADL activity (for example, transferring) may not have occurred during the entire 7-day look-back period, the other ADLs are usually occurring and would be included in the ADL index. We agree with the commenter that the ADL index may not fully reflect care needs for patients nearing the end of life. However, we note that the ADL index is only one factor used to determine resource use. The intensity of nursing staff time and resources for these individuals is reflected more completely in the STRIVE minutes and categorical classification.

*Comment:* Comments about the proposed ADL eating component changes were mixed, expressing both support and concern. A few commenters were pleased that we proposed to use both the Self-Performance and Support Provided items for eating, indicating that adding the ''support provided'' factor to the ADL eating component score is logical and in correlation with the other late-loss ADLs. One commenter was pleased to have Parenteral/IV and feeding tube items removed from the eating ADL, as they have been concerned that this may have been an incentive for providers to use feeding tubes rather than providing assistance to those residents who are able to eat through oral means. One commenter was concerned that the removal of feeding tubes from the ADL score for eating would not take into account the resources required to care for residents who must rely on tube feedings for nutrition, and that they would not be adequately reimbursed.

One commenter cited the statement, ''In the STRIVE analysis, we found that patients receiving One Person Physical Assist or more needed comparable staff resources to patients who were being fed by artificial means * * * the RUG–IV ADL component score does not use Parenteral/IV or feeding tube items.'' The commenter believed that the statement about comparable staff resources is inaccurate, as parenteral/IV or feeding tube assistance can only be done by a licensed nurse, while one person physical assist is most often that of a certified nurse assistant; thus, these are not comparable staff resources.

*Response:* The data from the STRIVE project indicate that using both the Self-Performance and Support Provided items for the eating ADL for all residents achieves a better categorization of residents who require assistance. In RUG–III, a person who receives nutrition via a feeding tube or parenteral/IV is assigned a ''3'' (the most dependent score for eating) regardless of the coding in section G, Physical Functioning and Structural Problems, specifically item G1Ah (eating, self-performance). In RUG–IV, instead of this person being automatically assigned the most dependent score for eating, the score will be based on both the Self-Performance and Support Provided codes. For the MDS 2.0 and the MDS 3.0, the assessor is to code how the resident eats and drinks, including nutritional intake via artificial means; for example, tube feeding, total parenteral nutrition. The assessor is expected to enter codes for eating when a person receives nutrition orally or through a feeding tube or other means. Therefore, the resources to care for a patient with tube feeding are captured on the MDS and in the ADL index and, thus, in reimbursement. We would like to clarify that when we discuss staff resources, we are using wage-weighted minutes. For example, when the licensed nurse provides nutrition to a resident via a feeding tube, the cost is more per hour but the time it takes is less relative to a situation in which an aide feeds a resident who requires total assistance. When an aide feeds a resident who requires total assistance, the cost per hour is less but the time required is greater. Therefore, the wage-weighted resource time is comparable. This was validated by the STRIVE study data.

In this final rule, we are finalizing the revisions to the RUG–IV ADL index as proposed in the FY 2010 proposed rule (74 FR 22225–27).

iv. ''Look-Back'' Period

In the RUG–III case-mix classification system, we identified five services that the data showed to require the highest levels of staff time use: Ventilator/respirator, tracheostomy, suctioning, IV medications, and transfusions. The instructions for coding these items in the MDS 2.0 specified that the item should be coded if it was furnished within the prior 14 days, even if the services were provided to the resident prior to admission to the SNF. In this way, the MDS 2.0 would collect data that should be considered during the patient care planning process. When the RUG–III system was developed, we retained the MDS 2.0 coding procedure regarding these 5 items, based on a clinical analysis suggesting that they would serve as a proxy for medical complexity and higher resource use after admission to the SNF. However, in the SNF PPS final rule for FY 2000 (64 FR 41668–69, July 30, 1999), we reserved the right to reconsider this policy in the future ''* * * if it should become evident in actual practice that this is not the case.'' In the FY 2010 proposed rule (74 FR 22208, 22227, May 12, 2009), we noted that we analyzed the STRIVE data to test the effectiveness of including services furnished during the prior hospital stay in the classification system. We found that, for these five services, utilization during the prior hospital stay does not, in fact, provide an effective proxy for medical complexity for SNF residents, and instead results in payments that are inappropriately high in many cases. Accordingly, we proposed to modify the look-back period under RUG–IV for items in section P1a, Special Treatments and Procedures, of the MDS 2.0, to include only those services that are provided after admission (or readmission) to the SNF. The comments that we received on this issue, and our responses, appear below.

*Comment:* Many commenters agreed that the look-back to the prior hospital stay should be changed so that only services furnished during the SNF stay are reflected in the SNF case-mix classification. In particular, in States that have rate equalization (that is, the private-pay resident must pay the rate established by the case-mix system), private-pay residents would now pay only for services received while a SNF resident. Several commenters believed that the SNF staff need to be aware of services provided to the resident during the acute stay, in order to develop an appropriate plan of care and ensure that

adequate services are provided during the SNF stay. However, some believed that this information does not need to be collected on the MDS, and recommended removing the first column for the Special Treatments, Procedures, and Programs (Section O) draft MDS 3.0 or making that column optional. Others disagreed with CMS changing the look-back into the hospital stay. Many argued that such a change would fail to account for the severity of the patient's condition upon arrival at the SNF. Others believed that eliminating the look-back would negatively affect quality of care provided to SNF residents and could result in increased readmissions back to the acute setting. Finally, one commenter stated ''limiting the look-back in section P1a to exclude hospital services would unfairly punish SNFs that provide valuable services to high-acuity rehabilitation patients whose care is more costly to provide.''

*Response:* As we stated in the proposed rule, we specifically collected staff time data on special treatments that are often provided in a hospital but are not often provided in a SNF after hospital discharge. Analysis of the STRIVE data shows that: (1) The ''look-back'' period does, in fact, capture services that are provided solely prior to admission to the SNF; and (2) there is a much lower utilization of staff resources for individuals who received certain treatments solely prior to the SNF stay compared to those who received those services while a resident of the SNF. In fact, the resources provided to patients who received treatments provided only prior to admission are similar to patients who never received those treatments in either setting. Again, the look-back does not provide an effective proxy for medical complexity and, thus, has resulted in payments that are inappropriately high for many cases. However, we do believe that for care planning purposes, the SNF staff should be aware of the services that were provided during the acute stay and, thus, we did not propose to eliminate the look-back from the assessment tool for these Special Treatments and Procedures. Instead, we proposed to expand the MDS 3.0 for these items to two columns. The first column allows providers to code those services that were provided prior to admission for care planning purposes.

We are concerned that commenters believe that eliminating the look-back to the hospital stay from the payment system will result in poor quality of care provided to SNF residents. The SNF is expected to provide the care required to achieve and/or maintain the resident's highest practicable level of well-being. However, as this concern was raised by several commenters, we will monitor the re-admission rates to hospitals and other proxies that may indicate poor care outcomes, such as QMs. In addition, we will work with the other CMS components to ensure that facilities are adhering to survey and certification requirements, including providing appropriate care to residents.

Further, we do not believe that limiting the look-back period for P1a services would unfairly punish SNFs that provide services to high-acuity patients. As stated above, the STRIVE data do not support the premise that services provided only during the hospital stay to SNF residents result in higher costs to the SNF. Limiting the look-back period helps to ensure that adequate and appropriate payments are made for services received during the SNF stay, while eliminating inappropriately high reimbursement for services that are provided solely prior to admission. Thus, if a patient receives high-acuity services during the SNF stay, those services should be adequately reimbursed. Therefore, we will eliminate the look-back period into the hospital stay for those specific services in section P1a on MDS 2.0, but we will maintain the ability for the provider to code those services provided prior to admission to the SNF on the MDS 3.0 by expanding the MDS 3.0 for these items to 2 columns. We believe that coding for these pre-admission services on the MDS 3.0 will allow providers to effectively capture these services for care planning purposes.

*Comment:* One commenter pointed out that the study for MDS 3.0 conducted by the RAND Corporation (RAND), a non-partisan economic and social policy research group, showed ''look-back periods were highlighted as a significant issue across the assessment (MDS 2.0) tool.'' The commenter further stated that CMS did not consider the findings on the STRIVE project with those of the RAND MDS 3.0 validation study. A few commenters were concerned that the changes to the look-back period made after the conclusion of the RAND analysis resulted in added burden in completing the MDS. They suggested that, prior to introducing the MDS 3.0, a new study should be done to validate the estimated time needed to complete the MDS 3.0.

*Response:* We do not agree with the assertion that we did not consider the RAND data when developing RUG–IV and establishing look-back periods for the various items used in payment. We concur with the RAND study that having multiple look-back periods on the assessment tool (for example, 7 days for some items, 30 days for others; some requiring look-back prior to admission to the SNF, while others only since admission to the SNF; and other look-back differences among the different items of the MDS) may lead to more opportunities for errors in coding, increase record review time and, thus, increase assessment burden. In making the final decisions on the look-back periods that would be applied to each MDS 3.0 item, we worked to balance three concerns: Data collection burden to the provider, consistency of look-back periods across items, and the sufficiency of the data points (that is, days of care) to assign an accurate case-mix classification for payment. Several of the look-back periods recommended by RAND were adjusted later by CMS to maximize their utility for payment and quality monitoring. In fact, RAND also reconsidered the 5-day therapy look-back period used in their study. They concluded that the 5-day look-back was too short to capture the therapy staff utilization and, thus, SNFs would be substantially underpaid if we adopted a shorter look-back. Therefore, both RAND and CMS favored changes to the look-back periods to enhance the accuracy of the MDS 3.0 responses. Finally, we do not believe a validation study is needed to estimate the time needed to complete the MDS 3.0, as none of the changes to the MDS 3.0 look-back periods extend the amount of data to be collected beyond the current MDS 2.0 collection period, and do not represent an additional burden to providers.

*Comment:* One commenter stated that the STRIVE analysis on look-back to services rendered solely in the hospital is flawed as only 5 treatments were used as the basis for this decision, and that some of these modalities are not widely available in the SNF setting. Another commenter stated that if our analysis on the items in section P1a of the MDS 2.0 assessment is accurate (specifically, that the staff resources involved when services were furnished solely during the hospital stay are significantly lower than when those services are furnished during the SNF stay), then MDS coding for Parenteral/IV feedings (K5a) should also specify that these services should only be coded when provided during the SNF stay, and not during the hospital stay.

*Response:* We do not agree that the change to the look-back period is based on a flawed analysis. The change to the look-back period affects only a small subset of the items reported on the MDS. Of these, we collected data on 6

of the 9 Special Treatment and Procedures that are currently used in the RUG–III classification system on the STRIVE Addendum (we inadvertently did not list oxygen therapy in the proposed rule as one of the special treatments and procedures on which we collected pre- and post-admission data; therefore, in response to this comment, we are now clarifying that we also collected data on oxygen therapy on the STRIVE Addendum). We considered a 7-day look-back period for services rendered prior to admission and after admission to the SNF on the STRIVE Addendum. We believe that we looked at a sufficient number of P1a services used in the RUG–III model to conclude appropriately that utilization of P1a services during the prior hospital stay is not an effective proxy for medical complexity during the SNF stay. The frequency of the services coded on the MDS based on the MDS Active Resident Information Report (found at *http://www.cms.hhs.gov/MDSPubQIandResRep.asp*) for the treatments we targeted on the STRIVE Addendum are as follows (first quarter 2006, STRIVE data collection began June 2006):

P1ac IV medications 9.5 percent
P1ag Oxygen 13.3 percent
P1ai Suctioning 1.2 percent
P1aj Tracheostomy care 1.1 percent
P1ak Transfusions 1.0 percent
P1al Ventilator or respirator .5 percent

For the 3 P1a services used in the RUG–III model for which we did not collect extra data on the STRIVE Addendum, the frequencies for coding for the same time frame are:

P1aa Chemotherapy .5 percent
P1ab Dialysis 1.5 percent
P1ah Radiation .1 percent

Of these, all 3 services are furnished to a small volume of SNF patients. Moreover, the actual service may sometimes be performed outside the SNF, and at least some of the individual services within each of these 3 categories are excluded from SNF consolidated billing and paid separately under Part B, outside of the bundled SNF PPS rate. Therefore, we believe it was appropriate to focus on the 6 P1a services listed above.

As noted above, we focused on certain services that, while they are frequently provided in a hospital, are furnished less frequently after the admission to the SNF. One of the main purposes of including P1a services on the STRIVE Addendum was to gather data to determine if utilization of these treatments in the hospital serves as a proxy for medical complexity for a SNF patient, as well as a predictor of SNF staff resource utilization. In fact, we collected data on all of the items used as qualifiers for the RUG–III Extensive Services category, as well as oxygen therapy, a Clinically Complex treatment coded frequently on the MDS 2.0. As discussed above, our analysis of 6 of the 9 look-back items listed above clearly indicated that utilization during a prior hospital stay is not an effective proxy for medical complexity for a SNF patient. Based on this, we believe that it is appropriate to eliminate the look-back period to the prior hospital stay for all P1a Special Treatments and Procedures to ensure that accurate and appropriate payments are made based on resources used during the SNF stay.

Finally, one commenter asked us to limit the look-back period for Parenteral/IV feedings (K5a) so that these services are coded on the MDS only when provided during the SNF stay, and not during the hospital stay.

We did include 2 items on the STRIVE Addendum for parenteral feedings. The first item asked the assessor to report the number of days that the parenteral feeding was administered in the facility over the last 7 days, while the second asked for the date on which the parenteral feeding was last administered. However, we were not able to use this information to determine with absolute certainty when the patient received the service in the SNF. When the data indicated a higher probability that the feeding was provided during the SNF stay as opposed to solely during the hospital stay, the resources were similar to when the data indicated that the feeding was provided exclusively in the hospital. In other words, for this particular treatment, the staff resources to care for a patient who received parenteral feeding only during the hospital stay and the staff resources to care for a patient who received the parenteral feeding in the SNF appeared to be comparable and, thus, indistinguishable. Therefore, based on the limited nature of the information we have available at this time, we do not believe that it would be appropriate to limit the look-back period for Parenteral/IV feedings (K5a) so that these services are coded on the MDS only when provided during the SNF stay (and not during the hospital stay). Thus, we will maintain our current MDS instructions for coding Parenteral/IV feedings (K5a), such that patients may be coded as receiving parenteral/IV feedings, regardless of whether they receive them before or after admission to the SNF.

*Comment:* One commenter stated that SNFs are admitting more complex patients and, thus, by eliminating the look-back into the hospital stay, CMS is ''reinforcing a compartmental approach towards assessing a patient's care needs.''

*Response:* We do not agree. As stated earlier, we will continue to have providers code services that are provided during the acute hospital stay on the MDS 3.0 for care planning purposes. Therefore, we continue to encourage the sharing of information between settings, and believe that the SNF will still be able to properly assess and develop an appropriate care plan based on services provided prior to SNF admission.

*Comment:* One commenter characterized the elimination of the look-back period into the hospital stay as a ''rate cutting measure.''

*Response:* Neither the MDS 3.0 nor the RUG–IV were designed as or function as ''rate-cutting measures.'' As discussed above, limiting the look-back period for P1a Special Treatments and Procedures ensures that adequate and appropriate payments are made for patients that actually receive these services during a SNF stay, while eliminating inappropriately high reimbursement for services that are provided solely prior to admission. Furthermore, by introducing the RUG–IV classification system in a budget neutral manner, we ensure that parity is maintained between aggregate payments to SNFs under RUG–III and RUG–IV. For FY 2011, the system is being designed so that overall payments under RUG–IV will be at the same level as what overall payments would have been under RUG–III if we had not changed to the new model. Although aggregate payments do not change, the distribution of payments does change, which is why the payment rates for the complex medical groups (that is, Extensive Care, Special Care, and Clinically Complex) will increase significantly.

As proposed in the FY 2010 proposed rule (74 FR 22227–28), we are modifying the look-back period under RUG–IV for the Special Treatment and Procedures currently listed in section P1a of the MDS 2.0, to include only those services that are provided after admission (or readmission) to the SNF. In addition, we will expand the MDS 3.0 for these items to 2 columns. The first column will allow providers to code services that were provided prior to SNF admission for care planning purposes.

v. Organizing the Nursing and Therapy Minutes

In the FY 2010 proposed rule (74 FR 22208, 22228, May 12, 2009), we discussed the proposed organization of nursing and therapy minutes under the RUG–IV model. The comments that we received on this subject have been addressed in detail in section III.C.1.b.ii of this final rule.

vi. Data Dissemination

*Comment:* One commenter stated lack of access to data limited the ability to determine whether or not the sample can be relied upon to generalize nationally. Another commenter said that the STRIVE data disseminated to date provided little information about the study's findings on resource utilization by provider type, size, and case mix.

*Response:* We do not agree with the comments indicating that we have provided insufficient data to evaluate this effort. Rather, from its very inception, we have taken every opportunity to seek input on and share available information about the progress of our research, not only through the rulemaking process, but also in Open Door Forums, at numerous Technical Expert Panels and other meetings, and on our Web site. In fact, we regard the exceptionally detailed and varied nature of the commenters' critiques of our supporting data as at least in part a direct reflection of the unusually large amount of data that we have made available to the public throughout this process. We note that even after the issuance of the FY 2010 SNF PPS proposed rule, we continued to respond to requests for technical assistance. We took questions on a daily basis, and posted additional technical materials on our Web sites so that all stakeholders could have access to the technical questions that we received. In addition, we note that in section III.C.1 of this final rule, we have addressed comments regarding the representativeness of the STRIVE sample.

We also wish to note that one of the large provider groups submitted a detailed report by an independent contractor, stating that the lack of available data precluded ruling out the possibility that the study was seriously flawed. While we appreciate the concerns raised in this report, we have no way of knowing what data were provided to the researcher in order to conduct the analysis, as we did not receive any requests for technical information or clarification. Thus, in section III.C.1 of this final rule, we have provided detailed responses to the independent researcher's report, but cannot accept the researcher's more global conclusions on methodological flaws and the validity of the study.

Finally, a few commenters expressed their concern that CMS has not provided them with the raw data used in the study, and cited the unavailability of raw data as the reason they could not adequately evaluate the RUG–IV model. CMS does not typically release analytic data files that contain data on participating facilities, participating employees, or on individual patients whose data are HIPAA-protected. We did, however, eliminate the personally identifiable data, and made a detailed analytic file available to all stakeholders. We believe that this file, in conjunction with the RUG–IV grouper, data on the anticipated redistribution of patient days under the RUG–IV, and the CMIs calculated for use in the RUG–IV model, provided more than sufficient data to evaluate the impact of the conversion to RUG–IV. Thus, we do not agree with the commenters who claimed that we failed to provide adequate data for the evaluation of the RUG–IV model.

*Comment:* One commenter requested CMS to provide the public with additional information about how occupational therapists were asked to record their time and interventions with residents using HCPCS codes through personal data assistants (PDAs) and a paper-based tool. The commenter expressed concern that therapists unfamiliar with HCPCS codes would be confused reconciling Medicare Part B HCPCS coding policies (CCI edits, 8 minute rule, *etc.*) with the ''click on/click off'' mentality of the STRIVE data collection PDA tool. The commenter was concerned that the inexperience of occupational therapists with these HCPCS codes could have skewed the study results.

*Response:* As part of the STRIVE study preparation, we worked with the therapists at the participating facilities, and trained them on study procedures. The therapists were not required to use HCPCS codes to report the modalities provided to each patient. Instead, the description of the services was included in the PDA by name, and the HCPCS code was listed next to it to assist those therapists who were more familiar with the codes than with the modality descriptions. We did not receive any complaints from the participating therapists that they were either unfamiliar with or did not know how to use HCPCS codes within the context of the STRIVE data collection.

*Comment:* A few commenters indicated that using an ''unvalidated RUG–IV grouper'' with a new MDS 3.0 assessment instrument is inconsistent with CMS's policies in developing the PPS for other Medicare providers, and does not meet OMB standards that regulatory analysis should be transparent and the results must be reproducible. In addition, a commenter noted that, in the interest of full disclosure and transparency, CMS has an obligation to disclose project limitations and uncertainties, and should consider additional research prior to rulemaking to evaluate such limitations.

*Response:* We do not agree with the commenters' assertions that we are proposing an ''unvalidated RUG–IV grouper.'' The methodology used to develop the RUG–IV grouper applies the same analytical procedures to the STRIVE data as were used to create the original RUG–III grouper. The validation process used to update the case-mix classification system to RUG–IV is described in detail in section III.C.1 of this final rule. In addition, we conducted detailed comparisons of the MDS 2.0 and MDS 3.0 to develop crosswalks, and tested these crosswalks to ensure that the RUG–IV grouper classified residents to the same groups using either the MDS 2.0 or MDS 3.0. These crosswalks have been posted on the CMS Web site at *http://www.cms.hhs.gov/nursinghomequalityinits/25_nhqimds30.asp*.

In addition, as evidenced by the detailed discussion in section III.C.1 of this final rule, we are confident that we have met OMB's requirements for regulatory analysis and full disclosure. Moreover, we evaluated the STRIVE findings at every stage of our research over the past 3½ years, and conducted additional analyses to test our findings and strengthen the validity of the RUG–IV model. As the evaluation of project findings was built into the project plan, we do not accept the assertion that additional research is needed before introducing the RUG–IV case-mix model for FY 2011.

2. The RUG–IV Classification System

In the FY 2010 proposed rule (74 FR 22208, 22229, May 12, 2009), we discussed the various features of the proposed RUG–IV model, and compared the proposed model to the existing RUG–III model that is currently in use. The comments that we received on this subject, and our responses, appear below.

General Comments

*Comment:* We received a variety of comments regarding the Medicare RUG–IV model, with some commenters expressing support and others

expressing concern over the proposed changes. One commenter characterized it as an improvement over the current Medicare RUG–III model that better represents the clinical needs and resource utilization of nursing home residents. Another commenter noted that, while a Medicaid model of RUG–IV has yet to be published, if the changes parallel the Medicare model, the result will be a more appropriate case-mix reimbursement system that fairly classifies residents. Commenters from a major industry organization commended CMS on its efforts to expand RUG–IV classifications accounting for the relative resource utilization of different case-mix groups. They believe the modification of the eight levels of hierarchy and the increase in the number of case-mix groups from 53 to 66 is a step in the right direction for allowing SNFs and therapists to define and document the patient's needs and resources more accurately, thus improving the quality of care. They encourage CMS's continued efforts in this area.

Other commenters questioned the accuracy of the RUG–IV model in capturing changes in acuity, such as the higher nursing complexity for patients in rehabilitation groups. While several commenters appreciated the added levels for extremely complex patients with ventilators and/or isolation, they were concerned that the RUG–IV model did not adequately recognize patients that had high-cost IV medication and pharmaceutical needs.

*Response:* The RUG–IV model was derived from the STRIVE data, and we believe that it reflects current practice and resource use in SNFs. However, we recognize that, no matter how accurately we identify typical practices and resource needs, there are atypical cases. In the FY 2010 SNF PPS proposed rule, we discussed our efforts to develop a separate method to reimburse for non-therapy ancillaries (NTAs), such as the IV medications and pharmaceuticals discussed by these commenters. We are committed to developing an NTA classification system as quickly as possible to recognize these higher costs.

Extensive Category

*Comment:* Several commenters supported the proposed changes in the Extensive Services Category in the RUG–IV model. A few commenters expressed concern over the removal of suctioning, noting if that if it is removed, Medicare will provide little reimbursement or incentive for SNFs to admit respiratory patients. One commenter noted that the frequent suctioning required by far utilizes increased nursing and respiratory therapist resources, even more so than trachesotomy care. The commenter stated that the proposal to move suctioning from the Extensive Care Category to a lower RUG category would significantly decrease their reimbursement.

*Response:* In the vast majority of cases, the STRIVE data showed that suctioning was highly correlated with the tracheostomy or ventilator services. Even in the absence of these two Extensive Care services, suctioning was associated with other respiratory conditions that are included in RUG–IV Special Care categories. We did find a small number of cases where suctioning was recorded on the MDS in the absence of any other respiratory condition or service. The data show that the staff resource time captured for this subset of suctioning patients was significantly lower than for patients reporting both suctioning and respiratory conditions. Eliminating suctioning as a RUG–IV qualifier only affects this smaller group where the service appears unrelated to respiratory conditions. Thus, we do not believe that the removal of suctioning as an independent qualifier will reduce the incentive for SNFs to admit respiratory patients or decrease reimbursement.

Special Care High and Special Care Low Categories

*Comment:* Several commenters supported the RUG–IV expansion and splitting of the RUG–III Special Care Categories into the Special Care High and Special Care Low Categories. These commenters also stated that while the addition of several new case-mix groups adds complexity to the model, the splitting of Special Care into a High and Low category adds finer distinctions of resource utilization and, thus, payment rates.

*Response:* CMS acknowledges the support of the commenters and concurs with the point of finer distinctions of resource utilization and payment rates by implementing a split of RUG–III Special Care Category into Special Care High and Special Care Low Categories in RUG–IV.

Fever with Dehydration

*Comment:* One commenter questioned the inclusion of dehydration as a qualifier with accompanying fever in the Special Care High Category versus the removal of dehydration alone as a qualifier in the Clinically Complex Category. To the commenter, the proposed rule appeared to indicate that dehydration as a qualifier has been removed from ''any'' category, implying that dehydration, even in combination with fever, would not contribute as a qualifying element to any RUG classification. The commenter questioned whether it was CMS's intention to leave dehydration as a qualifier in the Special Care High Category, in combination with fever; if so, then CMS should clarify the statement about dehydration in the proposed rule.

*Response:* As discussed in the FY 2010 proposed rule (74 FR 22231–34), dehydration was dropped as a qualifier in any category based on a finding by the American Medical Association (AMA) that there is no standard definition of dehydration among providers (*see* Faes, MC, ''Dehydration in Geriatrics,'' Geriatric Aging, 2007: 10(9): 590–596, available online at *http://www.medscape.com/viewarticle/567678*). We further stated that based on our MDS review, we believe that this qualifier is subject to a wide range of interpretation and, therefore, is unreliable as a standard for RUG classification. The inclusion of dehydration in conjunction with fever was inadvertent. In dropping dehydration as a qualifier in any category, for the reasons set forth above, dehydration should have been dropped as a qualifier accompanying fever. Thus, in response to the comment, we are clarifying that in RUG–IV, we are dropping dehydration as a qualifier accompanying fever in the Special Care High category. However, we are clarifying that fever in combination with pneumonia, vomiting, or weight loss are still qualifiers in the Special Care High category under RUG–IV.

*Comment:* One commenter indicated that the amount of nursing resources is directly correlated with the number of wounds a patient has, and that patients with multiple wounds would be better reflected in the Special Care High RUG category. For example, Patient A requires skilled treatment for two stage 2 wounds. The nurse is able to complete the wound care independently. Patient B requires skilled treatment for two stage 2, one stage 3, and two stage 4 wounds on various locations of the body; the nurse is able to complete the wound care independently, but it may take a significant amount of time to care for the wounds. The commenter believed that the more wounds a patient has, the more resources they will require.

Another commenter believed that Stage 2 pressure ulcers should be in Special Care Low, and that Stage 3 and 4 should be in Special Care High, because they require more nursing time and treatments than Stage 2 ulcers. One commenter was concerned that venous

and arterial ulcers may be misclassified, and that definitions should be available for the different types of ulcers.

*Response:* Based on these comments, we conducted numerous reviews of the STRIVE data regarding staff resources used to treat ulcers, and have determined that the research supports that we classify venous and arterial ulcers for payment purposes with pressure ulcers; however, it does not support separating wound care into 2 separate categories. We will maintain the policy outlined in the proposed rule and keep pressure ulcers in the Special Care Low category based on resource use associated with these conditions. As proposed, the patient will qualify for this category if 1 of the following is present along with 2 or more skin treatments:

- 2 or more Stage 2 pressure ulcers; or
- 1 or more Stage 3 or Stage 4 pressure ulcers.

In addition, based on our review of the STRIVE data, the patient will also qualify in the Special Care Low category if 1 of the following is present along with 2 or more skin treatments:

- 2 or more venous/arterial ulcers; or
- 1 Stage 2 pressure ulcer and 1 venous/arterial ulcer.

We will define the different types of ulcers in the RAI manual as the commenter suggested.

*Comment:* A few commenters questioned the elimination of several Special Care qualifiers. These included fever with tube feeding, and aphasia with tube feeding. While the commenters understood that CMS has proposed these changes as a result of the data derived from the STRIVE time study, they regarded the conclusion as counterintuitive to what is known to be in practice: For example, in the case of both fever and aphasia, it is clear that these conditions seriously complicate the course of treatment and result in significant added resources of both staff time and medical supplies. While the commenters commended the statistical analysis and modeling that went into these decisions, they asked that CMS reserve final judgment on these issues for review prior to finalization of RUG–IV.

*Response:* We believe that the STRIVE data accurately reflect wage-weighted staff time resources for aphasia with tube feeding. As discussed in the proposed rule (74 FR 22231), we are dropping aphasia based on the average staff resource time associated with that condition. As discussed in the FY 2010 proposed rule, we dropped the aphasia requirement because, based on the results of the STRIVE analysis, aphasia no longer correlated with tube feeding. Thus, we are retaining tube feeding as a Special Care Low qualifier, but are dropping aphasia. The mechanism of placement in a specific RUG group is such that a patient qualifying for the particular group had no other qualifiers for placement in a higher group. Had that been the case, then the patient would have been included in the higher group reflecting more resource utilization. Patients with aphasia frequently qualify for a higher Rehabilitation Category, because aphasia is often accompanied by another condition that warrants such a RUG classification. All of these medical factors blend into the overall resource utilization statistical mosaic for the RUG–IV system.

Based on the comments received, we reviewed the data on the staff resources required to treat patients with feeding tubes. We found that fever was a complicating factor and that the resources needed to treat a patient with both fever and a feeding tube were significantly higher than for a feeding tube alone. Thus, we will keep fever with tube feeding as a qualifier in the Special Care High category. Again, tube feeding alone remains as a Special Care Low item.

Clinically Complex Category

*Comment:* A few commenters responded positively to the expansion in the number of groups from 6 to 10 in the RUG–IV Clinically Complex Category. They noted that the expansion is due to increasing the number of ADL score breaks, particularly for moderate and more independent functioning residents.

*Response:* CMS acknowledges the support of the commenters and believes the expansion will capture a more accurate reflection of resource utilization in the SNF.

Pneumonia and Oxygen Therapy

*Comment:* One commenter stated that there appeared to be better reimbursement for pneumonia and oxygen therapy and was pleased that it would help with the care of these patients. Another commenter expressed concerns regarding oxygen therapy, stating this item can be gamed very easily. They recommended that CMS define what oxygen therapy is and specify a minimum amount of time/days for classification in the Clinically Complex Category. They pointed out that currently, SNFs can code this item if there is oxygen available on a PRN (''as needed'') basis, and that the resident needs to use it only once to qualify for the category.

*Response:* CMS has considered the suggestion of the commenters and reviewed the STRIVE data. In doing so, we have determined that, based on average resource use, oxygen therapy with respiratory failure, rather than oxygen therapy alone, should qualify for the Special Care Low Category, as the average resource time for oxygen therapy with respiratory failure is more consistent with the average resource use associated with the Special Care Low category. Oxygen therapy alone, based on average resource time, will qualify for the Clinically Complex Category. Regarding the suggestion for defined oxygen therapy regimens for classification in the Clinically Complex category, we note that the patient must require skilled services, and under the regulations at 42 CFR 409.33(b)(8), services that qualify as skilled nursing services include the initial phases of a regimen involving the administration of medical gases. Because the initial phases of an oxygen therapy regimen qualify as SNF services, we are not going to require a minimum number of days or amount of time for classification, and will maintain the MDS 2.0 coding instructions for oxygen therapy for use in the RUG–IV model.

Physician Orders

*Comment:* One commenter supported dropping physician orders as a qualifier due to lack of specificity and the variable nature of this qualifier, making it an unreliable predictor of resource use. Another commenter expressed confusion about the physician order qualifier, and whether it was CMS's intention to remove all physician orders as qualifiers in any category. A few commenters disagreed with the statement about physician orders being an unreliable predictor of resource use. One commenter with a background in nursing noted that it does not make sense to say that it does not take significant time to review new orders, carry them out, order medications from the pharmacy, order labs, *etc.,* and that this is one of the major reasons sub-acute units are busier than long-term care units. Another commenter stated that physician order changes are a good way to capture instability, and that the care of unstable residents can be more costly due to their increased use of lab tests, new medications, and nursing time.

*Response:* While the RUG–III model has used physician order changes as a proxy for instability, analysis of the STRIVE data did not support its continued use because of its lack of

specificity and variable nature. In an effort to achieve greater clarity and prevent misinterpretation, as we proposed, we are eliminating the physician orders qualifier from the Clinically Complex Category in RUG–IV. However, we are clarifying that we are retaining physician order changes in association with diabetes (that is, requiring daily insulin injections and physician insulin order changes on 2 or more days) in the Special Care High category because the STRIVE data show that physician orders in combination with diabetes with injections is a reliable predictor of resource use. The MDS 3.0 is being modified to collect physician order changes specifically related to the patient's diabetic condition.

Internal Bleeding

*Comment:* One commenter noted that as a result of the STRIVE study, internal bleeding was dropped as a qualifier. While the commenter understood that CMS has proposed these changes as a result of the data derived from the study, the commenter regarded the conclusion as counterintuitive to what is known to be in practice: This condition seriously complicates the course of treatment and the result is significant added resources of both staff time and medical supplies. Another commenter pointed out that transfusion services are costly to SNFs, and favored their inclusion as an indicator for RUG payment calculation, not simply for care planning purposes.

*Response:* CMS recognizes that internal bleeding can be a serious medical condition requiring an unusual amount of staff resources and supplies to control. However, the resource minutes derived from the STRIVE study were significantly lower than other conditions classified into the Clinically Complex category. These results suggest a high degree of variation in the conditions coded as internal bleeding that makes the item unreliable for use in a case-mix classification model. We wish to note that transfusions have been retained as a Clinically Complex qualifier in the RUG–IV model.

Dehydration

*Comment:* There were several comments about the removal of the dehydration qualifier for the Clinically Complex Category. Comments from a major industry organization agreed with CMS regarding the lack of a standard definition of dehydration, and that the signs and symptoms of dehydration may be vague and even absent in older adults. Commenters believed that continuing to use dehydration as a qualifier could result in inaccuracy in RUG classification. The commenters did not minimize the potentially serious nature of dehydration and the need for prompt medical attention in some cases, but rather, supported dropping it as a qualifier in order to improve coding accuracy.

Another commenter cited the American Medical Directors Association's (AMDA's) newly revised clinical practice guideline, ''Dehydration and Fluid Maintenance in the Long-Term Care Setting'' (*see http://www.cpgnews.org/DF/index.cfm*). Specifically, the commenter cited the AMDA as concluding that the confusion over the definition of the nonspecific, generic term dehydration results in confusion about the clinical diagnosis of dehydration in the long-term care (LTC) setting. According to the commenter, AMDA has concluded that dehydration is an unreliable quality of care indicator.

A number of commenters stated that while dehydration may be difficult to quantify (as stated in the proposed rule), the requirement to assess, plan, intervene, evaluate, and revise care plans for the patient at high risk of dehydration remains a significant clinical issue. The commenters further stated that instances whereby facilities fail to complete such assessment and documentation is not a valid reason to eliminate appropriate reimbursement for facilities that do provide the necessary standard of care.

*Response:* CMS agrees with the commenters stating that continuing use of dehydration as a qualifier could result in inaccuracy in RUG classification. As demonstrated by the wage-weighted staff time resource utilization, dehydration is an unreliable indicator of resource use. Therefore, dehydration has been removed as a qualifier from the Clinically Complex category of RUG–IV, and has also been removed as a qualifier accompanying fever in the Special Care High category. However, we would like to emphasize that we agree with the commenters regarding the severity of dehydration and the requirement for prompt medical attention. We expect that dehydration is seen in association with other services and conditions that are used as RUG–IV qualifiers. Thus, we do not expect that this change will discourage appropriate care or eliminate reimbursement for Medicare patients with skilled care needs.

IV Medications

*Comment:* Some commenters did not support the movement of the IV medications qualifier from the Extensive Services Category to the Clinically Complex category. The commenters indicated that IV medications drive high cost to the SNF, and this downward movement of IV medication will not cover the cost of purchasing most IV medications. The commenters recommended further study of the type of residents seen in the SNF setting, and reviewing the cost of providing that care in relationship to IV medications. If the shift to the Clinical Complex category would occur, the commenters recommended excluding the High cost IV medications from SNF consolidated billing.

Some commenters believed the inclusion of IV medications as an Extensive Services qualifier, as it is in the RUG–III classification system, appropriately captures the cost of providing the critical treatment these therapies offer to ill and injured patients.

*Response:* Although certain medications may have high costs, the STRIVE study data show that the average resource times related to IV medications are more reflective of conditions in the Clinically Complex category than the Extensive Services category. CMS recognizes the impact of high-cost medications on SNFs and is presently developing a protocol to assess the impact of non-therapy ancillaries, as discussed in the FY 2010 proposed rule (74 FR 22238–41). However, as discussed further in section III.G of this final rule, we currently do not have the statutory authority to exclude items such as IV medications from consolidated billing.

Look-Back Period for IV Medications

*Comment:* Some commenters expressed concern that the proposed RUG–IV model will eliminate all services provided in the acute setting, such as IV medications, as a qualifier for higher RUG categories. The commenters stated this eliminates the ''presumption of coverage'' that we clarified in the SNF PPS final rule of July 30, 1999 (64 FR 41666–41670), which allows a beneficiary who was in the acute setting for pneumonia, septicemia, and infectious diseases to be considered ''skilled'' through the first assessment reference date. The commenters stated that the removal of the IV fluid ''14-day hospital look-back'' qualifier for the SNF Extensive Services Category in RUG–IV fails to recognize the high risk of relapsing conditions with this patient population. The commenters believe this should be a consideration in skilled nursing assessment during the initial five-day assessment period, and that such care should be appropriately reimbursed, as it is in the current RUG

structure. These commenters stated that removal of this qualifier will lower the payment to SNFs, and that when IV medication does qualify, moving from Extensive Services to Clinically Complex will also result in lower payment. The commenters believed the nursing care of administering the IV will no longer count as a key factor in obtaining a refinement RUG and will essentially eliminate the refinement RUGs in most if not all Medicare stays. In addition, they believed that the reimbursement will not be enough to pay for the cost of the IV, let alone the cost of providing the nursing care required to administer the IV.

Several commenters believed the appropriate and necessary monitoring of the patient to prevent recurrence or exacerbation of the condition for which the IV medication was provided is a reason for inclusion in the Extensive Services category, and that it has not been considered in the removal of IV medication in the look-back period.

Some commenters noted that the STRIVE data analysis of the 14-day ''look back'' period for IV medication and 7-day ''look back'' period for IV fluids did not demonstrate a statistically significant difference in nursing time. The commenters suggested that CMS look at the nursing time spent monitoring when a resident has had an IV medication administered within the last 7 days, and factor it into the nursing component. The commenters believed that residents receiving IV medication in this time frame require a significant amount of nursing time to monitor side effects of the medications, as well as disease exacerbations. The commenters referenced literature indicating that SNFs have a lower rate of return to the hospital than other post acute settings; therefore, the time spent monitoring residents, notifying physicians of condition changes, and implementing care plan changes must be taken into consideration when making changes in the RUG system. The commenters recommended shortening the window as opposed to removing the provision altogether, that is, a 7-day look-back to capture IV meds. The commenters requested alternatives be considered before the proposed rule is implemented.

*Response:* CMS recognizes the concern of the nursing home community regarding levels of reimbursement. However, as discussed above in section III.C.1.b.iv of this final rule and in the proposed rule (74 FR 22228), our analysis of the STRIVE data supported the conclusion that the capture of certain preadmission services by the look-back does not provide an effective proxy for medical complexity in the SNF, and thus is not an effective predictor of subsequent resource intensity during the SNF stay. Therefore, we believe it is appropriate to eliminate the look-back to the hospital stay for P1a services, rather than adopt a shorter look-back period. However, we noted in the proposed rule that it is still important that the SNF consider preadmission services for care planning purposes and we have designed the MDS 3.0 accordingly. Regarding the IV medications qualifier, as discussed above, the STRIVE data showed that the average resource times related to IV medications are more reflective of conditions in the Clinically Complex category. Therefore, we believe that under RUG–IV, facilities will be appropriately reimbursed according to the wage-weighted resource staff time associated with a patient's condition. As discussed above, CMS recognizes the impact of high-cost IV medications on SNFs, and is developing a protocol to assess the impact of non-therapy ancillaries, as discussed in the FY 2010 proposed rule (74 FR 22238–41). Finally, we do not agree that eliminating the look-back period to the hospital stay eliminates the presumption of coverage, because even in the absence of the look-back, it remains possible for a resident to be assigned on the initial 5-day, Medicare-required assessment to one of the RUGs that we have designated as qualifying the resident for the presumption.

Patient Acuity and RN Care

*Comment:* Several commenters noted that the residents requiring IV medications are sick, as evidenced by the infection causing the need for IV antibiotics, and require extra nursing observation in addition to the RN time for IV starts, IV ordering, and IV administration. The commenters supported not coding the IVs that were given in the hospital, but questioned whether we are adequately accounting for the amount of care provided to residents receiving rehabilitation and in-house IVs, noting that there is no longer a provision for them to get a higher RUG rate. These commenters did not support dropping the IV medications and fluids to a lower RUG group, arguing that this is a situation requiring the presence, vigilance, and assessment skills of a RN. In addition, these commenters asserted that the complex nature of the residents of some SNFs can involve co-morbidities, non-verbal status with varying communication methods, various levels of cognitive abilities, and difficult feeding strategies that can best be treated within a specific type of facility, and that the patients are discharged from acute care much earlier than the typical geriatric resident.

*Response:* CMS appreciates the support of the recommendation not to include a 14-day IV look-back as a qualifier for the RUG–IV classification. We recognize and value the presence, vigilance, and assessment skills of an RN. However, all of the elements mentioned in the comment, including nursing observation time, IV starts, IV ordering, and IV administration, were captured in all of the nursing homes participating in the STRIVE time study. The STRIVE data did not reflect a statistically significant increase in wage-weighted staff time resource utilization for the patient population receiving IV medications, and the average staff resource time for these patients was more reflective of the Clinically Complex category.

Non-Patient Nursing Time

*Comment:* Some commenters objected to moving the IV medication qualifier to the Clinically Complex category and stated that the RUG–IV nursing case-mix index assigned to IV medications does not account for the additional expended nurse resources. They noted that those resources are affiliated with the increase in documentation associated with IV medication administration, and the specific nurse training required for effective administration and management of patients receiving IV medications; for example, when caring for a patient receiving IV medications, the nurse's time requirements go beyond the time he/she spends directly with the patient, and include completing detailed IV assessment flow sheets, preparing the IV medication, reviewing lab work and consulting with the pharmacist, and becoming IV certified.

*Response:* Administrative documentation and other non-patient nursing time were incorporated into the STRIVE time study. In addition, the costs of training and administrative documentation were captured in the 1995 base year for the SNF PPS's bundled rate; any bedside training and administrative documentation performed during the time study would have been captured. Further, as discussed above, the STRIVE results supported moving the IV medications qualifier to the Clinically Complex category.

Financial Hardship

*Comment:* Several commenters believed that dropping IV medications from the Rehabilitation/Extensive Services category and the Extensive

Services category will cause financial hardship to long-term care facilities, and undue stress to the residents. The commenters cited the following reasons:

- They are very expensive, which may be a factor for consideration in determining potential admissions to long-term care facilities. It is hard enough now not to lose money on patients requiring expensive IV medications.
- They are used for very ill residents who require more nursing hours than any of the conditions included in any of the Extensive Care or Special Care categories.

The commenters did not question the general findings of the STRIVE project, but expressed concern about the specific implications of those findings for IV medications used in the facilities.

One commenter requested that data analyses be performed to compare nursing home residents admitted with IV therapy to those admitted without IV therapy, both for their facilities' residents and for a benchmark of nursing home residents nationwide. The commenter presented the results of one such study. The national benchmark was constructed using MDS data for all clients from a specific organization and its members and includes more than 2,700 facilities nationwide with more than 400,000 MDS assessments. Two MDS variables were used in this analysis: (1) Item P1ac (IV medications), and (2) item K5a (IV fluids). The commenter's analysis of data from the specific facilities and from the national data showed statistically significant differences between the group with IV therapy and the group without IV therapy, with the former group having a higher level of acuity and a greater need for skilled nursing resources. The commenters questioned the validity of the STRIVE study, which demonstrated no time difference between giving a patient an oral antibiotic versus administering an IV antibiotic.

The commenters stated that most of the patients receiving IV therapy are elderly and have suffered a major illness or hospitalization and, thus, require the IV therapy they are receiving. These commenters questioned the incentive for SNFs to continue to provide IV therapy services if the RUG–IV system is implemented as proposed.

Another commenter pointed out that IV medications and IV fluids provided in a SNF require the presence of an RN in most States, and that facilities must employ RNs specifically to provide the residents with IV services, which can be costly in rural areas where there are shortages of healthcare professionals. The commenter asserted that prior to the RUG–53 refinement to the SNF PPS, residents requiring IV medications or fluids were frequently rejected by SNFs because of the expense and difficulty in finding nurses to provide care. The commenter expressed concern that bumping the IV medications down to the Clinically Complex category will again adversely affect resident admissions to nursing homes.

*Response:* The STRIVE study captured, and the data reflects, resource time expended by all staff levels. As discussed above, the STRIVE study indicated that the average resource times associated with IV medications are more reflective of conditions in the Clinically Complex category.

Thus, we believe that classification and reimbursement under the Clinically Complex category for IV medications is appropriate, and should not result in financial hardship. Under RUG–IV, reimbursement for patients with complex nursing needs such as IV therapy will increase significantly, and should be sufficient to cover the cost associated with these patients. We will, of course, continue to monitor utilization practices to determine whether there is any impact on access to or quality of care.

Still, as the payment under RUG–IV reflects the nursing resources and patient complexity associated with the provision of IV medications, we do not believe that access to care will be adversely affected. As discussed above, CMS recognizes the impact of high-cost medications on SNFs and is presently developing a protocol to assess the impact of non-therapy ancillaries as discussed in the FY 2010 proposed rule (74 FR 22238–41).

Behavioral Symptoms and Cognitive Performance Category

*Comment:* One commenter supported the combined Behavior Symptoms and Cognitive Performance Category in the RUG–IV model. This category combines the two separate categories of Impaired Cognition and Behavior Problems in RUG–III into the single new category with a combined total of 4 RUG groups as opposed to 4 in Impaired Cognition and another 4 in Behavior Problems.

One commenter noted that while patients would classify in this group when they display only behavioral symptoms, or when they display only issues of cognition, they also remain in this group even when they have both conditions. The commenter added that many residents have issues with both dementia and behavioral problems and probably require more resources or staff time to deal with both issues. The commenter believes that there needs to be an additional category with a higher CMI that recognizes the combination of both issues.

*Response:* During the meeting of the Technical Expert Panel in Spring 2009, this issue was discussed at some length. Unlike the results from other countries, the United States STRIVE time study analysis did not indicate that there was an increased wage-weighted staff time resource utilization with patients exhibiting both behavioral and cognitive issues. Reasons for this may include effective, monitored medication, and specialized, well-equipped nursing facility settings in this country. In addition, we need to consider whether the needs of individuals with cognitive impairment or serious behavior problems are addressed through specialized State programs similar to the Intermediate Care Facilities for the Mentally Retarded (ICFs/MR) for targeted populations.

Reduced Physical Function Category

*Comment:* One commenter supported the increased case-mix classification assigned to patients receiving restorative therapy in the Reduced Physical Function Category. The commenter believes this will better reflect the amount of nursing resources needed to implement an effective and efficient restorative program. A few commenters responded to CMS's request for comments on the tertiary split for restorative nursing in the RUG–IV model. Specifically, they noted a discrepancy between the reported service and the nursing minutes; in approximately half the Reduced Physical Function groups, the nursing minutes were lower for patients where restorative nursing was reported on the MDS than for patients who were not receiving the service. Commenters suggested most of the nursing rehabilitation may be provided by individuals under the direction of nursing staff who are not classified as nursing personnel, such as nurse aides on the floor, therapy aides, and recreation therapy aides. This, coupled with the facilities limiting the time these residents might have received from licensed nurses, could yield the results seen. Commenters suggested that it might be helpful to see whether licensed nurse time has been reduced for these residents inappropriately or if an additional use of aides has appropriately reduced the level of licensed nurse need. Regardless, the commenters believed that the retention of this split is crucial, as it encourages continued help for residents to maintain their highest physical functioning. Another commenter concurred with the

proposed rule's position that restorative nursing programs benefit all residents, and cited the findings of a Federal grant that studied nursing facilities in Colorado having good restorative nursing programs, including:

- Decrease in the number of acquired pressure ulcers.
- Increase in the number of residents ambulating independently.
- Increase in the number of residents feeding themselves.
- Decrease in the number of incontinent residents.
- Decrease in the number of Foley catheters.
- Decrease in the number of physical constraints.
- Increase in the number of residents involved in sensory stimulation, exercise, and grooming classes.
- Decrease in the number of contractures.
- Decrease in the number of accidents.
- Increase in the individual's mental stature and awareness.

*Response:* We appreciate the possible explanations of the reduced nursing minutes for patients receiving restorative nursing. It is plausible that much of the nursing rehabilitation may now be provided by aides and that the wage-weighted staff time resource utilization for the licensed nurses is now less than the time attributed to the various types of aides and assistants. As we proposed, we are retaining the tertiary split for restorative nursing in RUG–IV, as we believe that it benefits all patients. As the commenter suggested, we will consider monitoring restorative nursing to see whether licensed nurse time has been reduced for these residents inappropriately or if an additional use of aides has appropriately reduced the level of licensed nurse need.

Finally, we note that it was brought to our attention during the comment period that there were certain inconsistencies in our FY 2010 proposed rule. We noted these inconsistencies on our Web site, at *http://www.cms.hhs.gov/snfpps/02_spotlight.asp*. First, we identified some inconsistencies between the preamble text at 74 FR 22231 and the tables in the proposed rule (Table 14 and Table C in the Addendum) regarding the qualifying conditions for the Special Care High, Special Care Low, and Clinically Complex categories. We are clarifying that the information in the tables was accurate, with the correction noted below. In addition, we identified a necessary technical correction to Table C in the Addendum of the FY 2010 proposed rule. The Special Care High, Special Care Low, and Clinically Complex categories for RUG–IV stated in the Notes section, ''Signs of depression used for end splits; PHQ score <= 9 or CPS >=3.'' This should have read, ''Signs of depression used for end splits consisted of PHQ score >=9.5.''

Accordingly, we are finalizing the RUG–IV classification system as proposed in the FY 2010 proposed rule (74 FR 22229–36) for implementation in FY 2011, with the corrections noted above and with the following modifications:

- Fever with feeding tube has been added to Special Care High;
- We are clarifying that dehydration has been deleted as a qualifier in any category, including the Special Care and Clinically Complex categories;
- Respiratory failure in combination with oxygen therapy while a resident is added to Special Care Low;
- Oxygen therapy alone while a resident is moved to Clinically Complex; and
- A patient will also qualify in the Special Care Low category if 1 of the following is present along with 2 or more skin treatments:
  - 2 or more venous/arterial ulcers; or
  - 1 Stage 2 pressure ulcer and 1 venous/arterial ulcer.

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**Table 13**
**Crosswalk of MDS 3.0 Items and RUG-IV Groups**

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| ULTRA HIGH REHABILITATION PLUS EXTENSIVE SERVICES<br>Rehabilitation Rx 720 minutes/week minimum<br><br>AND<br><br>At least 1 rehabilitation discipline 5 days/week<br><br>AND<br><br>A second rehabilitation discipline 3 days/week<br><br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | 11-16<br>2-10 | Not Used<br>Not Used | RUX<br>RUL |
| VERY HIGH REHABILITATION PLUS EXTENSIVE SERVICES:<br>**Rehabilitation Rx 500 minutes/week minimum**<br><br>AND<br>**At least 1 rehabilitation discipline 5 days/week**<br><br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | 11-16<br>2-10 | Not Used<br>Not Used | RVX<br>RVL |
| HIGH REHABILITATION PLUS EXTENSIVE | | | |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| SERVICES<br>**Rehabilitation Rx 325 minutes/week minimum**<br>AND<br>**At least 1 rehabilitation discipline 5 days/week;**<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | 11-16<br>2-10 | Not Used<br>Not Used | RHX<br>RHL |
| MEDIUM REHABILITATION PLUS EXTENSIVE SERVICES<br>**Rehabilitation Rx 150 minutes/week minimum**<br>AND<br>**5 days any combination of 3 rehabilitation disciplines;**<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | 11-16<br>2-10 | Not Used<br>Not Used | RMX<br>RML |
| LOW REHABILITATION PLUS EXTENSIVE SERVICES<br>**Rehabilitation Rx 45 minutes/week minimum**<br>**AND** | 2-16 | Not Used | RLX |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| **3 days any combination of 3 rehabilitation disciplines;**<br>AND<br>**Restorative nursing 6 days/week, 2 services (see Reduced Physical Function (below) for restorative nursing services);**<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | | | |
| ULTRA HIGH REHABILITATION<br>Rehabilitation Rx 720 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>A second rehabilitation discipline 3 days/week | 11-16<br>6-10<br>0-5 | Not Used<br>Not Used<br>Not Used | RUC<br>RUB<br>RUA |
| VERY HIGH REHABILITATION<br>Rehabilitation Rx 500 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week | 11-16<br>6-10<br>0-5 | Not Used<br>Not Used<br>Not Used | RVC<br>RVB<br>RVA |
| HIGH REHABILITATION<br>**Rehabilitation Rx 325 minutes/week minimum**<br>AND<br>At least 1 rehabilitation discipline 5 days/week | 11-16<br>6-10<br>0-5 | Not Used<br>Not Used<br>Not Used | RHC<br>RHB<br>RHA |
| MEDIUM REHABILITATION<br>**Rehabilitation Rx 150 minutes/week** | 11-16<br>6-10 | Not Used<br>Not Used | RMC<br>RMB |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| **minimum**<br><br>AND<br>5 days any combination of 3 rehabilitation disciplines | 0-5 | Not Used | RMA |
| LOW REHABILITATION<br>**Rehabilitation Rx 45 minutes/week minimum**<br><br>AND<br><br>**3 days any combination of 3 rehabilitation**<br><br>**disciplines;**<br><br>AND<br>Restorative nursing 6 days/week, 2 services (see Reduced Physical Function for restorative nursing services) | 11-16<br>0-10 | Not Used<br>Not Used | RLB<br>RLA |
| EXTENSIVE SERVICES<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score of 2 or more | 2-16<br><br>2-16<br><br>2-16 | Tracheostomy care and ventilator/respirator<br><br>Tracheostomy care or ventilator/respirator<br>Isolation for active infectious disease | ES3<br><br>ES2<br><br>ES1 |
| SPECIAL CARE HIGH<br>**Comatose; septicemia; diabetes with daily**<br><br>**injections and order change on 2 or more days;**<br><br>**quadriplegia with ADL score >=5; chronic**<br><br>**obstructive pulmonary disease and shortness of** | 15-16<br>15-16<br>11-14<br>11-14<br>6-10<br>6-10<br>2-5<br>2-5 | Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of Depression | HE2<br>HE1<br>HD2<br>HD1<br>HC2<br>HC1<br>HB2<br>HB1 |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| **breath when lying flat; fever with pneumonia, or vomiting, or weight loss, or feeding tube; parenteral/IV feedings; respiratory therapy for 7 days**<br>AND<br>ADL score of 2 or more | | No Signs<br>Signs of Depression<br>No Signs | |
| SPECIAL CARE LOW<br>Cerebral palsy, multiple sclerosis, or Parkinson's disease with ADL score >=5; respiratory failure and oxygen therapy while a resident; feeding tube (calories >= 51% or calories = 26-50% and fluid >= 501cc); ulcers (2 or more stage II or 1 or more stage III or IV pressure ulcers; or 2 or more venous/arterial ulcers; or 1 stage II pressure ulcer and 1 venous/arterial ulcer) with 2 or more skin care treatments; foot infection/diabetic foot ulcer/open lesions of foot with treatment; radiation therapy while a resident; dialysis while a resident<br>AND<br>ADL score of 2 or more | 15-16<br>15-16<br>11-14<br>11-14<br>6-10<br>6-10<br>2-5<br>2-5 | Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs | LE2<br>LE1<br>LD2<br>LD1<br>LC2<br>LC1<br>LB2<br>LB1 |
| CLINICALLY COMPLEX<br>**Extensive Services, Special Care High or Special Care Low qualifier and ADL score of 0 or 1**<br>OR<br>Pneumonia; hemiplegia with ADL score >=5; surgical wounds or open lesions with treatment; burns; chemotherapy while a resident; oxygen therapy while a resident; IV medications while a resident; transfusions while a resident | 15-16<br>15-16<br>11-14<br>11-14<br>6-10<br>6-10<br>2-5<br>2-5<br>0-1<br>0-1 | Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of Depression<br>No Signs<br>Signs of | CE2<br>CE1<br>CD2<br>CD1<br>CC2<br>CC1<br>CB2<br>CB1<br>CA2<br>CA1 |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| | | Depression<br>No Signs | |
| BEHAVIORAL SYMPTOMS and COGNITIVE PERFORMANCE<br>**Cognitive impairment BIMS score <=9 or**<br>**CPS >=3**<br>**OR**<br>hallucinations or delusions<br>OR<br>physical or verbal behavioral symptoms toward others, other behavioral symptoms, rejection of care, or wandering<br>AND<br>ADL score <=5<br>See Reduced Physical Function for restorative nursing services | 2-5<br>2-5<br>0-1<br>0-1 | 2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing<br>2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing | BB2<br>BB1<br>BA2<br>BA1 |
| REDUCED PHYSICAL FUNCTION<br>Restorative nursing services:<br>• Urinary and/or bowel training program<br>• passive and/or active ROM<br>• amputation/prosthesis care training<br>• splint or brace assistance<br>• dressing or grooming training<br>• eating or swallowing training<br>• transfer training<br>• bed mobility and/or walking training<br>• communication training<br>NOTES: | 15-16<br>15-16<br>11-14<br>11-14<br>6-10<br>6-10<br>2-5<br>2-5<br>0-1 | 2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing<br>2 or more restorative nursing on 6+ days/wk<br>Less restorative | PE2<br>PE1<br>PD2<br>PD1<br>PC2<br>PC1<br>PB2<br>PB1<br>PA2 |

| CATEGORY | ADL INDEX | END SPLITS | MDS RUG-IV CODES |
|---|---|---|---|
| No clinical variables used | 0-1 | nursing<br>2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing<br>2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing<br>2 or more restorative nursing on 6+ days/wk<br>Less restorative nursing | PA1 |
| Default | | | AAA |

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3. Development of the FY 2011 Case-Mix Indexes

Section 1888(e)(4)(G)(i) of the Act requires that the Federal rates be adjusted for case mix. Pursuant to the statute, such adjustment must be based on a resident classification system, established by the Secretary, that accounts for the relative resource utilization of different patient types. The case-mix adjustment must be based on resident assessment data and other data the Secretary considers appropriate.

As discussed in the previous section, we are finalizing the RUG–IV model to be implemented in FY 2011. The RUG–IV update uses data collected in 2006–2007 during the STRIVE project, and reflects current medical practice and resource use in SNFs across the country. Our description of the proposed RUG–IV model in the FY 2010 proposed rule included a discussion of the development of the case-mix indexes to be used under this model (74 FR 22208, 22236–22238, May 12, 2009).

The case-mix indexes will be applied to the unadjusted rates resulting in 66 separate rates, each corresponding with one of the 66 RUG–IV classification groups. To determine the appropriate payment rate, SNFs will classify each of their patients into a RUG–IV group based on assessment data from the MDS 3.0.

Our intent in implementing RUG–IV is to allocate payments more accurately based on current medical practice and updated staff resource data obtained during the STRIVE study, and not to decrease or increase overall expenditures. Thus, consistent with the policy in place when we transitioned to the RUG–III 53-group model in FY 2006 (as discussed in section III.B.2.b of this final rule), we believe that overall expenditures under the RUG–IV model should maintain parity with overall expenditures under the RUG–III 53-group model. Therefore, we simulated payments under the RUG–III 53-group model and the RUG–IV 66-group model to ensure that the change in classification systems did not result in greater or lesser aggregate payments.

We used the resource minute data collected from STRIVE to create a new set of unadjusted relative weights, or case-mix indexes (CMIs), for the RUG–IV model as described in the proposed rule (74 FR 22208, 22236–22238, May 12, 2009). We then compared the CMIs for the RUG–53 and RUG–66 models in a way that is intended to ensure that estimated total payments under the 66-group RUG–IV model would be equal to those payments that would have been made under the 53-group RUG–III model. In the FY 2010 proposed rule, we stated that we used STRIVE data with sample weights applied and FY 2007 claims data (the most recent final claims data available at the time) to compare the distribution of payment days by RUG category in the 53-group model with the anticipated payments by RUG category in the new 66-group RUG–IV model. However, after the

proposed rule was published, final FY 2008 claims data became available. As we stated in the proposed rule, in the absence of actual RUG–IV utilization, we believe that the most recent final claims data are the best source available, as they are closest to the FY 2011 timeframe. Because our intent, as expressed in the FY 2010 proposed rule, was to use the most recent data available, we updated our analysis using FY 2008 final claims data to enhance the accuracy of our calculation of the adjustment necessary to achieve parity between the RUG–53 model and RUG–IV. Our projections of future utilization patterns under the new case-mix system indicated that the 66-group RUG–IV model would produce lower overall payments than under the original RUG–III 53-group model. Therefore, consistent with the policy in place when we transitioned to the RUG–III 53-group model in FY 2006 (as discussed in section III.B.2.b of this final rule), we proposed to provide for an adjustment to the nursing CMIs that would achieve ''parity'' between the old and new models (that is, would not cause any change in overall payment levels). Based on our analysis using FY 2008 claims data, the adjustment to the nursing weights necessary to achieve ''parity'' is an upward adjustment of 59.4 percent.

The parity adjustment relies on projecting the utilization for a new classification system, RUG–IV, based on a new assessment instrument, MDS 3.0. Our calculation of the parity adjustment uses the most recent data available to estimate RUG–IV utilization for FY 2011. In the absence of actual RUG–IV utilization data for this timeframe, we believe the most recent data are the best source available, as they are closest to the FY 2011 timeframe. As actual data for RUG–IV utilization become available, we intend to assess the effectiveness of the parity adjustment in maintaining budget neutrality and, if necessary, to recalibrate the adjustment in future years.

We intend to actively monitor the changes in beneficiary access and utilization patterns as a response to the implementation of RUG–IV. For example, we anticipate that the changes to the Extensive Services category could result in increased beneficiary access for patients with severe respiratory conditions. In addition, we intend to monitor utilization for any potential coding changes that could occur as a result of the changes to the SNF PPS. If, in future years, evidence becomes available that indicates that a change in aggregate payments are a result of changes in the coding or classification of residents that do not reflect real changes in case mix, CMS will consider the authority given to the Secretary under Section 1888(e)(4)(F) of the Act to provide for an adjustment to the unadjusted Federal per diem rates so as to eliminate the effect of such coding and classification changes.

We are finalizing the RUG–IV CMIs utilizing the methodology discussed. The final RUG–IV CMIs reflecting the parity adjustment are displayed in Table 14 and, as discussed in the previous section, we will implement these CMIs with the RUG–IV system beginning in FY 2011.

TABLE 14—RUG–IV CASE-MIX INDEXES

| RUG | Nursing index | Therapy index |
|---|---|---|
| RUX | 3.55 | 1.87 |
| RUL | 3.41 | 1.87 |
| RVX | 3.48 | 1.28 |
| RVL | 2.92 | 1.28 |
| RHX | 3.40 | 0.85 |
| RHL | 2.86 | 0.85 |
| RMX | 3.28 | 0.55 |
| RML | 2.92 | 0.55 |
| RLX | 3.01 | 0.28 |
| RUC | 2.08 | 1.87 |
| RUB | 2.08 | 1.87 |
| RUA | 1.32 | 1.87 |
| RVC | 2.00 | 1.28 |
| RVB | 1.48 | 1.28 |
| RVA | 1.47 | 1.28 |
| RHC | 1.92 | 0.85 |
| RHB | 1.59 | 0.85 |
| RHA | 1.22 | 0.85 |
| RMC | 1.81 | 0.55 |
| RMB | 1.62 | 0.55 |
| RMA | 1.12 | 0.55 |
| RLB | 1.99 | 0.28 |
| RLA | 0.94 | 0.28 |
| ES3 | 3.55 | ..... |
| ES2 | 2.65 | ..... |
| ES1 | 2.29 | ..... |
| HE2 | 2.20 | ..... |
| HE1 | 1.72 | ..... |
| HD2 | 2.02 | ..... |
| HD1 | 1.58 | ..... |
| HC2 | 1.87 | ..... |
| HC1 | 1.47 | ..... |
| HB2 | 1.84 | ..... |
| HB1 | 1.45 | ..... |
| LE2 | 1.94 | ..... |
| LE1 | 1.52 | ..... |
| LD2 | 1.84 | ..... |
| LD1 | 1.45 | ..... |
| LC2 | 1.54 | ..... |
| LC1 | 1.21 | ..... |
| LB2 | 1.44 | ..... |
| LB1 | 1.13 | ..... |
| CE2 | 1.66 | ..... |
| CE1 | 1.49 | ..... |
| CD2 | 1.54 | ..... |
| CD1 | 1.37 | ..... |
| CC2 | 1.28 | ..... |
| CC1 | 1.14 | ..... |
| CB2 | 1.14 | ..... |
| CB1 | 1.01 | ..... |
| CA2 | 0.87 | ..... |
| CA1 | 0.77 | ..... |
| BB2 | 0.96 | ..... |
| BB1 | 0.89 | ..... |
| BA2 | 0.69 | ..... |
| BA1 | 0.64 | ..... |
| PE2 | 1.49 | ..... |
| PE1 | 1.39 | ..... |
| PD2 | 1.37 | ..... |
| PD1 | 1.27 | ..... |
| PC2 | 1.09 | ..... |
| PC1 | 1.01 | ..... |
| PB2 | 0.83 | ..... |
| PB1 | 0.77 | ..... |
| PA2 | 0.58 | ..... |
| PA1 | 0.54 | ..... |

The comments that we received on this subject, and our responses, appear below.

*Comment:* Several commenters questioned our use of Bureau of Labor Statistics data to determine the wage-weighted staff time. Some suggested that we should have used industry sources instead. One commenter believed that the BLS data we used (2006) should be updated to 2008. A few commenters said that we did not include enough information about how the wage weights were calculated.

*Response:* In the STRIVE study, wage-weighted nursing and rehabilitation staff times were computed at the resident level by multiplying the number of minutes of care that were provided by each staff type by a wage weight for that staff type, and then summing over all staff types.

We believe we included sufficient information regarding how the wage weights were calculated in the FY 2010 proposed rule (74 FR 22237). To establish wage weights for each staff type, the STRIVE study obtained national median wage values for staff types from the May 2006 Bureau of Labor Statistics/Occupational Employment Statistics (BLS/OES). Next, we computed the ratio of median salaries for the different nursing and rehabilitation therapy staff to the median salary of a certified nurse aide. These ratios were used as salary weights for each staff category. The BLS/OES provides national data by staff type for Nursing Care Facilities and is publicly available. We considered many other sources of wage data, such as the BLS National Compensation Survey Employer Cost for Employee Compensation product; however, this product does not provide national averages and is not very specific to nursing homes. We also considered survey data collected by the industry. We found that these data were less

nationally representative, as they were collected for a smaller number of facilities and for specific types of nursing homes. In addition, they were more limited in the staff types collected. BLS/OES data contained nearly all of the staff types we encountered during the STRIVE data collection.

The STRIVE study allowed facilities to select from a wide range of staff type categories. For example, there were 11 different categories for non-licensed aide staff, as follows:

- Certified Medication Aide.
- Certified Nursing Assistant (CNA).
- Geriatric Nursing Assistant.
- Resident Care Technician.
- Restorative Aide.
- Feeding Aide.
- Transportation.
- Bath Aide.
- Non-certified care tech.
- Clinical Associate.
- Psychological Therapy Aide.

When one of these staff categories appeared in the BLS/OES, then the corresponding median hourly wage for that category was used by the STRIVE study. The participating facilities used a variety of titles for staff with similar job duties; for example, different kinds of certified nurse assistants (CNAs) or aides. When a staff category did not appear in the BLS/OES, a decision was made to set the wage for STRIVE computations to a value relative to most comparable staff category available in BLS/OES. The relative value used was based on an assessment of the functions performed by the staff in relation to the functions performed by the most comparable staff category available in BLS/OES. For example, ''restorative aide'' did not occur in BLS/OES and the wage for restorative aide was set to the 75th percentile of CNA wage. ''Geriatric nursing assistant'' did not appear in the BLS/OES and the wage for this staff type was set to the median CNA wage. ''Bath aide'' was not listed in the BLS/OES and the wage for this staff type was set to the 25th percentile of CNA wage, as aides in this staffing category were restricted to a single function. Generally, the few staff categories that were not available in the BLS/OES reported very few resident-specific time minutes.

BLS/OES is widely used as a source for average salary information. In fact, both MedPAC (''Report to Congress: Promoting Greater Efficiency in Medicare'', June 2007) and Acumen, LLC (*http://www.acumenllc.com/reports/cms*) have considered the BLS data for use in an alternative method to compute the wage index. Considering all of the alternatives, we believe that the BLS/OES represents the best source of data to establish the STRIVE wage weights.

The following table presents the STRIVE study wages and corresponding wage weights. Wage weights were standardized so that the CNA value equaled 1.00. This allowed an interpretation of a wage-weighted time as ''CNA equivalent minutes.''

TABLE 15—STRIVE STUDY WAGES AND CORRESPONDING WAGE WEIGHTS

| Job title | Decision * | Median hourly wage (2006$) | Wage weight |
|---|---|---|---|
| **Nursing Staff** | | | |
| Registered Nurse | Use BLS median | $27.54 | 2.58 |
| Nurse Practitioner | Use median RN wage | 27.54 | 2.58 |
| Licensed Practical Nurse | Use BLS median | 17.57 | 1.65 |
| Licensed Vocational Nurse | Use median Licensed Practical Nurse wage | 17.57 | 1.65 |
| Certified Medication Aide | Use median CNA wage | 10.67 | 1.00 |
| Certified Nursing Assistant (CNA) | Use BLS median | 10.67 | 1.00 |
| Geriatric Nursing Assistant | Use median CNA wage | 10.67 | 1.00 |
| Resident Care Technician | Use median CNA wage | 10.67 | 1.00 |
| Restorative Aide | Use 75th percentile CNA wage | 12.80 | 1.20 |
| Feeding Aide | Use 25th percentile CNA wage | 9.09 | 0.85 |
| Transportation | Use 25th percentile CNA wage | 9.09 | 0.85 |
| Bath Aide | Use 25th percentile CNA wage | 9.09 | 0.85 |
| Non-certified care tech | Use 25th percentile CNA wage | 9.09 | 0.85 |
| Clinical Associate | Use median CNA wage | 10.67 | 1.00 |
| Respiratory Therapist | Use BLS median | 22.80 | 2.14 |
| Respiratory Therapy Assistant | Use BLS median | 18.81 | 1.76 |
| Psychological Therapy Aide | Use BLS median | 11.49 | 1.08 |
| **Therapy Staff** | | | |
| Physical Therapist | Use BLS median | 31.83 | 2.98 |
| Physical Therapy Assistant | Use BLS median | 19.88 | 1.86 |
| Physical Therapy Aide | Use BLS median | 10.61 | 0.99 |
| Occupational Therapist | Use BLS median | 29.07 | 2.72 |
| Occupational Therapy Assistant | Use BLS median | 20.22 | 1.90 |
| Occupational Therapy Aide | Use BLS median | 12.03 | 1.13 |
| Speech Language Pathologist | Use BLS median | 27.74 | 2.60 |
| Audiologist | Use BLS median | 27.46 | 2.57 |
| Therapy Aide | Use the average of PT & OT aides | 11.32 | 1.06 |
| Therapy Transport | Use the average of PT & OT aides | 11.32 | 1.06 |

We note that staff types not included in this table were not considered in calculating nursing time in the STRIVE study. Some staff types (for example, nurse practitioner and dialysis technician) were excluded because there was little or no time for this staff type in the STRIVE study. Others were excluded because their services are not covered under Medicare Part A (for example, acupuncturist) or their services are not included in the Medicare Part A nursing rate component (for example, dietitian).

Finally, we used 2006 BLS/OES data to construct the wage weights, and although more recent data are available, we believe that the 2006 data represent the wages related to the staffing patterns in use during a period of time when the STRIVE data were collected. Although the absolute wages change over time, we have evaluated the differences in the wage weights from 2006–2008 and find that wage weights for most staff types over this period are stable. In other words, although the absolute wages change, the relative wages between staff types are not changing significantly. Therefore, we are finalizing our decision to use the 2006 BLS/OES data to calculate the wage weights used to construct the case-mix indexes.

*Comment:* Some commenters suggested that the parity adjustment be applied to both the nursing and therapy indexes.

*Response:* We considered this as an alternative to applying the parity adjustment entirely to the nursing CMIs. However, we believe it is most appropriate to apply the parity adjustment to the nursing CMIs. The parity adjustment accounts for the difference in payments between the RUG–III and RUG–IV systems accumulated across all RUGs. The nursing CMIs are applied to each of the 66 RUGs in the RUG–IV payment system and, therefore, we believe it is most appropriate to apply that adjustment to all RUGs. When applying a portion of the parity adjustment to the therapy CMIs, aggregate payment rates for therapy RUGs do not uniformly increase compared to aggregate payment rates for therapy RUGs if calculated by applying the entire parity adjustment to the nursing CMIs. The nursing component, even for most therapy groups, is usually the largest contributor to the aggregate payment rate.

*Comment:* One commenter noted RUB and RUC, and RVA and RVB have the same case-mix index for RUG–IV. For RUG–III, ''B'' ADL pays more than ''A,'' and ''C'' pays more than ''B.'' The commenter stated that this does not account for the increased resources used when providing care for a patient with ''B'' ADLs versus ''C'' ADLs, or ''A'' ADLs versus ''B'' ADLs.

*Response:* The RUG–IV CMIs are based on the time resource data from the STRIVE project. In the situations that the commenter cites, the STRIVE data indicated less nursing time for RUC than RUB and the resulting CMI for RUC would be less than that for RUB. A situation where the time resource use for groups within a category does not increase with increasing ADL scores is often referred to as an ''ADL inversion.'' The STRIVE data produced a few of these types of inversions, and they have existed in previous time studies as well. Previous time studies have adjusted for most of these inversions before calculating final CMIs. We believe it is appropriate to adjust these inversions so that the CMIs reflect higher resource use for more dependent patients and eliminate payment incentives that may cause practice patterns to be altered. Therefore, using the method described in section III.C.1.a of this final rule, we decided to ''smooth'' the inversion by combining a pair of groups and assigning the weighted average across the 2 groups as the mean resource time for each group. This is why the final means, and therefore the CMIs, for RUB and RUC are equal. We believe this is preferable to allowing the reimbursement for less dependent patients to be higher than the reimbursement for patients that are more dependent. We note that the CMI for RVB is slightly higher than the CMI for RVA using the final database.

4. Relationship of RUG–IV Classification System to Existing Skilled Nursing Facility Level-of-Care Criteria

As discussed previously in section III.B.5 of this final rule, the existing level of care presumption currently applies to the upper 35 groups of the refined 53-group RUG–III model. In the FY 2010 proposed rule (74 FR 22208, 22238, May 12, 2009), we proposed that under the new 66-group RUG–IV model, this presumption would apply to the upper 52 groups, as encompassed by the following categories: Rehabilitation Plus Extensive Services; Ultra High Rehabilitation; Very High Rehabilitation; High Rehabilitation; Medium Rehabilitation; Low Rehabilitation; Extensive Services; Special Care High; Special Care Low; and, Clinically Complex. We received no comments on this proposal, and in this final rule, we are implementing this provision as proposed.

5. Prospective Payment for SNF Nontherapy Ancillary Costs

The FY 2010 proposed rule discussed the issue of payment for nontherapy ancillary costs under the SNF PPS (74 FR 22208, 22238–22241, May 12, 2009). This discussion described the previous research that has been conducted in this area as well as current policy and analysis, and also specifically examined this issue as it relates to the temporary AIDS add-on payment established by section 511 of the MMA (*see* section I.E of this final rule). The comments that we received on this subject, and our responses, appear below.

*Comment:* A commenter stated that payments for ventilator services are inadequate to prevent ventilator patients from experiencing access barriers in SNFs. The commenter urged CMS to consider MedPAC's proposal to adjust payments to account specifically for nontherapy ancillary services, of which non-nursing ventilator services are a part. Several commenters also stated that CMS should provide for a rate adjustment specific to providers of ventilator services to compensate them for ventilator-related costs not covered under the PPS as currently configured or as proposed to be modified in the proposed rule. Further, commenters proposed that an outlier payment or add-on similar to the AIDS add-on be adopted for ventilator patients as an interim measure.

*Response:* Ventilator patients are addressed in our proposal for a redefined Extensive Services group. Our proposal does not make any changes in the method of paying for NTA costs; all such payments continue to be proportional to the nursing costs paid in the relevant case-mix group. Because the nursing component weight for Extensive Services will rise substantially under our refinements, payments for NTA costs associated with these patients will also rise substantially. However, we recognize the need for further research to revise the payment methodology for NTA costs, as described in our approach to the analysis in the proposed rule (74 FR 22238). We are reviewing MedPAC's NTA cost predictors as part of this work. The suggestion of an outlier payment or add-on payment cannot be implemented under current law, as we have no statutory authority to make such a change.

*Comment:* A commenter stated that the criteria we described for a system to adjust payments for NTA services by case mix appear reasonable, but went on to emphasize that CMS has not been able to identify appropriate case-mix adjustments for NTA in multiple prior efforts. The commenter further looks forward to seeing whether the new criteria produce a methodology that explains more than 20 percent of the variation in NTA needs of patients.

*Response:* We acknowledge that past efforts have not been uniformly successful and resulted in no implementable proposals. We have not targeted any specific level of ''goodness of fit'' for a future methodology. However, we note that the quality of the data available to conduct this research could significantly affect the explanatory power of any model that we may develop.

*Comment:* Several commenters recommended that we consider an outlier payment for NTA services or specifically, for intravenous medications. One commenter cited facilities that are losing money due to the high cost of the IV medications. Another commenter stated that under our proposal, bariatric, wound care, and certain chemotherapy patients, among others, incur unaccounted-for equipment and/or drug costs, resulting in restricted access for these patients. The commenter suggested that an outlier payment structure would remedy this situation.

*Response:* As we note elsewhere in this final rule, we have no statutory authority at this time to implement an outlier policy for NTA services. We welcome information about the incidence of high-cost IV medication days, bariatric patient days requiring special equipment, and other incidence information which could inform future efforts to design an outlier policy, if it is authorized.

*Comment:* A commenter stated that a payment add-on for non-therapy ancillary costs would be worth exploring.

*Response:* As discussed above, we do not have statutory authority to implement an outlier or add-on payment for NTA services. However, we discussed the possibility of implementing a case-mix adjustment for NTA services in the proposed rule. We believe that we currently have authority to create a separate NTA component of the Federal per diem rate, which would be carved out of the existing nursing component. Such a proposal would be contingent on developing a workable methodology for predicting NTA costs per day. The discussion in the proposed rule described the criteria that we envision for such a system. At the inception of the SNF PPS, average daily NTA costs were included in the nursing component. Any new, carved-out component would, in effect, recover the original costs from the nursing component and adjust them separately for case mix, using information that better predicts NTA costs than does the RUG methodology. However, this does not mean that overall expenditures under the SNF PPS would increase as a result of the creation of this NTA component and index.

*Comment:* A commenter criticized the RUG–IV proposal for removing IV patients from the Extensive Services group on the basis that staff time caring for such patients is not sufficiently large, noting that the actual drug costs for IV patients were not included in the staff time data.

*Response:* We recognize that the RUG–IV proposal did not take drug costs directly into account. The STRIVE study showed that collecting accurate and complete primary data on drug costs was not feasible. We anticipate that future work on paying for NTA costs, of which IV drugs are a part, will rely on administrative data resources. Under RUG–III, nursing weights for IV patients ranged from 1.17 to 1.72. However, the changes we are implementing to the case-mix classification system reallocated to the nursing component of the SNF PPS payment savings derived from more accurate accounting for therapy time. As a result, nursing weights for IV therapy patients range from .73 to 3.43, depending on whether IV therapy co-occurs with other qualifying conditions, such as infection isolation, septicemia, *etc.*

*Comment:* A commenter stated that ventilator-dependent patients should have their own classification.

*Response:* The revised Extensive Services group includes only three types of patients: Tracheostomy, ventilator/respirator, and infection isolation. Analysis of the STRIVE time study data suggested that these patients had similarly high nursing costs. Thus, it is likely that subdividing this group to classify ventilator patients separately would needlessly complicate the SNF PPS.

*Comment:* A number of commenters, while urging us to maintain the existing AIDS add-on until an alternate payment methodology can be developed, also indicated that we should consider creating a similar add-on payment mechanism for anti-rejection drugs, low molecular weight heparin, appetite stimulating agents, and erythropoiesis stimulating agents.

*Response:* We note that in contrast to the AIDS add-on (which was specifically created by section 511 of the MMA), the law contains no similar add-on payment authority for the other services mentioned.

*D. Minimum Data Set, Version 3.0 (MDS 3.0)*

Sections 1819(f)(6)(A)–(B) and 1919(f)(6)(A)–(B) of the Act, as amended by the Omnibus Budget Reconciliation Act of 1987 (OBRA 1987), require the Secretary to specify a Minimum Data Set (MDS) of core elements and common definitions for use by nursing homes in conducting assessments of their residents, and to designate one or more instruments which are consistent with these specifications. As stated in regulations at § 483.20, Medicare- and Medicaid-participating nursing homes must conduct initially and periodically ''a comprehensive, accurate, standardized, reproducible assessment'' of each nursing home resident's functional capacity. The FY 2010 proposed rule included an examination of various aspects of a new version of the MDS, MDS 3.0 (74 FR 22208, 22241, May 12, 2009), as discussed in the following sections.

1. Description of the MDS 3.0

The FY 2010 proposed rule described the major features of the MDS 3.0 (74 FR 22241). We determined that including information on the MDS 3.0 would be beneficial to stakeholders, as RUG–IV and MDS 3.0 will be introduced at the same time, as requested by virtually all stakeholders last year. Even though we included a discussion of the MDS 3.0 in the SNF PPS proposed rule, the instrument itself was not proposed. However, we did receive many comments on the MDS 3.0, which we summarize below.

*Comment:* Some of the general comments regarding the MDS 3.0 conveyed support, while others raised concerns about burden and the amount of testing that has been performed on the instrument. There were many comments that sought clarification or offered suggestions for items included in the draft MDS 3.0 item set posted at *http://www.cms.hhs.gov/NursingHomeQualityInits/Downloads/MDS30DraftItemSetv26.pdf.*

*Response:* We chose to use the SNF PPS rule to announce the upcoming October 2010 scheduled implementation of the MDS 3.0 and appreciates the comments in support of it. Concerning the comments about the possibility of increased burden and the need for additional testing of the instrument before implementation, findings from the pilot testing of MDS 3.0 in 2008 did not suggest that the MDS 3.0 was overly burdensome. We believe that any more recent changes made to the MDS 3.0 are minor and not substantive and, thus, that additional testing is not necessary.

Concerning the comments seeking clarification of the draft MDS 3.0 item set, CMS believes that these issues will be addressed with the MDS 3.0 RAI Manual and MDS 3.0 Final Item Set that are scheduled to be published on the CMS Web site, *http://www.cms.hhs.gov,* in October 2010. The specific recommendations for new or revised items for the MDS 3.0 instrument have been forwarded to the MDS 3.0 development team at CMS for review and consideration. The MDS 3.0 RAI Manual, Data Set, and Data Specifications are scheduled to be

published in October 2009 with subsequent implementation of the MDS 3.0 in October 2010. This time frame provides for an entire year for CMS, its contractors, and SNFs to prepare and train in anticipation of the October 1, 2010 implementation date.

*Comment:* Some comments discussed the MDS 3.0 item set content and format of the ''paper'' tool. Among the issues raised were: Maintaining the MDS 2.0 section G, ADL items, and DAVE discrepancy rates; the order of section A being problematic for the paper version when reviewing the assessment; adopting the OASIS diagnosis format; providing greater resident involvement by implementing interview tools; the need for pressure ulcer items to be more clinically based; suggestions for adding specific diagnoses to section I; and concerns that section Q may affect State agency staff resources. One commenter suggested that CMS simply address the specific problem areas with MDS 2.0, such as pressure ulcers, and not change any other aspects of it. Another commenter requested that the RAI manual be made available by August 1, 2009.

*Response:* We will take into consideration the suggestions submitted in response to the SNF PPS proposed rule. We agree that the MDS 3.0 provides a greater resident involvement in care and that the items being surveyed are more clinically based than the existing MDS 2.0. However, given the current specifications of the MDS 2.0, we are unable to adopt the commenter's suggestion of simply revising certain problematic items, due to limitations in the data string.

We understand the concern of maintaining the MDS 2.0 scoring system for ADLs. We have revised the ADL-Self-performance response codes to address a care planning concern raised by stakeholders. While we agree that the Data Assessment and Verification (DAVE) findings on discrepancy rates for the ADL items are high, the DAVE contractor did not, as part of its analysis, factor into account the degree or severity of the discrepancy. For example, in a situation where one assessor coded a resident as supervision, the DAVE project did not consider whether the second assessor coded the same person as limited assistance, extensive assistance, or total dependence, but simply determined whether the codes were the same. We are currently working with stakeholders to ensure that the MDS 3.0 RAI manual provides clear guidance.

While we want to ensure that a paper version of the MDS 3.0 is user-friendly, we encourage providers and users to move toward an electronic model. We will take into consideration the concerns provided to us on the record layout.

*Comment:* One commenter stated that CMS has ''tinkered'' with the assessment tool, which creates confusion and jeopardizes timely rollout. Another asserted that MDS 3.0 does not meet the criteria CMS set out to accomplish. One commenter requested CMS to ''batch'' revisions to the MDS 3.0 and implement in a systematic fashion. Another suggested that CMS provide a ''journal'' of all changes in a central location that is available to all users and assessors. One commenter remarked that the data gathered during the STRIVE project is not valid for evaluating the effectiveness of the proposed MDS 3.0 assessment.

*Response:* Our goals for updating the assessment instrument used in nursing homes were to introduce advances in assessment measurement, increase relevance of items, improve accuracy and validity of the tool, and increase our knowledge of residents' experience of care by introducing more resident interview items. We believe we have achieved these goals, as evidenced by features such as the following:

- Addition of pressure ulcer items where the clinician reports the actual stage of the ulcer, not the appearance;
- Use of resident interview items for mood and other areas;
- Use of valid and reliable assessment tools, such as the Brief Interview for Mental Status; and
- Improvement of pain assessment items.

Therefore, we do not agree with the assertion that we did not accomplish what we had intended.

We have stated from the outset of releasing version 3.0 of the MDS that it was in draft form, and that providers and users should not consider the draft version final. We have built upon RAND's study to improve the assessment further and ensure that it meets, as much as possible, the needs of multiple users, such as Medicaid State Agencies for payment purposes and return-to-the-community initiatives. Lastly, the STRIVE project did not ''evaluate'' the effectiveness of the MDS 3.0. RAND's responsibility was to improve the clinical effectiveness of the instrument. They were not required to ensure that quality measures and indicators or the RUG classification systems were kept fully ''intact.'' RAND was aware of the other purposes of the MDS and did take this into consideration during their study and analysis. We did not approach the issue with the belief that a single project would meet the needs of all users, and have actually incorporated lessons learned from other CMS projects, such as the CARE tool. The STRIVE project did not evaluate the effectiveness of the MDS 3.0. In fact, the STRIVE study was conducted at the same time the RAND staff were testing the pilot MDS 3.0 instrument. The STRIVE contractor did conduct analysis to ensure that payment systems and quality measures were not negatively affected based on data collected under the MDS 3.0 project.

Currently, we post updates to the MDS 2.0 on the CMS Web site so that all users and assessors are able to access the changes. Our expectation is that the MDS 3.0 instrument and RAI manual will not require updates for some time. However, the format, that is, the item numbering and layout, as well as the specifications, will provide us with the ability to update the tool in a simple and quick method when the need arises. Finally, we will take into consideration the comment on ''batching'' updates, and will work with stakeholders to ensure that they have access to the updates in a timely fashion.

*Comment:* A few recommendations were received on the MDS 3.0's relationship to Health Information Technology (HIT) standards. The recommendations include:

- Increasing efforts in Federally-mandated initiatives to adopt cost-effective use of information technology in healthcare settings;
- Consider present and future data use and exchange requirements to format and exchange MDS 3.0 data;
- Incorporate all standardized terminology approved by Consolidated Health Informatics (CHI), Office of the National Coordinator for Health Information Technology (ONC), National Institute of Standards and Technology (NIST), or American National Standards Institute (ANSI) in all HIT projects; and
- Consider incorporating all available approved terminology and exchange standards for use in all Health Information Exchange or HIT projects.

Contained in the comments was the suggestion that if CMS were unable to carry out the approach outlined in the bullets above for MDS 3.0, then CMS should consider placing efforts on the CARE tool.

*Response:* CMS appreciates the comments that were submitted with regard to HIT standards and will consider these comments as the MDS 3.0 is implemented.

2. MDS Elements, Common Definitions, and Resident Assessment Protocols (RAPs) Used under the MDS

The FY 2010 proposed rule included a discussion of the MDS 3.0's MDS elements, common definitions, and RAPs (74 FR 22243). The comments that we received on this subject, and our responses, appear below.

*Comment:* One commenter expressed concern about our proposal to remove language identifying MDS domains and common definitions at §§ 483.315(e)(1) through (18) and instead reference the domain requirements at § 483.20(b)(1)(i) through (xviii) and use the RAI manual for specific details regarding the MDS domains and common definitions. Although the commenter acknowledged the need for us to make timely MDS changes, the commenter stated that removing the MDS domains and common definitions could affect assessment reliability, consistency, accuracy, validity, and reimbursement, and could deny the public a meaningful voice in challenging proposed changes or offering official recommendations.

*Response:* Rapid changes in clinical practice make it imperative for us to have the flexibility to change or add to the MDS domains and common definitions quickly in order to protect the health and safety of nursing home patients.

For example, the CDC Advisory Committee on Immunization Practices (ACIP) has recommended vaccination against the varicella zoster virus (VZV, that is, chicken pox) for individuals over age 60. VZV can reactivate clinically decades after initial infection to cause herpes zoster (that is, shingles), a localized and generally painful cutaneous eruption that occurs most frequently among older adults and affects approximately 1 million individuals in the United States every year. A common complication of zoster is post-herpetic neuralgia (PHN), a chronic pain condition that can last months or even years. Complications include involvement of the eye that can threaten sight, bacterial super infections, and disfiguring facial scarring. Another example is the annual CDC ACIP recommendations regarding the provision of influenza vaccinations in relation to the timing and duration of the influenza season. Based on recommendations such as these, we need the flexibility to add or change vaccinations promptly to the MDS domains.

In a December 23, 1997 final rule (62 FR 67174), we removed the MDS and its instructions from the regulation text that was inserted in the December 28, 1992 proposed rule (57 FR 61414). In that final rule, we noted this was necessary in order to allow us to easily modify the MDS so that it requires collection of information that is clinically relevant and meets evaluative needs as clinical practice evolves (62 FR 67174, 67203). These notations still continue to reflect our current view.

In the past, as we have proposed changes to the MDS domains and common definitions, we have given the public ample opportunity to comment through the use of CMS Open Door Forums and Town Hall meetings; dedicated mailboxes for comments; CMS Web site postings; and meetings with stakeholder organizations. We believe that in directly discussing and negotiating with affected parties, it will be possible to maintain an MDS assessment process that is clinically relevant while also obtaining public comment. We will continue to use these venues to solicit public comments on proposed changes, and we believe they are sufficient to allow robust public input and address the commenter's concerns. Therefore, we are not accepting the comment. Accordingly, this final rule removes the language identifying MDS domains and common definitions at §§ 483.315(e)(1) through (18), and instead references the domain requirements at § 483.20(b)(1)(i) through (xviii). We will use the RAI Manual for specific details regarding the MDS domains and common definitions.

*Comment:* One commenter expressed concern that the proposed rule did not specify when an MDS is considered to be complete, noting that this information is currently available for the MDS 2.0 in the RAI User's Manual.

*Response:* Federal regulations at 42 CFR 483.20(i)(1) and (2) require the RN assessment coordinator to sign and certify that the assessment is complete. This completion attestation is made when the MDS assessment is considered complete; the timing varies depending on the assessment type. Federal regulations at 42 CFR 483.20(b)(2) and (c) specify the timeframes for conducting the various assessment types. As the commenter noted, this specific information is currently available for MDS 2.0 in the RAI User's Manual. As this information will continue to be provided for MDS 3.0 in the RAI User's Manual and is already covered in the regulations text, we believe that this information is adequately provided.

*Comment:* Although commenters expressed various concerns, several were supportive of the proposed changes to the MDS 3.0 RAPs.

*Response:* We were pleased with the support expressed through the comments. While it is true that the structure of the proposed changes to the MDS 3.0 RAPs process was not fully specified in the proposed rule, CMS is aware of most of the issues raised in the comments, and has been actively working on them. We have provided responses to specific comments in the following paragraphs.

*Comment:* We received a few comments requesting us to clarify that, while RAPs are no longer mandatory, it is CMS's intent that facilities must continue to use care area triggers (CATs) from the MDS and current, evidence-based clinical guidance or resources to assist them in the care planning process.

*Response:* CMS values the opinions and insights provided by our stakeholders, and we plan to clarify that this is, in fact, our intent. As the planning for the RAI process instructions moves forward, we fully intend to clarify our instructions in this area and will continue to involve our stakeholders.

*Comment:* Several commenters expressed concern about the level of burden that might be imposed by no longer mandating the use of the RAPs and, therefore, leaving the determination of what clinical guidance/practice tools will be used in the care planning decision process to the discretion of the facilities. The commenters indicated that such a system would create inefficiencies and inequalities in the care delivery system, and also expressed concern about how CATs and outside resources will be utilized for guidance in the future.

*Response:* When the RAPs were originally developed, facilities lacked easy access to Internet resources, which is no longer the case. A great many clinical practice guidelines have been developed by professional organizations and government agencies, many of which are available at no cost. The RAPs were limited in the number of topics they covered and, due to ongoing changes in clinical practice, they would need to be regularly updated by CMS, necessitating changes to the requirements. We believe this is no longer necessary or efficient, as the relevant information is now widely available from a variety of authoritative sources. At this phase in the planning effort, CMS has developed a set of tools (formerly known as RAPs) that will be available for facility use via the MDS manual; however, they will not be mandatory. We are also publishing in the manual a list of other resources that practitioners can use, most of which are available at no cost. The facility's

clinical team can use these resources or any others that they deem appropriate. We found the comments very helpful, and expect that these resources will minimize any burden as much as possible.

*Comment:* We received a few comments pointing out the need for CMS to partner with its stakeholders and nursing home industry experts to design care planning practices, including development of a Technical Expert Panel. Commenters suggested including clarification in the RAI manual regarding the use of an interdisciplinary team approach.

*Response:* We have reported on our work and progress regarding the care areas and care planning as part of the RAI process in stakeholder meetings and on Open Door Forum calls. As the planning for the RAI process instructions moves forward, we will continue to involve our stakeholders.

*Comment:* Several commenters pointed out the need for CMS to reconsider the use of CATs in relation to the care planning process.

*Response:* While it is true that the structure of the proposed changes to the MDS 3.0 RAPs process was not fully specified in the proposed rule, we agree that the proposed rule's language regarding the use of CATs did not adequately convey the proposed changes. We also acknowledge that CATs represent only one part of a dynamic process and may also cause industry confusion. Accordingly, the final rule includes the term ''Care Area Assessment'' (CAA) to denote the process that was formerly known as the RAPs process. However, CMS will continue to use the CATs terminology to represent the triggers from the MDS for a particular care area problem or issue. Of course, we plan to continue to involve our stakeholders as the planning for the RAI process instructions moves forward, and we will continue to work to clarify the care planning process.

*Comment:* A few commenters questioned how the State Survey Agencies (SSAs) would handle their nursing home surveys without the direction of the RAPs.

*Response:* The specific issues that were raised about the design of the nursing home survey program are beyond the scope of this final rule. However, it is important to note that CMS is fully aware of this issue and is working to provide direction to the SSAs about the full range of guidance or resources they may encounter, including instructions that are provided to facilities through the RAI manual. We appreciate the careful consideration that this comment reflected, and will bring it to the attention of appropriate CMS staff.

*Comment:* In addition to the comments that we received on the proposed change to the RAPs, several commenters provided discussion of specific issues involving prescriptive care planning and the use of electronic RAPs for nursing homes.

*Response:* The specific issues that were raised about the design of care planning and the use of electronic RAPs for nursing homes are beyond the scope of this final rule. However, we appreciate the careful consideration that these comments reflected, and will bring them to the attention of appropriate CMS staff.

3. Data Submission Requirements under the MDS 3.0

The FY 2010 proposed rule included a discussion of data submission requirements under the MDS 3.0 (74 FR 22243). The comments that we received on this subject, and our responses, appear below.

*Comment:* One commenter voiced concerns regarding whether the proposal for SNFs to submit resident assessment data to the national CMS system rather than to the States will require a change in electronic software programs at the facility level to accommodate reporting directly to the Federal level. The commenter also stated that, if this is the case, adequate time should be provided for this transition software.

*Response:* There is no software program change required, as the MDS data will be collected centrally at the Federal level rather than from each State. However, there will be a new software program required to implement the new MDS 3.0 data and file specifications. CMS believes that adequate time is being provided for this development.

*Comment:* One commenter noted that the proposed 14-day timeframe for transmission of MDS data will shorten the current time period by 2 weeks. The commenter also observed that in some States, this requirement (or even a shorter time period) has already been imposed at the State level for a number of years. The commenter pointed out that the State of Washington, where submissions must be within 10 days of completion for the MDS to be considered timely, finds that this requirement has improved the quality of MDS submissions, with fewer submissions ''falling through the cracks.'' Another commenter remarked that State agencies will be able to better track those residents who would like to return to the community. A few commenters opposed shortening the submission requirement to 14 days, stating that this would pose a hardship on nurses who have ''other responsibilities,'' may be difficult in small nursing homes, and would increase the pressure to complete assessments.

*Response:* We appreciate the comment informing CMS that some States currently have stricter submission requirements than the one we proposed. We are pleased to learn that a submission timeframe of 14 days or less is working well in those States that already have such a requirement in place. We anticipate that there will be an equally smooth transition for facilities in the remaining States. Further, swing-bed facilities have been required to submit their MDS assessments within 14 days of completion since 2002. These facilities tend to have fewer SNF patients than most nursing homes and also tend to have shorter lengths of stay. In fact, swing-bed facilities do not appear to have difficulty meeting this requirement. Therefore, we do not agree that shortening the submission time frame to 14 days will be problematic or cause hardship on facilities. In fact, almost 75 percent of the MDS assessments are submitted by nursing homes within 14 days of completion. We are concerned with the comment that shortening the submission time frame will create pressure to complete assessments. We have outlined the requirements for completing MDS assessments in the RAI manual. The submission time frame is based on the completion date of the assessment. Thus, the submission time frame does not drive the completion of assessments; rather, the reverse is true—the completion of the assessment determines the submission date. Lastly, as noted by commenters' remarks on obtaining quality measures on swing beds as discussed below in section III.H of this final rule, we are simply holding both types of providers to the same standards.

*Comment:* Several commenters expressed concern and confusion over the requirement that facilities have 7 days after completing a resident's assessment to be capable of transmitting that assessment data. They also questioned what the term ''capable'' meant, and whether this requirement re-instituted the ''locking'' concept that has been inactive for several years.

*Response:* The regulations at 42 CFR 483.20(f)(2) regarding facility capability to transmit a resident's assessment data within 7 days of completing the assessment is not new, nor did we

propose it through this rule. What we did propose was changing the language to note that facilities must be capable of transmitting to the CMS System instead of to the State. It is not our intent to re-institute the ''locking'' concept. The term ''capable'' as used in the regulations text here means that the facility has encoded the MDS assessment information and put that data into a format that conforms to standard record layouts and data dictionaries defined by CMS and the State.

*Comment:* One commenter expressed confusion over the requirements regarding State responsibilities with respect to MDS 3.0 data. Specifically, the commenter questioned State responsibilities regarding supporting and maintaining the MDS State system and database, the receipt of facility data from CMS, and the resolution of all errors. The commenter noted that the States are not in a position to ensure that all errors are resolved, as some (such as a late submission) cannot be resolved.

*Response:* The provision at 42 CFR 483.315(h) regarding the requirements for the State to maintain an MDS database and ensure that a facility resolves errors upon receipt of data is not new, nor did we propose it through this rule. What we did propose was changing the language to note that States must continue to maintain an MDS database for receipt of facility data from CMS. We also added the term ''support'' to the regulations at 42 CFR 483.315(h)(1) to note that each State is still responsible for supporting all their users and uses of the MDS 3.0 data. It is our intent for the regulation text regarding facility data at 42 CFR 483.315(h)(3) to denote that MDS 3.0 data are received by the States from the CMS system. We agree with the commenter that some facility data errors, such as a late submission, may not be able to be resolved completely. Our intent through this language was simply to retain the requirement for States to work with their respective facilities to resolve errors. However, after further consideration of this issue, we are retracting our proposal to include the term ''all'' in the regulation text at 42 CFR 483.315(h)(3). In addition, as it has come to our attention that the regulation text at 42 CFR 483.315(h) did not adequately convey who in the State had the responsibilities regarding the State MDS database, we have added the term ''agency,'' in order to indicate that these are responsibilities of the State Survey Agency.

4. Proposed Change to Section T of the Resident Assessment Instrument (RAI) under the MDS 3.0

In the context of the MDS 3.0 discussion, the FY 2010 proposed rule proposed certain revisions to the reporting of therapy services effective October 1, 2010 (74 FR 22244). First, we proposed to eliminate Section T of the RAI. In addition, we proposed (a) to revise the therapy reporting procedures related to short-stay patients so that the appropriate therapy level is calculated using items that will be reported on the MDS 3.0 (using the procedures set forth in the proposed rule); (b) to provide SNFs with the option to use the Other Medicare Required Assessment (OMRA) to signal the start of therapy; and (c) to require SNFs to complete an OMRA with an ARD that is set 1 to 3 days (rather than 8 to 10 days) from the last day therapy services were provided. A more detailed description of the proposals appears in the SNF PPS proposed rule for FY 2010 (74 FR 22244). The comments that we received on these proposed revisions, and our responses, appear below.

*Comment:* Several commenters supported the elimination of section T (items T1b, c, d) of the MDS, thereby preventing Medicare from paying for therapy services that were ordered, but not actually furnished to patients. They stated that these changes will increase the accuracy of payments to providers. Other commenters were opposed to the elimination of section T, indicating that the proposed change reflected a payment model more akin to fee-for-service than a prospective payment. Some commenters stated that eliminating section T would result in providers not being paid for therapy services that they actually provide during the first 14 days of a SNF stay. They also believed that there would be financial pressure to provide less care than the beneficiary needs.

*Response:* As we stated in the proposed rule, the GAO found that one-quarter of the patients classified using estimated minutes of therapy did not receive the amount of therapy they were assessed as needing, while three-quarters eventually did. Further, the GAO found that in 2001, half of the patients initially categorized in the Medium and High Rehabilitation groups did not actually receive the minimum amount of therapy required to be classified in those groups, due in part to the use of estimated therapy minutes. We agree that by eliminating section T, there is a risk that the therapy data would not be captured for some patient days where the service was actually provided. However, we also proposed to provide for an optional start-of-therapy OMRA with an ARD that is set 5 to 7 days from the first day therapy services are provided. Based on this OMRA, payment for the start of therapy would begin the day that therapy is started. We proposed that a SNF may complete a start-of-therapy OMRA when therapy started between MDS observation periods. However, in response to comments stating that under our proposed revised reporting procedures, providers may not be paid for therapy services that they actually provide during the first 14 days, we are allowing SNFs to complete the optional start-of-therapy OMRA not only when therapy starts in between assessment windows, but also when therapy has started within the Medicare-required assessment window. For the second situation, the optional start-of-therapy OMRA may be completed as a stand-alone assessment or it may be combined with a scheduled Medicare-required assessment. For example, the SNF must complete a 5-day Medicare-required assessment with an ARD between day 1 and day 8. If therapy begins on day 5 and if the provider chooses day 7 as the 5-day ARD, then only 3 days of therapy, at most, would have been provided by the ARD and, thus, a rehabilitation RUG would not have been assigned (or achieved). The provider may then complete an optional start-of-therapy OMRA with an ARD of day 9, 10, or 11. If the provider chooses day 11, then the start-of-therapy OMRA may be combined with the 14-day Medicare-required assessment (day 11 is in the assessment window of the 14-day Medicare-required assessment). Payment for the rehabilitation RUG would begin on the day that therapy started, for example, day 5, and would continue until day 30 as long as the SNF level of care coverage requirements are met, and/or therapy was not discontinued, and/or another assessment was not required that resulted in a different RUG assignment. If the provider chooses day 9 or day 10 as the ARD for the optional start-of-therapy OMRA, the Rehabilitation RUG would also begin on the day therapy started, but the provider would also be required to complete a 14-day Medicare-required assessment as long as the patient continues to meet SNF level of care requirements and remains in the facility after day 14. Lastly, if the provider chooses not to complete the optional start-of-therapy OMRA, either as a stand-alone or in combination with a Medicare-required assessment, the rehabilitation RUG would then begin

with the payment period of the next Medicare-required assessment. As the provider may complete the optional start-of-therapy OMRA in situations where therapy has started within the assessment window, but a rehabilitation RUG was not assigned because the daily requirement had not been met, we do not believe that eliminating section T will result in ''financial pressures'' to provide less care than the resident requires. Therefore, after review of the comments, effective October 1, 2010, we will delete section T (T1b, c, d) from the MDS 3.0 as we proposed in the FY 2010 SNF PPS proposed rule. In addition, we will implement the optional start-of-therapy OMRA, which may be completed not only when therapy starts in between assessment windows, but also when therapy has started in a Medicare-required assessment window. As explained above, we believe that the option to use the start-of-therapy OMRA, regardless of when therapy starts, eliminates the risk that therapy data would not be captured for some patient days.

*Comment:* Several commenters stated that eliminating the projection could result in a mismatch of the therapy plan of care with the beneficiary's needs or a misallocation of the therapy resources that the beneficiary requires, because section T assists the therapist in making clinical projections which, in turn, results in better coordination of care.

*Response:* While we are eliminating the projection of therapy services in section T, we are also providing for a start-of-therapy OMRA. We rely on the clinician's judgment to make decisions on the need for and volume and frequency of therapy services. The documentation currently required in section T under the MDS 2.0 simply shows the results of the clinical evaluation. We do not believe that a projection methodology can serve to provide clinical guidance to a therapist and, thus, we do not expect that the elimination of this particular documentation requirement will adversely affect patient care.

*Comment:* Several commenters supported the voluntary start-of-therapy OMRA so that patients can be assigned to rehabilitation RUGs based on when therapy services are started, especially when therapy is started outside the assessment reference window. Many commenters also supported the change to the end-of-therapy assessment. They stated that these proposed changes will increase the accuracy of payments to providers. However, some commenters disagreed with introducing either the optional start-of-therapy OMRA or the end-of-therapy OMRA, stating that increasing the number of assessments providers will need to complete would represent an added burden. A few suggested that CMS should develop a methodology to compensate facilities for the added burden of work associated with the OMRAs. One commenter disagreed with changing the end-of-therapy OMRA ARD from 8–10 days after the discontinuation of therapy to the proposed 1 to 3 days, as a therapy RUG might still be assigned. One commenter suggested that requiring SNFs to complete an OMRA within 1 to 3 days following therapy discharge could affect the nurse's assessment of the need for skilled nursing services. These commenters also asserted that the proposed change would deny patients valuable time in recovery while being closely observed by nursing for 7 days following the discharge from therapy, and could potentially cause an inappropriate over-utilization of the OMRA by triggering additional assessments (which might not have been necessary if the patient had been maintained in a therapy group). Some commenters stated that when therapy is not provided for a few days due to an illness, an end-of-therapy OMRA would be required and then a start-of-therapy OMRA once the patient is again able to participate in therapy. They believe this would increase the number of assessments required and, thus, would represent an added burden.

*Response:* We agree with the commenters that the changes to provide for a voluntary start-of-therapy OMRA and a required end-of-therapy OMRA will result in more accurate payments to providers. Under current practice, the assessment reference date (ARD) for the OMRA is required to be set within 8 to 10 days of the end of all therapies. The proposed change that we are adopting in this final rule would simply require the ARD for the end-of-therapy OMRA to be set in a shorter time frame, that is, no more than 3 days following the cessation of all therapies, and would not increase the number of assessments. Further, the start-of-therapy OMRA is completely voluntary and is not required and, thus, we do not believe it is an additional burden. In addition, because the provider would be able to combine the start-of-therapy OMRA with a Medicare-required assessment, there would be no additional burden. However, we are aware that completing the stand-alone voluntary start-of-therapy OMRA might result in an increase of assessments. Therefore, in response to concerns expressed by commenters regarding the increase in the number of assessments, we will provide for an abbreviated OMRA for the stand-alone start-of-therapy OMRA, which will include only the required demographic information (needed for all assessment types), the therapy items, restorative therapy items and bladder and bowel training items, and the extensive services items. The other clinical payment items would not be required, as the purpose of the optional start-of-therapy OMRA is to classify a person in a rehabilitation RUG (including Rehabilitation plus Extensive Services). In addition, we note that commenters expressed concern regarding the possibility that our revised ARD requirement for the end-of-therapy OMRA may increase the number of assessments needed. Although we do not agree that changing the ARD requirement for the end-of-therapy OMRA would increase the number of assessments required, in order to alleviate the commenter's concerns and because the MDS 3.0 gives us the capability, we will also shorten the end-of-therapy OMRA so that it consists only of the required demographic items and all of the payment items (unlike the MPAF, which includes all of the required demographic items, the payment items, and many other clinical items). However, as discussed above, we do not agree that CMS is requiring additional assessments. We note that the start-of-therapy OMRA is optional, thus making it entirely voluntary and not required. CMS has no authority to provide for additional reimbursement for this assessment itself; however, the voluntary start-of-therapy OMRA would typically be completed when assignment to the new therapy group would result in higher reimbursement. The end-of-therapy OMRA is already required and, therefore, the cost of completing the end-of-therapy OMRA is already included in the payment rates for SNFs.

In reality, we have actually reduced the burden associated with the end-of-therapy OMRA, by including only the required demographic items and payment items. As we stated in the proposed rule, we have included the ability to provide two Medicare RUG classifications. The first will be the ''therapy'' RUG, which is based on all of the payment items, including the rehabilitation items. The second RUG is the ''non-therapy'' RUG. This RUG classification will not consider any of the rehabilitation items when assigning a RUG. Therefore, when submitting a claim for days of service after therapy has been discontinued, the provider would use the ''non-therapy'' RUG. We will provide detailed MDS coding and

billing instructions in the Internet-only Manuals and the RAI Manual.

We do not agree that requiring SNFs to complete an OMRA within 1 to 3 days following the discontinuation of therapy would result in patients being denied valuable recovery time by no longer paying for therapy services for 7 days after all therapy is discontinued. It is the responsibility of the professional therapist to determine when a patient has met the goals established for the patient in the therapy plan of care, and to avoid discontinuing therapy prematurely. If this determination is appropriately made by the therapist, we do not believe requiring an OMRA to be completed within 1 to 3 days after the discontinuation of therapy should cause inappropriate utilization of the OMRA triggering additional assessments. Also, we do not believe that changing the ARD for the end-of-therapy OMRA will affect the assessment of the need for continued skilled nursing services, as the nursing needs of a resident should not be affected by whether therapy is being provided. The SNF should be providing for all of the resident's needs during the entire SNF stay, regardless of when the ARD for the end-of-therapy OMRA is required to be set. In addition, if the patient continues to receive skilled nursing after the therapy has been discontinued, the patient will continue to be covered under the Medicare Part A benefit until such time as a skilled level of care is no longer required. For these reasons, we do not agree that additional assessments would be needed, or that additional days paid at the therapy RUG would affect the recovery of the patient or the assessment of the need for continued skilled nursing services.

We do not agree with the commenters that a brief illness would increase the number of required assessments. As stated in the ''daily basis'' criteria at 42 CFR 409.34(b), ''a break of one to two days in the furnishing of rehabilitation services will not preclude coverage if discharge would not be practical for the one or two days during which, for instance, the physician has suspended the therapy sessions because the patient exhibited extreme fatigue.'' Therefore, according to these regulations, a brief illness would not necessarily result in the provider having to complete an end-of-therapy OMRA. Based on the concerns expressed by these commenters, we would like to take this opportunity to help ensure that the end-of-therapy OMRA is completed timely and appropriately. We proposed that the end-of-therapy OMRA be completed with an ARD of 1 to 3 days after the discontinuation of all therapies (speech-language pathology services and occupational and physical therapies). For purposes of the ARD for an end-of-therapy OMRA, the provider shall consider day 1 the day after all therapies are discontinued. When a facility provides rehabilitation therapies five days a week (Monday through Friday), we would like to clarify that day 1 would correspond to the first day, following the cessation of therapy services, on which therapy services would normally be provided. For example, if all therapies are discontinued on October 15, 2010 (which is a Friday), the next day that therapy would normally be provided would be Monday, October 18, and this day would become day 1 after therapies were discontinued. The provider would have the ability to choose the ARD to be set on October 18 (day 1), October 19 (day 2), or October 20 (day 3). As set forth in 42 CFR 409.34(a)(2), when therapy services are not available 7 days a week, therapy services must be needed and provided at least 5 days a week. When a facility only provides therapy 5 days a week, the therapy department would not be open on the weekend. Therefore, the weekend days would not be counted toward the establishment of the ARD for the end-of-therapy OMRA. Again, as discussed above, we believe the ability to choose the ARD up to 3 days after the discontinuation of all therapies will not lead to over-utilization of OMRAs.

*Comment:* Commenters had various understandings of what constitutes a short stay. In their comments regarding our revisions to section T and the therapy reporting procedures (that is, therapy reporting procedures for short-stay patients, implementation of a start-of-therapy OMRA, and revised ARD for the end-of-therapy OMRA), a few commenters provided examples of a short-stay resident with different lengths of stay. Their remarks varied from the first ''few'' days to the first 5 days of the SNF stay. Comments regarding the STRIVE project on a short stay often cited 7 days as being a short stay (that is, a discharge before day 8).

*Response:* We realize that our discussion in the FY 2010 SNF PPS proposed rule of the revised reporting of therapy services for short-stay patients (74 FR 22245) may have caused confusion. When the SNF PPS was introduced in July 1998, we expanded the collection of MDS data to include new assessments that were primarily used to determine payment. These Medicare-required assessments were defined in our May 1998 SNF rule (63 FR 26252, 26265–69), and processing instructions are included in the MDS manual.

For SNF PPS purposes, SNFs are required to complete the Medicare-required 5-day assessment in order to initiate Medicare payment for the stay. The facility captures clinical data with an ARD from days 1 through 8 of the covered stay on this Medicare-required 5-day assessment, which is then used to assign the patient to a RUG group. Generally, the RUG group assigned using the Medicare 5-day assessment is used to pay for up to 14 days of the covered stay.

Since the inception of the SNF PPS, CMS has allowed providers to record therapy services based on a projection via section T of the MDS. This projection can only be made when two criteria are met. First, the need for therapy must have been established through a therapy evaluation and a physician's order. Second, therapy could not be initiated early enough in the beneficiary's stay to capture (on the Medicare-required 5-day assessment) the 5 days of therapy required to assign a therapy case-mix group. The projected therapy days and minutes are used in the calculation of the assigned RUG, thus allowing an SNF to receive payment for therapy services that it plans to provide to a beneficiary in the beginning of the stay. Even when patients are discharged before the Medicare 5-day assessment can be fully completed (that is, prior to day 8, the last allowed date that can be used to report the MDS clinical data), providers are still expected to complete section T as accurately as possible and submit at least a partial Medicare-required 5-day assessment. Because the Medicare-required 5 day assessment may be performed until day 8 of the resident's stay, we believe that it is appropriate to define a short-stay patient as one who is discharged on day 8 or earlier.

Based on the comments that we received, it appears that our proposal regarding the revised therapy reporting procedures for short-stay patients (74 FR 22245) may have caused some confusion among commenters, as we inadvertently described a short-stay patient as a patient who is discharged prior to day 14. Therefore, we are clarifying in this final rule that short-stay patients are patients who are discharged on day 8 or earlier, and that the revised reporting procedures for short-stay patients apply to those patients who are discharged on day 8 or earlier. The RUG–IV group established under this revised reporting procedure can then be used to reimburse SNFs at the therapy rate from day 1 to the date of short-stay discharge.

*Comment:* A few commenters stated that our proposed methodology for determining the assigned rehabilitation RUG for short-stay patients did not account for therapy services that are provided at a higher level than Medium, even though the SNF may have provided greater amounts of therapy, such as one of the High rehabilitation groups. They expressed concern that by only allowing for Rehabilitation Low and Medium categories, SNFs would not be adequately reimbursed for providing a more intense level of therapy and, thus, some patients may not receive the appropriate and adequate amount of therapy in the beginning of the SNF stay.

*Response:* We agree that for residents who are discharged early in the post-hospital stay (day 8 or earlier) and have not been able to complete 5 days of therapy, and when the SNF has provided therapy at the intensity of Rehabilitation High or greater, the resident should be able to be assigned to a rehabilitation RUG greater than Medium. We also agree that the SNF should be adequately reimbursed for the therapy services they provided. Thus, when calculating the rehabilitation RUG for a resident who is discharged early in the post-hospital stay (day 8 or earlier) and when the patient has not been able to report delivery of 5 days of therapy on the 5-day MDS 3.0, a therapy RUG will be calculated by using items from the MDS 3.0. As proposed, these items will include: the actual number of therapy minutes provided, the date of admission, the date therapy started, the patient's ADL level, and the ARD. In addition, as stated in the proposed rule, if the average daily therapy minutes provided are between 15–29 minutes, the record will be assigned to the Rehabilitation Low category (RLx). In addition, in response to comments received, the assignment for other rehabilitation categories will be based on the average daily minutes of therapy provided, as follows:

- Average daily therapy minutes are between 30–64 minutes, a Rehabilitation Medium category (RMx).
- Average daily therapy minutes are between 65–99 minutes, a Rehabilitation High category (RHx).
- Average daily therapy minutes are between 100–143 minutes, a Rehabilitation Very High category (RVx).
- Average daily therapy minutes are 144 or greater, a Rehabilitation Ultra High category (RUx).

We determined the minutes above for each rehabilitation RUG category by taking the minimum required minutes for each category and dividing by 5, which represents the minimum weekly required number of days of therapy according to the SNF level of care criteria's daily basis requirement (42 CFR 409.34). Accordingly, we are taking this opportunity to update the example that we provided in the FY 2010 proposed rule regarding the therapy reporting procedure for short-stay patients. Physical therapy is started on day 4 and the resident is discharged on day 7; the resident received 65 minutes of individual therapy on day 4, 70 minutes of individual therapy on day 5, 73 minutes of individual therapy on day 6, and 67 minutes of individual therapy on day 7. The ARD on the assessment is day 7. The total physical therapy minutes provided are 275. The average number of daily therapy minutes is 68.75. The rehabilitation RUG assigned will be RHx (the average daily therapy minutes are between 65–99).

We are reiterating that this policy only applies to the short-stay resident whose stay is 8 days or less and who received less than 5 days of therapy. Also, as stated in the proposed rule, the ADL index will be based on the ADL level reported on the MDS. Together, the ADL index and the average daily therapy minutes determine the RUG–IV group that will be assigned. We will provide detailed instructions in the online Medicare manuals and the MDS 3.0 RAI Manual.

*Comment:* A few commenters requested that we clarify how the ARD should be set for the start-of-therapy OMRA. They believe CMS intended to say that the ARD would be set 4–6 days after the start of therapy, rather than 5–7.

*Response:* We understand the confusion that may have arisen from the use of the phrase ''5–7 days after therapy starts.'' We will, therefore, take the opportunity to provide an example to clarify the policy. As we stated above, if therapy starts on day 5 of the stay, the provider may set the ARD for the optional start-of-therapy OMRA on day 9, 10, or 11. The day that therapy starts is counted as day 1. The purpose of stating 5–7 days and counting the therapy start date as day 1 was to coincide with the look-back period when completing the MDS. The look-back for the therapy items for days and minutes on the MDS is 7 days. The concept is for the provider to capture the first day of therapy when completing the MDS. Therefore, 5 days from the start of therapy is day 9 (day 5=1, day 6=2, day 7=3, day 8=4, day 9=5). If, on the other hand, the SNF chooses day 7 after the start of therapy in the previous example (which would be day 11 of the stay), the day that therapy started (day 5) would still be captured in the look-back period. We will work with industry stakeholders to ensure that our instructions in Medicare manuals and the RAI Manual are clear.

*Comment:* Several comments stated that changes in discontinuing therapy at a skilled level may create technical issues with regard to a resident receiving Part B therapy during a Part A stay.

*Response:* This comment would appear to reflect a misunderstanding of the SNF benefit structure, as a resident cannot receive Part B therapy during a Part A stay. Under the SNF PPS, the Part A payment represents payment in full for all costs (routine, ancillary, and capital-related) incurred by the facility to provide care to the resident, including those services that were previously covered under Part B.

*Comment:* Several commenters stated that reporting the dates that physical and/or occupational therapy and/or speech-language pathology services start and end on the claim when billing a rehabilitation RUG will be burdensome.

*Response:* We are in the process of evaluating our data needs to support both RUG–IV and a possible separate NTA payment mechanism. Changes to billing requirements will be introduced through updated instructions in the claims processing manuals, and will be addressed in our FY 2011 SNF PPS proposed rule as appropriate.

Therefore, effective October 1, 2010, we will eliminate section T of the MDS and revise the therapy reporting procedures as proposed in the FY 2010 proposed rule (74 FR 22244–46) (that is, reporting procedures for short-stay patients, implementation of an optional start-of-therapy OMRA, and revised ARD for the end-of-therapy OMRA), with the modifications and clarifications discussed above.

*E. Other Issues*

1. Invitation of Comments on Possible Quarterly Reporting of Nursing Home Staffing Data

Although we did not propose specific regulatory language in this area under the FY 2010 proposed rule, we did request public comment on a possible requirement for nursing homes to report nursing staffing data to CMS on a quarterly basis.

*Comment:* Although commenters expressed various concerns, most were supportive of the proposed quarterly payroll-based collection of staffing data.

*Response:* We were pleased with the level of support expressed through the comments. While it is true that the design of the proposed electronic

payroll-based nursing home staffing data collection system was not fully specified in the proposed rule, CMS is aware of most of the issues raised in the comments, and has been actively working on them. We provide responses to specific comments in the following paragraphs.

*Comment:* We received several comments pointing out the need for CMS to partner with its stakeholders during the design of any new staffing data collection.

*Response:* CMS values the opinions and insights provided by our stakeholders. We have reported on our funded staffing studies and other efforts to improve the accuracy of nursing home staffing data in stakeholder meetings and conference calls, and on Open Door Forum calls. As the planning for a payroll-based data collection system moves forward, we certainly plan to continue to involve our stakeholders.

*Comment:* Several commenters expressed concern about the level of administrative burden that might be imposed by a quarterly payroll-based reporting system for staffing data. One commenter believed that such a system would create inefficiencies in the care delivery system.

*Response:* CMS shares the commenters' concern about the need to avoid unnecessary administrative burden, and for this reason, we specifically requested comments in the proposed rule on the level of burden to nursing homes imposed by a quarterly payroll-based reporting system for staffing data. We would hope to minimize any burden to the extent possible, and we found the comments very helpful.

*Comment:* A few commenters raised the issue of the financial cost to individual nursing homes of a computerized staffing collection system: For the cost of software and updates, initial costs for the introduction of a computerized payroll system, or added costs with payroll vendors.

*Response:* The financial cost to nursing homes of providing quarterly payroll-based staffing data electronically is also an area of concern to CMS. As with the administrative burden, we would also hope to design and implement the system in such a way as to minimize any burden to the extent possible. The comments provided were very helpful to our planning.

*Comment:* A few commenters expressed concern about issues of privacy involved with the use of payroll data.

*Response:* This data collection effort is currently in a planning phase, but we want to be clear that it is not our intention to collect names, social security numbers, or wage data for staff members. CMS is interested in each staff member's time spent caring for residents, and in the start and end date of service in the facility. We envision each staff member's data being identified with a facility-level identification number and, within the facility data, an individual staff member identification number.

*Comment:* One commenter pointed out the need under any new system for careful and consistent directions for coding of staff categories and for consistent directions on how to handle non-productive versus productive time.

*Response:* We agree that clear, consistent directions for specifying staff categories and for handling non-productive time are vital to ensuring accuracy of any data collected.

*Comment:* Several commenters pointed out the importance of including data in the proposed system that would allow the calculation of staff turnover and retention.

*Response:* We agree that data to address turnover and retention are important to include in a staffing data collection system. Staff turnover and staff retention measures were developed as part of the CMS-funded ''Development of Staffing Quality Measures'' Project (2003–2008). Both measures were found to be related to the quality of care in the nursing home.

*Comment:* Several commenters pointed out the need to carefully address collection of contract and agency staff data. Specifically, one commenter was concerned with the burden of potentially having to hand-sort invoices as a basis for data reporting.

*Response:* An assessment of the best way to collect staffing data for contract and agency staff is currently being conducted under a CMS-funded study. While we currently believe that an auditable source of data such as invoices would be preferable, we are awaiting the results of our study. We appreciate the comment, and are conscious of the level of effort entailed in a system requiring hand-sorting.

*Comment:* A few commenters discussed the need for a data collection system to allow a ''complete staffing picture'' by including therapists, physician extenders, and other staff providing resident care.

*Response:* This data collection effort is currently in a planning phase. At this point it is not entirely clear which staff categories will be included in the data collection. Being able to see a ''complete staffing picture'' for a facility would certainly be helpful, and we will take the comment into account.

*Comment:* A commenter pointed out the need for any new system to be sensitive to the staffing patterns of culture change facilities and to allow the staff to be fairly represented.

*Response:* We are aware of concerns that the currently used staffing form (CMS–671) does not well accommodate the broad range of newer nursing home care staff roles. The staffing patterns of culture change facilities are good examples of this issue. We will be sensitive to this concern in developing the definitions for the payroll-based data collection system.

*Comment:* We received a few comments urging that any staffing data collected be standardized for acuity (or case-mix) of residents and for the facility census.

*Response:* Facility-level staffing data that are currently posted on the CMS Nursing Home Compare Web site are expressed as hours of care per resident per day, so they are, in effect, standardized for the census of the facility. Although the staffing data used in the Five Star Quality Rating System calculations are case-mix adjusted using Resource Utilization Group categories, the case-mix adjusted measures themselves are not reported. We will give consideration to the comment as we plan for implementing the payroll-based system.

*Comment:* Several commenters suggested that any quarterly collection of staffing data could be most easily accomplished through the use of the MDS reporting systems.

*Response:* At this phase in the planning efforts, we are considering the use of the MDS reporting system, as well as several other options.

*Comment:* A commenter suggested basing any new system on the publicly posted staffing information in each facility that is currently required by CMS. The data include nursing home census and staffing resources by shift.

*Response:* We have been funding work concerned with ensuring the accuracy of nursing home staffing data since 1998, with the beginning of the Phase I Staffing Study (designed to investigate the appropriateness of minimum staffing ratios in nursing homes). The results of both the Phase I and the Phase II Staffing Studies suggested that using payroll data as a basis for staffing produced more accurate data than other sources, such as cost reports or the current Online Survey Certification and Reporting System (OSCAR), which houses the data collected at the time of survey. A later CMS-funded Study (Development of

Staffing Quality Measures (SQM)—2003–2008), following the advice of a panel of technical experts, provided a further assessment of the use of payroll data for staffing. This study assembled a database of payroll data from 1453 nursing homes and, using those data, developed a number of measures of direct care staffing, including turnover and retention. A comparison of these data with OSCAR data showed clear differences.

While we have not assessed the relative accuracy of the staffing data posted publicly in each facility compared to payroll data, the research base supports the use of payroll data as a more accurate source for staffing data.

*Comment:* Several commenters suggested uses of the data that involved collection of wage data in addition to staffing time data.

*Response:* The payroll-based staffing data collection, as it is currently proposed, does not include collection of wage data.

*Comment:* In addition to the comments that we received on the proposed quarterly staffing data collection, several commenters provided discussion of specific issues involving the CMS Five Star Quality Rating System for Nursing Homes.

*Response:* The specific issues that were raised about the design of the Five Star Quality Rating System for Nursing Homes and the calculations involved in the rating system are beyond the scope of this final rule. However, we appreciate the careful consideration that these comments reflected, and we will direct them to the attention of appropriate staff in CMS.

2. Miscellaneous Technical Corrections and Clarifications

In the FY 2010 proposed rule, we proposed to correct the paragraph heading in the regulations text at § 483.75(j), by removing the phrase ''Level B requirement:'' and italicizing the remaining text in the heading (''*Laboratory services*''). We received no comments on this proposal, and in this final rule, we are revising this portion of the regulations text as proposed.

*F. The Skilled Nursing Facility Market Basket Index*

Section 1888(e)(5)(A) of the Act requires us to establish a SNF market basket index (input price index), that reflects changes over time in the prices of an appropriate mix of goods and services included in the SNF PPS. In the FY 2010 proposed rule, we stated that the proposed rule incorporated the latest available projections of the SNF market basket index. In this final rule, we are updating projections based on the latest available projections at the time of publication. Accordingly, we have developed a SNF market basket index that encompasses the most commonly used cost categories for SNF routine services, ancillary services, and capital-related expenses.

*Comment:* One commenter stated that the SNF market basket factor is defective and continues to understate compensation, pharmacy, and operating costs, and that current market basket weights do not reflect changing staffing, higher pharmacy costs, and rising liability insurance.

*Response:* The 2004-based SNF market basket is a fixed-weight index that is intended to measure the price increases associated with the same mix of goods and services over time. The market basket is not intended to measure actual costs and, therefore, we do not accept the commenter's argument that the SNF market basket factor is defective and continues to understate compensation, pharmacy, and operating costs. The current FY 2010 market basket update factor of 2.2 percent is based on the IHS Global Insight (IGI) second quarter 2009 forecast, and reflects the projected price changes for all cost categories in the market basket (including those associated with compensation, pharmacy, and other operating costs). IGI is a nationally recognized economic and financial forecasting firm that contracts with CMS to forecast the components of the market baskets.

We also do not agree with the commenter's claim that the market basket does not reflect changing staffing costs, higher pharmacy costs, and rising liability insurance. For the FY 2008 final rule (72 FR 43424–43429), we adopted a revised and rebased 2004-based SNF market basket that reflected the 2004 cost structures of Medicare-participating SNFs. The previous SNF market basket was based on the 1997 cost structures for Medicare-participating SNFs. The major cost weights of the 2004-based SNF market basket, which are inclusive of compensation, pharmacy, and professional liability insurance, were derived mainly from 2004 Medicare cost reports. During the rebasing process, we revised our methodology for calculating the pharmacy cost weight to incorporate an estimate of Medicaid drug expenses (72 FR 43426) incurred by SNFs. The inclusion of these costs resulted in a pharmacy cost weight for the 2004-based SNF market basket that was twice as large as that of the 1997-based market basket pharmacy cost weight. We also explicitly designated a professional liability insurance cost category (which was not a separate cost category in the 1997-based SNF market basket due to lack of sufficient data). As a result, we believe the current SNF market basket cost weights reflect the cost structures of Medicare-participating SNFs.

Each year, we calculate a revised labor-related share based on the relative importance of labor-related cost categories in the input price index. Table 16 summarizes the updated labor-related share for FY 2010.

TABLE 16—LABOR-RELATED RELATIVE IMPORTANCE, FY 2009 AND FY 2010

| | Relative importance, labor-related, FY 2009 08:2 forecast* | Relative importance, labor-related, FY 2010 09:2 forecast |
|---|---|---|
| Wages and salaries | 51.003 | 51.078 |
| Employee benefits | 11.547 | 11.533 |
| Nonmedical professional fees | 1.331 | 1.323 |
| Labor-intensive services | 3.434 | 3.446 |
| Capital-related (.391) | 2.468 | 2.460 |
| Total | 69.783 | 69.840 |

*Published in the **Federal Register** (73 FR 46434); based on the second quarter 2009 IHS Global Insight Inc. revised forecast.

1. Use of the Skilled Nursing Facility Market Basket Percentage

Section 1888(e)(5)(B) of the Act defines the SNF market basket percentage as the percentage change in the SNF market basket index from the average of the previous FY to the average of the current FY. For the Federal rates established in this final rule, we use the percentage increase in the SNF market basket index to compute the update factor for FY 2010. This is based on the IHS Global Insight, Inc. (formerly DRI–WEFA) second quarter 2009 forecast (with historical data through the first quarter 2009) of the FY 2010 percentage increase in the FY 2004-based SNF market basket index for routine, ancillary, and capital-related expenses, to compute the update factor in this final rule. Finally, as discussed in section I.A. of this final rule, we no longer compute update factors to adjust a facility-specific portion of the SNF PPS rates, because the initial three-phase transition period from facility-specific to full Federal rates that started with cost reporting periods beginning in July 1998 has expired.

2. Market Basket Forecast Error Adjustment

As discussed in the FY 2004 supplemental proposed rule (68 FR 34768, June 10, 2003) and finalized in the FY 2004 final rule (68 FR 46067, August 4, 2003), the regulations at § 413.337(d)(2) provide for an adjustment to account for market basket forecast error. The initial adjustment applied to the update of the FY 2003 rate for FY 2004, and took into account the cumulative forecast error for the period from FY 2000 through FY 2002. Subsequent adjustments in succeeding FYs take into account the forecast error from the most recently available FY for which there is final data, and apply whenever the difference between the forecasted and actual change in the market basket exceeds a specified threshold. We originally used a 0.25 percentage point threshold for this purpose; however, for the reasons specified in the FY 2008 SNF PPS final rule (72 FR 43425, August 3, 2007), we adopted a 0.5 percentage point threshold effective with FY 2008. As discussed previously in section I.F.2. of this final rule, because the difference between the estimated and actual amounts of increase in the market basket index for FY 2008 (the most recently available FY for which there is final data) does not exceed the 0.5 percentage point threshold, the payment rates for FY 2010 do not include a forecast error adjustment.

*Comment:* One commenter suggested that CMS apply a cumulative forecast error to account for all of the variations in the market basket forecasts since FY 2004 (that is, as of when CMS implemented the market basket forecast error correction policy.) The commenter asserted that the forecast adjustment process did not work as intended, citing the lack of any annual adjustments in subsequent years as evidence. The commenter recommended that the policy be modified to provide for an FY 2010 cumulative adjustment of 1.0 percent to restore these ''lost'' dollars to the SNF industry.

*Response:* For FY 2004, CMS applied a one-time, cumulative forecast error correction of 3.26 percent (68 FR 46036, August 4, 2003). Since that time, the forecast errors have been relatively small and clustered near zero. We believe the forecast error correction should be applied only when the degree of forecast error in any given year is such that the SNF PPS base payment rate does not adequately reflect the historical price changes faced by SNFs. Accordingly, we continue to believe that the forecast error adjustment mechanism should appropriately be reserved for the type of major, unexpected change that initially gave rise to this policy, rather than the minor variances that are a routine and inherent aspect of this type of statistical measurement. Further, we note that all of the Medicare prospective systems use an annual market basket adjustment factor to update rates to reflect inflation in the prices of goods and services used by providers.

3. Federal Rate Update Factor

Section 1888(e)(4)(E)(ii)(IV) of the Act requires that the update factor used to establish the FY 2010 Federal rates be at a level equal to the full market basket percentage change. Accordingly, to establish the update factor, we determined the total growth from the average market basket level for the period of October 1, 2008 through September 30, 2009 to the average market basket level for the period of October 1, 2009 through September 30, 2010. Using this process, the market basket update factor for FY 2010 SNF PPS Federal rates is 2.2 percent. We used this update factor to compute the Federal portion of the SNF PPS rate shown in Tables 2 and 3.

*G. Consolidated Billing*

Section 4432(b) of the BBA established a consolidated billing requirement that places the Medicare billing responsibility for virtually all of the services that the SNF's residents receive with the SNF, except for a small number of services that the statute specifically identifies as being excluded from this provision. As noted previously in section I. of this final rule, subsequent legislation enacted a number of modifications in the consolidated billing provision.

Specifically, section 103 of the BBRA amended this provision by further excluding a number of individual ''high-cost, low-probability'' services, identified by the Healthcare Common Procedure Coding System (HCPCS) codes, within several broader categories (chemotherapy and its administration, radioisotope services, and customized prosthetic devices) that otherwise remained subject to the provision. We discuss this BBRA amendment in greater detail in the proposed and final rules for FY 2001 (65 FR 19231–19232, April 10, 2000, and 65 FR 46790–46795, July 31, 2000), as well as in Program Memorandum AB–00–18 (Change Request #1070), issued March 2000, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/ab001860.pdf*.

Section 313 of the BIPA further amended this provision by repealing its Part B aspect; that is, its applicability to services furnished to a resident during a SNF stay that Medicare Part A does not cover. (However, physical, occupational, and speech-language therapy remain subject to consolidated billing, regardless of whether the resident who receives these services is in a covered Part A stay.) We discuss this BIPA amendment in greater detail in the proposed and final rules for FY 2002 (66 FR 24020–24021, May 10, 2001, and 66 FR 39587–39588, July 31, 2001).

In addition, section 410 of the MMA amended this provision by excluding certain practitioner and other services furnished to SNF residents by RHCs and FQHCs. We discuss this MMA amendment in greater detail in the update notice for FY 2005 (69 FR 45818–45819, July 30, 2004), as well as in Program Transmittal #390 (Change Request #3575), issued December 10, 2004, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/r390cp.pdf*.

Further, while not substantively revising the consolidated billing requirement itself, a related provision was enacted in the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA, Pub. L. 110–275). Specifically, section 149 of MIPPA amended section 1834(m)(4)(C)(ii) of the Act to create a new subclause (VII), which adds SNFs (as defined in section 1819(a) of the Act)

to the list of entities that can serve as a telehealth ''originating site'' (that is, the location at which an eligible individual can receive, through the use of a telecommunications system, services furnished by a physician or other practitioner who is located elsewhere at a ''distant site'').

As explained in the Medicare Physician Fee Schedule (PFS) final rule for Calendar Year (CY) 2009 (73 FR 69726, 69879, November 19, 2008), a telehealth originating site receives a facility fee which is always separately payable under Part B outside of any other payment methodology. Section 149(b) of MIPPA amended section 1888(e)(2)(A)(ii) of the Act to exclude telehealth services furnished under section 1834(m)(4)(C)(ii)(VII) of the Act from the definition of ''covered skilled nursing facility services'' that are paid under the SNF PPS. Thus, a SNF ''* * * can receive separate payment for a telehealth originating site facility fee even in those instances where it also receives a bundled per diem payment under the SNF PPS for a resident's covered Part A stay'' (73 FR 69881). By contrast, under section 1834(m)(2)(A) of the Act, a telehealth distant site service is payable under Part B to an eligible physician or practitioner only to the same extent that it would have been so payable if furnished without the use of a telecommunications system. Thus, as explained in the CY 2009 PFS final rule, eligible distant site physicians or practitioners can receive payment for a telehealth service that they furnish

* * * only if the service is separately payable under the PFS when furnished in a face-to-face encounter at that location. For example, we pay distant site physicians or practitioners for furnishing services via telehealth only if such services are not included in a bundled payment to the facility that serves as the originating site (73 FR 69880).

This means that in those situations where a SNF serves as the telehealth originating site, the distant site professional services would be separately payable under Part B only to the extent that they are not already included in the SNF PPS bundled *per diem* payment and subject to consolidated billing. Thus, for a type of practitioner whose services are not otherwise excluded from consolidated billing when furnished during a face-to-face encounter, the use of a telehealth distant site would not serve to unbundle those services. In fact, consolidated billing does exclude the professional services of physicians, along with those of most of the other types of telehealth practitioners that the law specifies at section 1842(b)(18)(C) of the Act, that is, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, certified nurse midwives, and clinical psychologists (*see* section 1888(e)(2)(A)(ii) of the Act and 42 CFR 411.15(p)(2)). However, the services of clinical social workers, registered dietitians and nutrition professionals remain subject to consolidated billing when furnished to a SNF's Part A resident and, thus, cannot qualify for separate Part B payment as telehealth distant site services in this situation. Additional information on this provision appears in Program Transmittal #1635 (Change Request #6215), issued November 14, 2008, which is available online at *http://www.cms.hhs.gov/transmittals/downloads/R1635CP.pdf*.

To date, the Congress has enacted no further legislation affecting the consolidated billing provision. However, as noted above and explained in the proposed rule for FY 2001 (65 FR 19232, April 10, 2000), the amendments enacted in section 103 of the BBRA not only identified for exclusion from this provision a number of particular service codes within four specified categories (that is, chemotherapy items, chemotherapy administration services, radioisotope services, and customized prosthetic devices), but also gave the Secretary ''* * * the authority to designate additional, individual services for exclusion within each of the specified service categories.'' In the proposed rule for FY 2001, we also noted that the BBRA Conference report (H.R. Rep. No. 106–479 at 854 (1999) (Conf. Rep.)) characterizes the individual services that this legislation targets for exclusion as ''* * * high-cost, low probability events that could have devastating financial impacts because their costs far exceed the payment [SNFs] receive under the prospective payment system * * *''. According to the conferees, section 103(a) ''is an attempt to exclude from the PPS certain services and costly items that are provided infrequently in SNFs. * * * For example, * * * specific chemotherapy drugs * * * not typically administered in a SNF, or * * * requiring special staff expertise to administer * * *.'' By contrast, the remaining services within those four categories are not excluded (thus leaving all of those services subject to SNF consolidated billing), because they are relatively inexpensive and are furnished routinely in SNFs.

As we further explained in the final rule for FY 2001 (65 FR 46790, July 31, 2000), and as our longstanding policy, any additional service codes that we might designate for exclusion under our discretionary authority must meet the same statutory criteria used in identifying the original codes excluded from consolidated billing under section 103(a) of the BBRA: They must fall within one of the four service categories specified in the BBRA, and they also must meet the same standards of high cost and low probability in the SNF setting, as discussed in the BBRA Conference report. Accordingly, we characterized this statutory authority to identify additional service codes for exclusion ''* * * as essentially affording the flexibility to revise the list of excluded codes in response to changes of major significance that may occur over time (for example, the development of new medical technologies or other advances in the state of medical practice)'' (65 FR 46791). In the FY 2010 proposed rule, we specifically invited public comments identifying codes in any of these four service categories (chemotherapy items, chemotherapy administration services, radioisotope services, and customized prosthetic devices) representing recent medical advances that might meet our criteria for exclusion from SNF consolidated billing (74 FR 22208, 22249, May 12, 2009). The comments that we received on this subject, and our responses, appear below.

*Comment:* Several commenters submitted additional chemotherapy codes that they recommended for exclusion from consolidated billing.

*Response:* A review of the particular chemotherapy codes that commenters submitted in response to the proposed rule's solicitation for comment revealed that many of them were codes that had already been submitted for consideration in past years, and which we had already decided previously not to exclude. Other codes that commenters submitted were themselves already in existence as of July 1, 1999, but did not fall within the specific code ranges statutorily designated for exclusion in the BBRA. As the statute does not specifically exclude these already-existing codes (and as further discussed later in this section of the final rule), we are not adding them to the exclusion list. Most of the other codes submitted represent services that, for various reasons, do not meet the statutory criteria for exclusion. For example, some represent oral medications that can be administered routinely in SNFs and are not reasonably characterized as ''requiring special staff expertise to administer'' in accordance with the previously-cited BBRA Conference report language. Other codes do not meet the BBRA

Conference report's threshold criteria of high cost (that is, an item whose ''* * * costs far exceed the payment [SNFs] receive under the prospective payment system'') and low probability that the Congress imposed in enacting this exclusion. Still others represent drugs that are administered in conjunction with chemotherapy to address side effects such as nausea; however, as such drugs are not in themselves inherently chemotherapeutic in nature, they do not fall within the excluded chemotherapy category designated in the BBRA. Two particular codes that a commenter offered as possible candidates for the chemotherapy exclusion actually are not anti-cancer drugs, but rather, are used in hormone therapy and for the treatment of certain types of anemia, respectively. Finally, some other codes that were submitted represent services that, in fact, are already excluded from consolidated billing under existing instructions.

*Comment:* Some commenters reiterated previous suggestions on expanding the existing chemotherapy exclusion to encompass related drugs that are commonly administered in conjunction with chemotherapy in order to treat the side effects of the chemotherapy drugs. The commenters cited examples such as anti-emetics (anti-nausea drugs) and erythropoietin (EPO).

*Response:* As we have noted previously in this final rule and in response to comments on this issue in the past (most recently, in the August 8, 2008 SNF PPS final rule for FY 2009 (73 FR 46437)), the BBRA authorizes us to identify additional services for exclusion only within those particular service categories—chemotherapy and its administration; radioisotope services; and, customized prosthetic devices—that it has designated for this purpose, and does not give us the authority to exclude other services which, though they may be related, fall outside of the specified service categories themselves. Thus, while anti-emetics, for example, are commonly administered in conjunction with chemotherapy, they are not themselves inherently chemotherapeutic in nature and, consequently, do not fall within the excluded chemotherapy category designated in the BBRA. We also explained in the FY 2008 final rule that the existing statutory exclusion from consolidated billing for EPO is effectively defined by the scope of coverage under the Part B EPO benefit at section 1861(s)(2)(O) of the Act; that benefit, in turn, specifically limits EPO coverage to dialysis patients, and does not provide for such coverage in any other, non-dialysis situations such as chemotherapy (72 FR 43432).

*Comment:* One comment concerned our longstanding view, most recently discussed in the SNF PPS final rule for FY 2009 (73 FR 46436, August 8, 2008) and the SNF PPS proposed rule for FY 2010 (74 FR 22249, May 12, 2009), that the authority granted by the BBRA to identify additional codes for exclusion within the designated categories essentially serves to confer ''* * * the flexibility to revise the list of excluded codes in response to changes of major significance *that may occur over time* (for example, the development of new medical technologies or other advances in the state of medical practice)'' (emphasis added). Our position has always been that this discretionary authority applies solely to codes that were created subsequent to the enactment of the BBRA, and not to those codes that were already in existence as of July 1, 1999 (the date that the legislation itself uses as the reference point for identifying those codes that it designates for exclusion). Implicit in this position is an assumption that if a particular code was already in existence as of that date but not designated for exclusion, this indicated the Congress's intent for that code to remain within the SNF PPS bundle.

One commenter took exception to this position and cited the Conference report that accompanied the BBRA (H.R. Rep. No. 106–479 at 854 (1999) (Conf. Rep.)), which gives two examples of potential problems with the practice of ''* * * excluding services or items from the [SNF] PPS by specifying codes in legislation'':

- Some already-existing items that meet the exclusion criteria may have inadvertently been left off of the original exclusion list.
- New, extremely costly items may come into use or codes may change over time.

The commenter then asserted that our discretionary authority to identify additional codes for exclusion should apply not only to the latter concern, but also to the former one as well. As a result, the commenter argued that our periodic review of the codes for possible additional exclusions from consolidated billing should not be limited to only new and revised codes, but should also consider the entire set of codes that were already in existence as of the BBRA legislation's reference date, July 1, 1999.

*Response:* In contrast to the new and revised codes that reflect an ongoing process of change within the coding system, the codes that were in existence as of the BBRA reference date (July 1, 1999) essentially comprise a closed code set at this point, one that remains static and unchanging from year to year. Accordingly, we do not believe that it would be either necessary or appropriate to conduct recurring reviews of this particular code set once it has received an initial review. Moreover, we note that after identifying the two potential problems with designating exclusions by code as discussed above, the BBRA Conference report that the commenter cites then goes on to issue two specific directives: it confers on the Secretary the authority ''* * * to review *periodically* and modify, as needed, the list of excluded services'' (emphasis added), and it also directs the GAO ''* * * to review the codes of the excluded items and make recommendations on whether the criteria for their exclusion are appropriate *by July 1, 2000''* (emphasis added). Accordingly, we believe it is clear that the GAO's short-term, one-time-only review of the exclusion codes would serve to encompass those codes already in existence as of the BBRA reference date, while the Secretary's ongoing authority to conduct reviews ''periodically'' was intended to address changes in the coding system that occur *subsequent* to that point.

*Comment:* Although the FY 2010 SNF PPS proposed rule specifically invited comments on possible exclusions within the particular service categories identified in the BBRA legislation, a number of commenters took this opportunity to reiterate concerns about other aspects of consolidated billing. For example, some commenters reiterated past comments made on previous rules, urging CMS to unbundle additional service categories. The commenters identified services such as hyperbaric oxygen treatments, observation services, and blood transfusions as appropriate candidates for exclusion. They also repeated previous calls to expand the existing exclusion for certain high-intensity outpatient hospital services to encompass services furnished in other, nonhospital settings, arguing that such nonhospital services may be cheaper and more accessible in certain localities (such as rural settings) than those furnished by hospitals. Some commenters expressed support for expanding the existing, partial exclusion of ambulance services from consolidated billing to encompass all ambulance services, but they also acknowledged that creating such an exclusion of an entire service category would require legislation by the

Congress. Another commenter recommended conducting a comprehensive overhaul of the entire set of existing consolidated billing exclusions, in a way that would streamline and simplify the current complex set of exclusion rules and make it easier to administer.

*Response:* As we have consistently stated (most recently, in the August 8, 2008 SNF PPS final rule for FY 2009 (73 FR 46436)), the BBRA authorizes us to identify additional services for exclusion only within those particular service categories—chemotherapy and its administration; radioisotope services; and, customized prosthetic devices—that it has designated for this purpose, and does not give us the authority to carve out entire service categories beyond those specified in the law. Accordingly, as the particular services that these commenters recommended for exclusion do not fall within one of the specific service categories designated for this purpose in the statute itself, these services remain subject to consolidated billing.

We have also included in a number of previous rules an explanation of the setting-specific nature of the exclusion for certain high-intensity outpatient hospital services—most recently, in the FY 2009 SNF PPS final rule (73 FR 46436, August 8, 2008):

> We believe the comments that reflect previous suggestions for expanding this administrative exclusion to encompass services furnished in non-hospital settings indicate a continued misunderstanding of the underlying purpose of this provision. As we have consistently noted in response to comments on this issue in previous years * * * and as also explained in Medicare Learning Network (MLN) Matters article SE0432 (available online at *http://www.cms.hhs.gov/MLNMattersArticles/downloads/SE0432.pdf*), the rationale for establishing this exclusion was to address those types of services that are so far beyond the normal scope of SNF care that they require the intensity of the hospital setting in order to be furnished safely and effectively.
>
> Moreover, we note that when the Congress enacted the consolidated billing exclusion for certain RHC and FQHC services in section 410 of the MMA, the accompanying legislative history's description of present law acknowledged that the existing exclusions for exceptionally intensive outpatient services are specifically limited to ''* * * certain outpatient services *from a Medicare-participating hospital or critical access hospital* * * *'' (emphasis added). (*See* the House Ways and Means Committee Report (H. Rep. No. 108–178, Part 2 at 209), and the Conference Report (H. Conf. Rep. No. 108–391 at 641).) Therefore, these services are excluded from SNF consolidated billing only when furnished in the outpatient hospital or CAH setting, and not when furnished in other, freestanding (non-hospital or non-CAH) settings.

Further, the authority for us to establish a categorical exclusion for these services that would apply irrespective of the setting in which they are furnished does not exist in current law. In addition, with regard to the relative availability of such services in hospital versus nonhospital settings, we have also noted previously that:

> * * * to the extent that advances in medical practice over time may make it feasible to perform such a service more widely in a less intensive, nonhospital setting, this would not argue in favor of excluding the nonhospital performance of the service from consolidated billing under these regulations, but rather, would call into question whether the service should continue to be excluded from consolidated billing at all, even when performed in the hospital setting (70 FR 45049, August 4, 2005).

Regarding the comment on ambulance services, we agree with the commenters that carving out an entire service category from consolidated billing would require legislation by the Congress, and cannot be accomplished administratively. Finally, with reference to the suggestion for a comprehensive overhaul of the existing consolidated billing rules, while the commenter's interest in promoting improved ease of administration is understandable, we note that current law contains no authority to adopt the suggested approach.

*Comment:* Some comments cited ongoing concerns about the SNF PPS's ability to account accurately for the cost of NTAs, and suggested that we create additional consolidated billing exclusions for certain exceptionally high-cost drugs as a means of addressing those concerns.

*Response:* We note that, as mentioned previously in section III.C.2 of this final rule, we are continuing to conduct research relating to the treatment of NTAs under the SNF PPS, including the exploration of possible modifications in the case-mix classification system that might further improve its accuracy in accounting for these costs. However, as we indicated in the SNF PPS final rule for FY 2002 (66 FR 39588, July 31, 2001), and again in the SNF PPS final rule for FY 2004 (68 FR 46062, August 4, 2003), ''* * * we do not share the view * * * that the creation of additional exclusions from consolidated billing could serve, in effect, as an interim substitute for [such] refinements.'' Rather, we believe ''* * * that payment adjustments relating to case-mix would best be accomplished directly through refinements in the case-mix classification system'' itself.

*Comment:* In contrast to the preceding comments that advocated expanding the existing exclusion of certain exceptionally intensive outpatient services to encompass freestanding (nonhospital) settings, one commenter specifically acknowledged this exclusion's restriction to the hospital setting, and then proceeded to recommend a particular drug, natalizumab (Tysabri®, HCPCS code J2323) for exclusion on this basis. Natalizumab is an intravenous infusion drug used for treating multiple sclerosis in cases where alternative therapies are not feasible. The commenter indicated that natalizumab not only meets the general criteria of high cost, low probability, and inelastic demand (that is, the service is unlikely to be overprovided even if separate payment under Part B becomes available for it) that characterize services under the exclusion, but also has a number of specific characteristics that could reasonably be viewed as requiring the intensity of the hospital setting for its safe and effective administration. The commenter noted that under the terms of this drug's approval by the Food and Drug Administration (FDA), natalizumab is subject to a complex risk minimization action plan (RiskMAP) protocol that requires highly specialized expertise in its administration. The commenter also cited an FDA notice in the **Federal Register** (73 FR 16313, March 27, 2008), including natalizumab in a list of drugs that are deemed to have in effect an approved risk evaluation and mitigation strategy (REMS). (The REMS is designed to address certain drugs that, while providing an important benefit to patients, can be especially dangerous if not used properly.) The FDA notice also indicated that such drugs have in effect a number of elements to assure safe use, including their being ''* * * dispensed to patients only in certain health care settings, such as hospitals . * * *'' Accordingly, the commenter also suggested that we consider similarly excluding the other drugs identified in the FDA notice (which, like natalizumab, are deemed to have an approved REMS in effect).

*Response:* We believe that the commenter's observations merit further study to determine whether drugs of this type might, in fact, meet the outpatient hospital services exclusion's longstanding threshold (most recently discussed, as noted previously, in the FY 2009 SNF PPS final rule (74 FR 46436, August 8, 2008)) of being ''* * * so far beyond the normal scope of SNF care that they require the intensity of

the hospital setting in order to be furnished safely and effectively.'' Accordingly, we plan to examine the appropriateness of designating one or more of these drugs as exceptionally intensive outpatient hospital services for purposes of exclusion from consolidated billing. As we noted in the discussion of the outpatient hospital exclusion in the SNF PPS final rule for FY 2000 (64 FR 41676, July 30, 1999), while any broad refinements in the outpatient hospital exclusion's underlying policy itself (which might be necessitated by the development of the outpatient hospital PPS) ''* * * would be made through future rulemaking,'' modifying the list of individual services encompassed by the exclusion would occur ''* * * in future instructions.'' Accordingly, we would use program instructions as the vehicle for specifying any additional services that we may decide to designate as qualifying for exclusion on this basis.

*H. Application of the SNF PPS to SNF Services Furnished by Swing-Bed Hospitals; Quality Monitoring of Swing-Bed Hospitals*

In accordance with section 1888(e)(7) of the Act, as amended by section 203 of the BIPA, Part A pays CAHs on a reasonable cost basis for SNF services furnished under a swing-bed agreement. However, effective with cost reporting periods beginning on or after July 1, 2002, the swing-bed services of non-CAH rural hospitals are paid under the SNF PPS. As explained in the final rule for FY 2002 (66 FR 39562, July 31, 2001), we selected this effective date consistent with the statutory provision to integrate swing-bed rural hospitals into the SNF PPS by the end of the SNF transition period, June 30, 2002.

Accordingly, all non-CAH swing-bed rural hospitals have come under the SNF PPS as of June 30, 2003. Therefore, all rates and wage indexes outlined in earlier sections of this final rule for the SNF PPS also apply to all non-CAH swing-bed rural hospitals. A complete discussion of assessment schedules, the MDS and the transmission software (RAVEN–SB for Swing Beds) appears in the final rule for FY 2002 (66 FR 39562, July 31, 2001). The latest changes in the MDS for swing-bed rural hospitals appear on the SNF PPS Web site, *http://www.cms.hhs.gov/snfpps*. It is our intention to include rural hospital swing beds in the transition to the MDS 3.0 effective October 1, 2010, and to adopt the RUG–IV classification for swing-bed facilities on that same date. Under the RUG–III payment model, swing-bed hospitals have not been comprehensively monitored for quality of care, but have been required to submit four types of abbreviated MDS assessments: The abbreviated Medicare Assessments submitted on days 5, 14, 30, 60, and 90 used to determine payment under the SNF PPS, entry and discharge tracking assessments, the clinical change assessments, and the Other Medicare Required Assessments (OMRAs). The limited use of the MDS for quality monitoring was established because we believed that swing-bed units, as parts of rural hospitals, were already subject to the hospital quality review process. In addition, our analyses showed that the average length of stay in swing-bed facilities was significantly lower than in either hospital-based or freestanding SNFs, and that our existing quality measures might be unable to evaluate short-stay patient care accurately. Thus, in the FY 2002 final rule referenced above (65 FR 39590), we decided that we would not ''require swing-bed facilities to perform the care planning and quality monitoring components included in the full MDS * * *'' at that point. At the same time, we explained our intention of including ''* * * an analysis of swing-bed requirements in our comprehensive reevaluation of all post-acute data needs, and in the design of any future assessment and data collection tools.''

Since that time, we have expanded our quality analysis in a variety of settings, and have made SNF information publicly available through Nursing Home Compare and other initiatives. While developing ways to monitor and compare quality across swing-bed facilities and between swing-bed facilities and other SNFs would increase swing-bed facility data collection and transmission requirements, it would also increase the information available to patients, families, and oversight agencies for making placement decisions and evaluating the quality of care furnished by swing-bed facilities. For these reasons, in the FY 2010 proposed rule (74 FR 22208, 22250, May 12, 2009), we stated that we were considering a change in the swing-bed MDS (SB–MDS) reporting requirements that would go into effect with the introduction of the MDS 3.0. Since the current SB–MDS does not include the items needed to evaluate quality in the same way as for other nursing facilities, we proposed to eliminate the SB–MDS, and replace it with the MDS 3.0 equivalent of the Medicare Payment Assessment Form (MPAF) that captures all of the items used in determining quality measures. Accordingly, in the FY 2010 proposed rule (74 FR 22208, 22250, May 12, 2009), we solicited comments on expanding swing-bed MDS reporting requirements to apply the quality monitoring mechanism in place for all other SNF PPS facilities to rural swing-bed hospitals. The comments that we received on this subject, and our responses, appear below.

*Comment:* Some commenters supported the quality monitoring of swing-bed services, while others opposed it. Those who opposed quality monitoring of swing-bed services asserted that the existing hospital quality review process is sufficient, and that the short length of stays for swing-bed patients would not result in reliable measures. The commenters were also concerned with the burden associated with additional paperwork. A few commenters stated that this would impose a burden on CAHs. Those who supported quality monitoring of swing-bed services argued that it would help achieve greater consistency between the swing-bed and SNF settings, and would allow consumers to make the same quality comparisons and evaluations for swing beds as for SNFs.

*Response:* When the Congress enacted the swing-bed program, it described swing-bed services as ''* * * services of the type which, if furnished by a skilled nursing facility, would constitute extended care services'' (section 1883(a)(1) of the Act). Therefore, we believe it is appropriate and in the best interest of beneficiaries to monitor the quality of care provided in swing-bed hospitals similar to the manner in which we monitor quality of care for SNFs, and to be able to inform consumers of the various choices they have for post acute care services in their community. We are cognizant of the short length of stays in swing beds and realize that the current CMS quality measures may not be applicable in many instances for swing-bed providers. However, we will not be able to make a sound decision unless we first gather the data to determine the best avenue for measuring quality similar to SNFs. Based on comments received, we will limit the items to be collected in the MDS 3.0 swing-bed assessment to the required demographic, payment, and quality items. The MDS 3.0 swing-bed assessment will be similar to the MDS 3.0 MPAF; however, it will contain fewer items, as the MPAF includes clinical items that are not required for payment or quality measures. We will begin collecting the data from swing-bed facilities starting October 1, 2010, and then, once sufficient information is obtained, we will conduct an analysis

that includes (but is not limited to) the following: (1) Whether the length of stay in swing beds is adequate to measure changes (or outcomes) in patient care; (2) Whether these changes are measurable and attainable; and (3) Which quality measures are appropriate. We will also determine the best venue to share quality data on swing beds with consumers. Because CAHs are not subject to SNF PPS and MDS requirements at this time, they will not be required to complete the MDS 3.0 and, thus, are not affected by the policy to collect quality data from swing beds based on MDS data.

## IV. Provisions of the Final Rule

This final rule incorporates the provisions of the regulations text of the proposed rule (74 FR 22208), as herein modified. We have adopted the proposed changes from the above captioned proposed rule with regard to the Resident Assessment Instrument under the MDS 3.0 (including an implementation schedule) provision that will be introduced in conjunction with the RUG–IV classification system.

In § 483.315(h), we have removed the term ''survey'' and replaced it with ''agency''.

In § 483.315(h)(3), we have removed the word ''all''.

## V. Collection of Information Requirements

Under the Paperwork Reduction Act of 1995, we are required to provide 30-day notice in the **Federal Register** and solicit public comment before a collection of information requirement is submitted to the Office of Management and Budget (OMB) for review and approval. In order to fairly evaluate whether an information collection should be approved by OMB, section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 requires that we solicit comment on the following issues:

- The need for the information collection and its usefulness in carrying out the proper functions of our agency.
- The accuracy of our estimate of the information collection burden.
- The quality, utility, and clarity of the information to be collected.
- Recommendations to minimize the information collection burden on the affected public, including automated collection techniques.

We are soliciting public comment on each of these issues for the following sections of this document that contain information collection requirements (ICRs):

*Section 483.20 Resident Assessment*

Section 483.20(b) requires the facility to make a comprehensive assessment of a resident's needs using the resident assessment instrument (RAI) provided by the State.

Section 483.20(f)(3) requires upon completion of the RAI for the facility to electronically transmit encoded, accurate, complete MDS data to the CMS system.

While there is burden associated with the requirements found under Section 483.20, they are currently approved under OMB# 0938–0739.

*Section 483.315 Specification of Resident Assessment Instrument*

Section 483.315(h) requires the facility to support and maintain the CMS State system and database and analyze data and generate and transmit reports as specified by CMS.

While there is burden associated with this requirement, we believe this requirement is exempt from the PRA as stated in sections 4204(b) and 4214(d) of the Omnibus Budget Reconciliation Act of 1987 (OBRA 1987, Pub. L. 100–203), which specifically waive PRA requirements with respect to the revised requirements for participation introduced by the nursing home reform legislation.

In the FY 2002 SNF PPS proposed rule (66 FR 24026–28, May 10, 2001) and final rule (66 FR 39594–96, July 31, 2001), we invited and discussed public comments on the information collection aspects of establishing the existing, abbreviated MDS completion requirements that apply to rural swing-bed hospitals paid under the SNF PPS (CMS–10064, OMB# 0938–0872, 73 FR 30105, May 23, 2008). Similarly, in the FY 2010 proposed rule (74 FR 22208, 22250, May 12, 2009), we invited public comment with respect to the expansion of MDS reporting requirements so that the quality measures currently in place for all other SNF PPS facilities can be applied to swing-bed hospitals, as discussed previously in section III.H of this final rule. Specifically, we proposed to replace the SB–MDS with the MDS 3.0 version of the MPAF.

If you comment on these information collection and recordkeeping requirements, please submit your comments to the Office of Information and Regulatory Affairs, Office of Management and Budget,

*Attention:* CMS Desk Officer, [1410–F].

*Fax:* (202) 395–6974; or

*E-mail: OIRA_submission@omb.eop.gov.*

## VI. Regulatory Impact Analysis

### *A. Overall Impact*

We have examined the impacts of this rule as required by Executive Order 12866 (September 1993, Regulatory Planning and Review), the Regulatory Flexibility Act (September 19, 1980, RFA, Pub. L. 96–354), section 1102(b) of the Social Security Act (the Act), the Unfunded Mandates Reform Act of 1995 (UMRA, Pub. L. 104–4), Executive Order 13132 on Federalism, and the Congressional Review Act (5 U.S.C. 804(2)).

Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). A regulatory impact analysis (RIA) must be prepared for major rules with economically significant effects ($100 million or more in any 1 year). This final rule is an economically significant rule under Executive Order 12866, because we estimate the FY 2010 impact reflects a $690 million increase from the update to the payment rates and a $1.05 billion reduction (on an incurred basis) from the recalibration of the case-mix adjustment, thereby yielding a net decrease of $360 million in payments to SNFs. For FY 2011, we estimate that there will be no aggregate impact on payments as a result of the implementation of the RUG–IV model, which will be introduced on a budget neutral basis. The final FY 2011 impacts will be issued prior to August 1, 2010, and will include the FY 2011 market basket update, FY 2011 wage index, and any further FY 2011 policy changes. Furthermore, we are also considering this a major rule as defined in the Congressional Review Act (5 U.S.C. 804(2)).

The update set forth in this final rule would apply to payments in FY 2010. In addition, we include a preliminary estimate of the impact of the introduction of the RUG–IV model on FY 2011 payments. In accordance with the requirements of the Act, we will publish a notice for each subsequent FY that will provide for an update to the payment rates and include an associated impact analysis. Therefore, final estimates for FY 2011 will be published prior to August 1, 2010.

The RFA requires agencies to analyze options for regulatory relief of small entities, if a rule has a significant impact on a substantial number of small businesses or other small entities. For

purposes of the RFA, small entities include small businesses, nonprofit organizations, and small government jurisdictions. Most SNFs and most other providers and suppliers are small entities, either by their nonprofit status or by having revenues of $13.5 million or less in any 1 year. For purposes of the RFA, approximately 51 percent of SNFs are considered small businesses according to the Small Business Administration's latest size standards, with total revenues of $13.5 million or less in any 1 year (for further information, *see http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepdf.pdf*). Individuals and States are not included in the definition of a small entity. In addition, approximately 29 percent of SNFs are nonprofit organizations.

This final rule updates the SNF PPS rates published in the final rule for FY 2009 (73 FR 46416, August 8, 2008) and the associated correction notice (73 FR 56998, October 1, 2008), thereby decreasing net payments by an estimated $360 million. As indicated in Table 17a, the effect on facilities will be a net negative impact of 1.1 percent. The total impact reflects a $1.05 billion reduction from the recalibration of the case-mix adjustment, offset by a $690 million increase from the update to the payment rates. We also note that the percent decrease will vary due to the distributional impact of the FY 2010 wage indexes and the degree of Medicare utilization. For FY 2011, we estimate that there will be no aggregate impact on payments due to the introduction of the RUG–IV model. However, we estimate that there will be distributional impacts that vary from slight increases to slight decreases due to the case-mix distribution of individual providers.

Guidance issued by the Department of Health and Human Services, on the proper assessment of the impact on small entities in rulemakings, utilizes a revenue impact of 3 to 5 percent as a significance threshold under the RFA. While this final rule is considered economically significant, its relative impact on SNFs overall is small because Medicare is a relatively minor payer source for nursing home care. We estimate that Medicare covers approximately 10 percent of service days, and approximately 20 percent of payments. However, the distribution of days and payments is highly variable, with the majority of SNFs having significantly lower Medicare utilization. As a result, for most facilities, the impact to total facility revenues, considering all payers, should be substantially less than those shown in Table 17a. Therefore, the Secretary has determined that this final rule would not have a significant impact on a substantial number of small entities. However, in view of the potential economic impact on small entities, we have considered alternatives as described in section III.K.3 of this final rule.

In addition, section 1102(b) of the Act requires us to prepare a regulatory impact analysis if a rule may have a significant impact on the operations of a substantial number of small rural hospitals. This analysis must conform to the provisions of section 604 of the RFA. For purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital that is located outside of a Metropolitan Statistical Area and has fewer than 100 beds. This final rule will affect small rural hospitals that (a) furnish SNF services under a swing-bed agreement or (b) have a hospital-based SNF. We anticipate that the impact on small rural hospitals will be similar to the impact on SNF providers overall. Therefore, the Secretary has determined that this final rule will not have a significant impact on the operations of a substantial number of small rural hospitals.

Executive Order 13132 establishes certain requirements that an agency must meet when it promulgates regulations that impose substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications. This final rule would have no substantial direct effect on State and local governments, preempt State law, or otherwise have Federalism implications. Further, while we realize that there is an impact on the Federal portion of the Medicaid payment, we have not yet determined the specific amount of that impact. However, we are working closely with State survey and Medicaid agencies to gain a better understanding of the impact from the transition to MDS 3.0 and the RUG–IV model.

Section 202 of UMRA also requires that agencies assess anticipated costs and benefits before issuing any rule whose mandates require spending in any 1 year of $100 million in 1995 dollars, updated annually for inflation. In 2009, that threshold is approximately $133 million. This final rule would not impose spending costs on State, local, or Tribal governments in the aggregate, or by the private sector, of $133 million.

*B. Anticipated Effects*

This final rule sets forth updates of the SNF PPS rates contained in the final rule for FY 2009 (73 FR 46416, August 8, 2008) and the associated correction notice (73 FR 56998, October 1, 2008). Based on the above, we estimate the FY 2010 impact would be a net decrease of $360 million in payments to SNFs (this reflects a $1.05 billion reduction from the recalibration of the case-mix adjustment, offset by a $690 million increase from the update to the payment rates). The impact analysis of this final rule represents the projected effects of the changes in the SNF PPS from FY 2009 to FY 2010. We assess the effects by estimating payments while holding all other payment-related variables constant. Although the best data available is utilized, there is no attempt to predict behavioral responses to these changes, or to make adjustments for future changes in such variables as days or case-mix. In addition, we provide an impact analysis projecting the changes for FY 2011 due to the introduction of the RUG–IV model.

Certain events may occur to limit the scope or accuracy of our impact analysis, as this analysis is future-oriented and, thus, very susceptible to forecasting errors due to certain events that may occur within the assessed impact time period. Some examples of possible events may include newly legislated general Medicare program funding changes by the Congress, or changes specifically related to SNFs. In addition, changes to the Medicare program may continue to be made as a result of previously enacted legislation, or new statutory provisions. Although these changes may not be specific to the SNF PPS, the nature of the Medicare program is that the changes may interact and, thus, the complexity of the interaction of these changes could make it difficult to predict accurately the full scope of the impact upon SNFs.

In accordance with section 1888(e)(4)(E) of the Act, we update the payment rates for FY 2009 by a factor equal to the full market basket index percentage increase plus the FY 2008 forecast error adjustment to determine the payment rates for FY 2010. The special AIDS add-on established by section 511 of the MMA remains in effect until ''* * * such date as the Secretary certifies that there is an appropriate adjustment in the case mix * * *.'' We have not provided a separate impact analysis for the MMA provision. Our latest estimates indicate that there are slightly more than 2,700 beneficiaries who qualify for the AIDS add-on payment. The impact to Medicare is included in the ''total'' column of Table 17a. In updating the rates for FY 2010, we make a number of standard annual revisions and clarifications mentioned elsewhere in

this final rule (for example, the update to the wage and market basket indexes used for adjusting the Federal rates). These revisions increase payments to SNFs by approximately $690 million.

We estimate the net decrease in payments associated with this final rule to be $360 million for FY 2010. The decrease of $1.05 billion due to the recalibration of the case-mix adjustment, together with the market basket increase of $690 million, results in a net decrease of $360 million.

The FY 2010 impacts appear in Table 17a. The breakdown of the various categories of data in the table follows.

The first column shows the breakdown of all SNFs by urban or rural status, hospital-based or freestanding status, and census region.

The first row of figures in the first column describes the estimated effects of the various changes on all facilities. The next six rows show the effects on facilities split by hospital-based, freestanding, urban, and rural categories. The urban and rural designations are based on the location of the facility under the CBSA designation. The next twenty-two rows show the effects on urban versus rural status by census region.

The second column in the table shows the number of facilities in the impact database.

The third column of the table shows the effect of the annual update to the wage index. This represents the effect of using the most recent wage data available. The total impact of this change is zero percent; however, there are distributional effects of the change.

The fourth column shows the effect of recalibrating the case-mix adjustment to the nursing CMIs. As explained previously in section II.B.2 of this final rule, we are proposing this recalibration so that the CMIs more accurately reflect parity in expenditures under the refined, 53-group RUG system introduced in 2006 relative to payments made under the original, 44-group RUG system, and in order to keep the NTA component at the appropriate level specified in the FY 2006 SNF PPS final rule. The total impact of this change is a decrease of 3.3 percent. We note that some individual providers may experience larger decreases in payments than others due to case-mix utilization.

The fifth column shows the effect of all of the changes on the FY 2010 payments. The market basket increase of 2.2 percentage points is constant for all providers and, though not shown individually, is included in the total column. It is projected that aggregate payments will decrease by 1.1 percent, assuming facilities do not change their care delivery and billing practices in response.

As can be seen from Table 17a, the combined effects of all of the changes vary by specific types of providers and by location. For example, though nearly all facilities would experience payment decreases, providers in the rural Mountain region would show a slight increase of 0.1 percent for FY 2010 total payments. Of those facilities showing decreases, facilities in the urban New England and urban Mountain areas of the country show the smallest decreases.

TABLE 17A—PROJECTED IMPACT TO THE SNF PPS FOR FY 2010

| | Number of facilities | Update wage data (percent) | Revised CMIs (percent) | Total FY 2010 change (percent) |
|---|---|---|---|---|
| Total | 15,307 | 0.0 | −3.3 | −1.1 |
| Urban | 10,586 | 0.1 | −3.3 | −1.1 |
| Rural | 4,721 | −0.3 | −3.1 | −1.3 |
| Hospital based urban | 1,675 | −0.1 | −3.4 | −1.4 |
| Freestanding urban | 8,911 | 0.1 | −3.3 | −1.1 |
| Hospital based rural | 1,065 | −0.2 | −3.3 | −1.4 |
| Freestanding rural | 3,656 | −0.3 | −3.1 | −1.3 |
| Urban by region: | | | | |
| New England | 832 | 0.8 | −3.4 | −0.5 |
| Middle Atlantic | 1,489 | −0.1 | −3.5 | −1.4 |
| South Atlantic | 1,742 | 0.0 | −3.2 | −1.1 |
| East North Central | 2,024 | −0.2 | −3.2 | −1.3 |
| East South Central | 539 | −0.4 | −3.3 | −1.5 |
| West North Central | 874 | 0.3 | −3.3 | −0.9 |
| West South Central | 1,200 | −0.4 | −3.2 | −1.5 |
| Mountain | 478 | 0.8 | −3.2 | −0.3 |
| Pacific | 1,402 | 0.4 | −3.3 | −0.8 |
| Outlying | 6 | −0.1 | −3.6 | −1.5 |
| Rural by region: | | | | |
| New England | 148 | −0.8 | −3.1 | −1.8 |
| Middle Atlantic | 254 | 0.0 | −3.3 | −1.2 |
| South Atlantic | 593 | 0.0 | −3.1 | −1.0 |
| East North Central | 930 | −0.5 | −3.1 | −1.5 |
| East South Central | 533 | −0.2 | −3.1 | −1.2 |
| West North Central | 1,092 | −0.5 | −3.3 | −1.6 |
| West South Central | 788 | −0.5 | −3.1 | −1.4 |
| Mountain | 247 | 1.2 | −3.2 | 0.1 |
| Pacific | 134 | −0.3 | −3.2 | −1.3 |
| Outlying | 2 | 1.1 | −3.9 | −0.7 |
| Ownership: | | | | |
| Government | 652 | −0.2 | −3.5 | −1.5 |
| Proprietary | 11,302 | 0.0 | −3.2 | −1.1 |
| Voluntary | 3,353 | 0.1 | −3.4 | −1.1 |

**Note:** The Total column includes the 2.2 percent market basket increase.

Table 17b shows the estimated effects for the FY 2011 distributional changes due to the proposed RUG–IV classification system. Though the aggregate impact shows no change in total payments, it is estimated that some facilities will experience payment increases while others experience payment decreases due to the Medicare utilization under RUG–IV. For example, providers in the urban New England and urban Middle Atlantic regions show increases of 1.3 percent, while providers in the rural East North Central region show a decrease of 1.5 percent. In addition, voluntary providers show an increase of 0.2 percent, while there is no change for proprietary facilities in aggregate.

TABLE 17B—PROJECTED IMPACT OF RUG–IV FOR FY 2011

| | Number of facilities | RUG–IV (percent) |
|---|---|---|
| Total | 15,443 | 0.0 |
| Urban | 10,516 | 0.3 |
| Rural | 4,927 | −0.8 |
| Hospital based urban | 609 | −1.4 |
| Freestanding urban | 9,907 | 0.4 |
| Hospital based rural | 426 | −0.8 |
| Freestanding rural | 4,501 | −0.8 |
| Urban by region: | | |
| New England | 833 | 1.3 |
| Middle Atlantic | 1,479 | 1.3 |
| South Atlantic | 1,724 | −0.6 |
| East North Central | 2,018 | 0.0 |
| East South Central | 523 | 1.2 |
| West North Central | 864 | 0.1 |
| West South Central | 1,169 | 0.9 |
| Mountain | 472 | −0.5 |
| Pacific | 1,427 | 0.2 |
| Outlying | 7 | 0.5 |
| Rural by region: | | |
| New England | 155 | −1.3 |
| Middle Atlantic | 270 | 0.6 |
| South Atlantic | 622 | −0.9 |
| East North Central | 945 | −1.5 |
| East South Central | 557 | −0.1 |
| West North Central | 1,123 | −0.2 |
| West South Central | 846 | −1.2 |
| Mountain | 265 | −0.9 |
| Pacific | 144 | −1.1 |
| Outlying | 0 | 0.0 |
| Ownership: | | |
| Government | 840 | 1.4 |
| Proprietary | 10,539 | 0.0 |
| Voluntary | 4,064 | 0.2 |

**Note:** The wage index column is not included for FY 2011, as the FY 2011 wage index is unknown. In addition, the Total column is not included for FY 2011, as the market basket is unknown.

*Comment:* Several commenters expressed concern that the proposed RUG–IV case-mix classification system would adversely affect them from a fiscal standpoint. One commenter specifically cited the proposal to allocate concurrent therapy and the change in the method to calculate the ADL index.

*Response:* The aggregate impact of the RUG–IV case-mix classification is budget neutral. We caution providers on determining the fiscal impact of RUG–IV based on only one or two areas of the entire system. Although we are making changes to the ADL index and allocation of concurrent therapy, the total payment rate is based on the combination of the nursing and therapy components. Total payment rates for therapy groups are not projected to decrease. Even after we consider that many patients will fall into lower rehabilitation RUGs under the allocation of concurrent therapy, because of the increase to the nursing CMIs to adjust for parity, total payment rates may actually be higher under RUG–IV for some comparable patients. We realize that there are distributional effects determined by an individual provider's case-mix utilization and some providers will be negatively affected. In examining the impacts presented in the table above for FY 2011, there are subsets of providers that are positively affected and other subsets that are negatively affected. However, in looking at large subsets such as the ownership type, proprietary owners are expected to be budget neutral, whereas voluntary providers are expected to see a slight increase in payments (0.2 percent) compared to RUG–III.

Another effect of the introduction of the RUG–IV model is a re-distribution of dollars between payment groups that focus on rehabilitation in contrast to those focused primarily on nursing services. In order to further understand the changes to specific provider types and case-mix, we evaluated the individual effect on the nursing and therapy portion of total payments. Table 18 shows the nursing and therapy percentage change as a portion of total payments by comparing the nursing and therapy rate components using the RUG–III CMIs and RUG–IV CMIs. As shown in Table 18, although hospital-based facilities do not show as large an increase in the nursing portion of total payments, they also show a slightly smaller decrease in the therapy portion of their payments. We expect that facilities providing more intensive

nursing services will show increases in payments under the proposed RUG–IV model.

TABLE 18—PERCENTAGE CHANGE IN PAYMENT FOR THE NURSING AND THERAPY COMPONENTS

| Rate component | Urban (percent) | Rural (percent) |
|---|---|---|
| Nursing CMIs—Freestanding | 21.8 | 20.7 |
| Nursing CMIs—Hospital-Based | 11.0 | 11.6 |
| Therapy CMIs—Freestanding | −41.5 | −41.2 |
| Therapy CMIs—Hospital-Based | −41.1 | −40.7 |

We further note that while this analysis is focused primarily on the anticipated impact to the Medicare program, we understand that States are also concerned about potential systems needs to address the transition to the MDS 3.0 and the RUG–IV case-mix system. Although our systems analysis showed that the transition to a national CMS data collection system would retain all existing functionality, we have been working closely with the State Agencies (SAs) to verify that the transition will be as seamless as possible. Starting in the Fall of 2008, we initiated monthly conference calls between CMS staff and representatives from the State Survey and Medicaid agencies to make sure that we have taken all State systems needs into account, and to develop strategies to support the SAs. Our progress has been hampered by three factors. First, many States have developed MDS-based applications to support a variety of State functions beyond the typical survey and payment operations. We are developing a comprehensive list of all affected State functions currently using the MDS so we can develop ways for the States to access the data once we adopt the MDS 3.0 format. Second, most States have customized their Medicaid payment systems, which means that potential CMS data solutions cannot utilize a ''one size fits all'' approach.

The third issue is that the majority of the States have not yet reached a final decision on the payment system changes they will implement in October 2010. Some States will maintain their existing RUG–III payment systems and will simply need support to convert MDS 3.0 data into an MDS 2.0 format to continue calculating their Medicaid payments. Other States are considering adopting all or part of the RUG–IV model, and will need more extensive support.

We recently conducted a survey asking each State to identify their likely transition scenarios and system costs and are beginning to analyze the information provided. We will continue to work with individual States and will develop a comprehensive transition plan that will include an analysis of the systems costs likely to be incurred under each transition approach; that is, maintaining a standard RUG–III payment structure, maintaining a customized RUG–III structure, and adopting all or part of RUG–IV.

For those States that will maintain their existing RUG–III based payment models, we have already started work on support systems that will allow States to convert or crosswalk the MDS 3.0 data to the current MDS 2.0 structure. The data specifications for these crosswalks are expected to be released by October 2010. We plan to work closely with the States to ensure a smooth transition.

State Medicaid agencies are not required to adopt the RUG–IV model and will only do so after careful consideration of the cost and benefit of such a change on an individual State-by-State basis. For those States choosing to adopt the RUG–IV model, CMS provides detailed program specifications free of charge, which will mitigate State program design costs associated with converting from RUG–III to RUG–IV. We intend to continue to work closely with State Medicaid agencies during the next year to assist them in evaluating the RUG–IV model for Medicaid use.

*C. Alternatives Considered*

We have determined that this final rule is an economically significant rule under Executive Order 12866. As described above, we estimate the FY 2010 impact will be a net decrease of $360 million in payments to SNFs, resulting from a $690 million increase from the update to the payment rates and a $1.05 billion reduction from the recalibration of the case-mix adjustment. In view of the potential economic impact, we considered the alternatives described below.

Section 1888(e) of the Act establishes the SNF PPS for the payment of Medicare SNF services for cost reporting periods beginning on or after July 1, 1998. This section of the statute prescribes a detailed formula for calculating payment rates under the SNF PPS, and does not provide for the use of any alternative methodology. It specifies that the base year cost data to be used for computing the SNF PPS payment rates must be from FY 1995 (October 1, 1994, through September 30, 1995). In accordance with the statute, we also incorporated a number of elements into the SNF PPS (for example, case-mix classification methodology, the MDS assessment schedule, a market basket index, a wage index, and the urban and rural distinction used in the development or adjustment of the Federal rates). Furthermore, section 1888(e)(4)(H) of the Act specifically requires us to disseminate the payment rates for each new FY through the **Federal Register**, and to do so before the August 1 that precedes the start of the new FY. Accordingly, we are not pursuing alternatives with respect to the payment methodology as discussed above. However, in view of the potential economic impact on small entities, we have voluntarily considered alternative approaches to the recalibration of the case-mix adjustments.

Using our authority to establish an appropriate adjustment for case mix under section 1888(e)(4)(G)(i) of the Act, this final rule recalibrates the adjustment to the nursing case-mix indexes based on actual CY 2006 data instead of FY 2001 data. In the SNF PPS final rule for FY 2006 (70 FR 45031, August 4, 2005), we committed to monitoring the accuracy and effectiveness of the case-mix indexes used in the 53-group model. We believe that using the CY 2006 actual claims data to perform the recalibration analysis results in case-mix weights that reflect the resources used, produces more accurate payment, and represents an appropriate case-mix adjustment. Using the CY 2006 data is consistent with our intent to make the change from the 44-group RUG model to the refined 53-group model in a budget-neutral manner, as described in section III.B.2.b of this final rule and in the SNF PPS

final rule for FY 2006 (70 FR 45031, August 4, 2005).

We investigated using alternative time periods in calculating the case-mix adjustments. One possibility was to use CY 2005 rather than CY 2006 data. However, using CY 2005 data still requires us to use a projection of the distributional shift to the nine new groups in the RUG–53 group model. We also looked at a second alternative, which involved comparing quarterly data periods directly before and after implementation of the RUG–53 model; for example, October through December 2005 for the RUG–44 model and January through March 2006 for the RUG–53 model. This approach uses a combination of projected and actual data for only a 6-month time period. However, we believe that using actual utilization data for the entire CY 2006 is more accurate, as actual case mix during the calibration year is the basis for computing the case-mix adjustment. Accordingly, we have determined that performing the recalibration using the CY 2006 data is the most appropriate methodology.

We considered various options for implementing the recalibrated case-mix adjustment. For example, we considered implementing partial adjustments to the case-mix indexes over multiple years until parity was achieved. However, we believe that these options would continue to reimburse in amounts that significantly exceed our intended policy. Moreover, as we move forward with programs designed to enhance and restructure our post-acute care payment systems, we believe that payments under the SNF PPS should be established at their intended and most appropriate levels. Stabilizing the baseline is a necessary first step toward implementing the RUG–IV classification methodology. As discussed in section III.C.2 of this final rule, RUG–IV will more accurately identify differences in patient acuity and will more closely tie reimbursement to the relative cost of goods and services needed to provide high quality care.

We believe the introduction of the RUG–IV classification system better targets payments for beneficiaries with greater care needs, improving the accuracy of Medicare payment. In addition, RUG–IV changes such as eliminating the ''look-back'' period for preadmission services correct for existing vulnerabilities in the RUG–53 system. Therefore, we believe it would be prudent to move to RUG–IV as quickly as possible. However, we also recognize the need to allow sufficient lead time to ensure an orderly and successful transition. Accordingly, while we initially considered implementing the RUG–IV model for FY 2010, we are instead implementing the system for FY 2011. Many of the refinements of the RUG–IV model are integrated into the MDS 3.0 resident assessment instrument. The transition to both the MDS 3.0 and the RUG–IV case-mix system requires careful planning, as it will affect multiple Medicare and Medicaid quality monitoring and production systems, including Medicaid PPS systems used by more than half the State agencies. In addition, State agencies, providers, and software vendors would benefit by receiving adequate time to prepare for a smooth transition. Therefore, we plan to implement RUG–IV for FY 2011.

*Comment:* One commenter expressed concern that hierarchical maximization, instead of index maximization, was used to estimate the distribution of RUG–IV days.

*Response:* We agree with the commenter that an index maximization approach provides the best estimation of the RUG–IV days of service distribution. The reason for this is that when RUG–IV is implemented for payment, an index maximizing approach will be used. However, use of RUG–IV hierarchical classification rather than index maximizing classification has very little impact on the fiscal estimates and simplified the work that was required to make those estimates.

The final fiscal estimates are based on the distribution of RUG–IV days obtained by applying the STRIVE transition matrix that cross-tabulated RUG–III classifications with RUG–IV classifications for STRIVE Medicare Part A residents. The RUG–III classification used index maximizing, but the RUG–IV classification used a hierarchical approach. Grouper code allowing RUG–IV index maximizing classification has not yet been developed and tested and, therefore, it was not possible to use the index maximizing approach for RUG–IV at this time.

When making fiscal estimates, it is absolutely critical that index maximizing be used for RUG–III. Index maximizing causes major shifts in the days of service for RUG–III. Most importantly, with index maximizing, some residents in RVL and all residents in RHX and RHL shift to either RMX or RML. In contrast, the use of index maximizing RUG–IV classification has very little impact on the fiscal estimates, because fewer residents will shift into other groups after index maximizing. With RUG–IV, index maximizing will only affect rare groups, and not all residents in a group will shift to another group. Analyses indicate that the maximum possible impact of RUG–IV index maximizing would be a 0.23 percent increase in total estimated RUG–IV payments. The actual impact is likely to be much less, probably 0.1 percent or less.

*Comment:* Several commenters expressed concern that the proposed rule's regulatory impact analysis significantly underestimated the total economic impact of the proposed policy changes, citing secondary effects such as indirect job losses and loss of tax revenue to the States.

*Response:* As indicated in the impact analysis, the changes due to the recalibration of the CMIs are expected to result in a net decrease in Medicare payments to SNFs of about 3.3 percent. This estimate represents the direct impact on SNFs and does not include any of the ''indirect,'' ''induced,'' or ''ripple'' effects that are raised by the commenters. Such secondary effects are extremely difficult to model and are highly uncertain as a result. Based on this uncertainty and the relatively small percentage of aggregate SNF revenues (from all payers) affected by this reduction, we cannot conclude with confidence that there will be significant impacts beyond those that are already described in the rule. Additionally, because these types of secondary effects are occurring within a dynamic, market-based economy, it is our expectation that the market will properly adjust its economic resources in reaction to the appropriately recalibrated SNF PPS payments. For these reasons, we believe that the regulatory impact analysis adequately estimates the proposed rule's economic impact.

*Comment:* A few commenters said that they could not fully evaluate the impact of RUG–IV because CMS failed to provide the FY 2011 market basket and wage index.

*Response:* Although the FY 2011 market basket and wage index are required to set the final FY 2011 payment rates, they are not necessary to evaluate the impact of RUG–IV. As discussed previously in this section, impacts are evaluated by determining the effect on payments of each policy change while holding all other payment-related variables constant. The market basket for FY 2011 will have the same impact for all providers. The FY 2011 wage index will produce the same distributional effect due to changes in wage data, regardless of the classification system. Thus, the market basket and wage index have no effect on the RUG–IV policy.

*D. Accounting Statement*

As required by OMB Circular A–4 (available at *http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf*), in Table 19, we have prepared an accounting statement showing the classification of the expenditures associated with the provisions of this final rule. This table provides our best estimate of the change in Medicare payments under the SNF PPS as a result of the policies in this final rule based on the data for 15,307 SNFs in our database. All expenditures are classified as transfers from Medicare providers (that is, SNFs).

TABLE 19—ACCOUNTING STATEMENT: CLASSIFICATION OF ESTIMATED EXPENDITURES, FROM THE 2009 SNF PPS FISCAL YEAR TO THE 2010 SNF PPS FISCAL YEAR

| Category | Transfers |
|---|---|
| Annualized Monetized Transfers | −$360 million.* |
| From Whom To Whom? | Federal Government to SNF Medicare Providers. |

*The net decrease of $360 million in transfer payments is a result of the decrease of $1.05 billion due to the recalibration of the case-mix adjustment, together with the market basket increase of $690 million.

*E. Conclusion*

Overall estimated payments for SNFs in FY 2010 are projected to decrease by $360 million, or 1.1 percent, compared with those in FY 2009. We estimate that SNFs in urban areas would experience a 1.1 percent decrease in estimated payments compared with FY 2009. We estimate that SNFs in rural areas would experience a 1.3 percent decrease in estimated payments compared with FY 2009. Providers in the rural New England region would show decreases in payments of 1.8 percent, the highest decreases for any region. This area shows the largest decrease in payments due to the wage index.

Though the FY 2011 aggregate impact due to the introduction of the RUG–IV model shows no change in payments, there are distributional effects for providers due to Medicare utilization. These effects range from a decrease of 1.5 percent for Rural East North Central facilities to an increase of 1.4 percent for Government facilities.

Finally, in accordance with the provisions of Executive Order 12866, this regulation was reviewed by the Office of Management and Budget.

**List of Subjects in 42 CFR Part 483**

Grants programs—health, Health facilities, Health professions, Health records, Medicaid, Medicare, Nursing homes, Nutrition, Reporting and recordkeeping requirements, Safety.

■ For the reasons set forth in the preamble, the Centers for Medicare & Medicaid Services amends 42 CFR chapter IV as set forth below:

## PART 483—REQUIREMENTS FOR STATES AND LONG TERM CARE FACILITIES

■ 1. The authority citation for part 483 continues to read as follows:

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

### Subpart B—Requirements for Long Term Care Facilities

■ 2. Amend § 483.20 by—
■ A. Republishing paragraph (b)(1) introductory text.
■ B. Revising paragraph (b)(1)(xvii).
■ C. Revising paragraph (f)(2).
■ D. Revising paragraph (f)(3) introductory text.

The revisions read as follows:

**§ 483.20 Resident assessment.**

* * * * *

(b) *Comprehensive assessment*—(1) *Resident assessment instrument.* A facility must make a comprehensive assessment of a resident's needs, using the resident assessment instrument (RAI) specified by the State. The assessment must include at least the following:

* * * * *

(xvii) Documentation of summary information regarding the additional assessment performed on the care areas triggered by the completion of the Minimum Data Set (MDS).

* * * * *

(f) * * *

(2) *Transmitting data.* Within 7 days after a facility completes a resident's assessment, a facility must be capable of transmitting to the CMS System information for each resident contained in the MDS in a format that conforms to standard record layouts and data dictionaries, and that passes standardized edits defined by CMS and the State.

(3) *Transmittal requirements.* Within 14 days after a facility completes a resident's assessment, a facility must electronically transmit encoded, accurate, and complete MDS data to the CMS System, including the following:

* * * * *

■ 3. Amend § 483.75 by revising the heading of paragraph (j) to read as follows:

**§ 483.75 Administration.**

* * * * *

(j) *Laboratory services.* * * *

* * * * *

### Subpart F—Requirements that Must be Met by States and State Agencies, Resident Assessment

■ 4. Amend § 483.315 by—
■ A. Revising paragraph (d)(2).
■ B. Revising paragraph (e).
■ C. Removing and reserving paragraph (f).
■ D. Revising paragraph (h).
■ E. Revising paragraph (i) introductory text.
■ F. Revising paragraph (i)(2).

The revisions read as follows:

**§ 483.315 Specification of resident assessment instrument.**

* * * * *

(d) * * *

(2) Care area assessment (CAA) guidelines and care area triggers (CATs) that are necessary to accurately assess residents, established by CMS.

* * * * *

(e) *Minimum data set (MDS).* The MDS includes assessment in the areas specified in § 483.20(b)(i) through (xviii) of this chapter, and as defined in the RAI manual published in the State Operations Manual issued by CMS (CMS Pub. 100–07).

* * * * *

(h) *State MDS system and database requirements.* As part of facility agency responsibilities, the State Survey Agency must:

(1) Support and maintain the CMS State system and database.

(2) Specify to a facility the method of transmission of data, and instruct the facility on this method.

(3) Upon receipt of facility data from CMS, ensure that a facility resolves errors.

(4) Analyze data and generate reports, as specified by CMS.

(i) *State identification of agency that receives RAI data.* The State must identify the component agency that receives RAI data, and ensure that this agency restricts access to the data except for the following:

* * * * *

(2) Transmission of reports to CMS.

* * * * *

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

Dated: July 23, 2009.

**Charlene Frizzera,**

*Acting Administrator, Centers for Medicare & Medicaid Services.*

Approved: July 29, 2009.

**Kathleen Sebelius,**

*Secretary.*

**BILLING CODE 4120–01–P**

**[Note: The following Addendum will not appear in the Code of Federal Regulations]**

**Addendum:**

Tables A & B - FY 2010 CBSA Wage Index Tables

Table C - RUG-III to RUG-IV Comparison

In this Addendum, we provide the wage index tables referred to in the preamble to this final rule. Tables A and B display the CBSA-based wage index values for urban and rural providers.

**Table A: FY 2010 WAGE INDEX FOR URBAN AREAS BASED ON CBSA LABOR MARKET AREAS**

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 10180 | Abilene, TX<br>Callahan County, TX<br>Jones County, TX<br>Taylor County, TX | 0.7946 |
| 10380 | Aguadilla-Isabela-San Sebastián, PR<br>Aguada Municipio, PR<br>Aguadilla Municipio, PR<br>Añasco Municipio, PR<br>Isabela Municipio, PR<br>Lares Municipio, PR<br>Moca Municipio, PR<br>Rincón Municipio, PR<br>San Sebastián Municipio, PR | 0.3462 |
| 10420 | Akron, OH<br>Portage County, OH<br>Summit County, OH | 0.8850 |
| 10500 | Albany, GA<br>Baker County, GA<br>Dougherty County, GA<br>Lee County, GA<br>Terrell County, GA<br>Worth County, GA | 0.8899 |
| 10580 | Albany-Schenectady-Troy, NY<br>Albany County, NY<br>Rensselaer County, NY<br>Saratoga County, NY<br>Schenectady County, NY<br>Schoharie County, NY | 0.8777 |
| 10740 | Albuquerque, NM<br>Bernalillo County, NM<br>Sandoval County, NM<br>Torrance County, NM<br>Valencia County, NM | 0.9399 |
| 10780 | Alexandria, LA<br>Grant Parish, LA<br>Rapides Parish, LA | 0.8012 |
| 10900 | Allentown-Bethlehem-Easton, PA-NJ<br>Warren County, NJ<br>Carbon County, PA<br>Lehigh County, PA<br>Northampton County, PA | 0.9611 |
| 11020 | Altoona, PA<br>Blair County, PA | 0.8863 |
| 11100 | Amarillo, TX<br>Armstrong County, TX<br>Carson County, TX<br>Potter County, TX<br>Randall County, TX | 0.8689 |
| 11180 | Ames, IA<br>Story County, IA | 0.9493 |
| 11260 | Anchorage, AK<br>Anchorage Municipality, AK<br>Matanuska-Susitna Borough, AK | 1.2013 |
| 11300 | Anderson, IN<br>Madison County, IN | 0.9052 |
| 11340 | Anderson, SC<br>Anderson County, SC | 0.9023 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 11460 | Ann Arbor, MI<br>Washtenaw County, MI | 1.0293 |
| 11500 | Anniston-Oxford, AL<br>Calhoun County, AL | 0.7643 |
| 11540 | Appleton, WI<br>Calumet County, WI<br>Outagamie County, WI | 0.9289 |
| 11700 | Asheville, NC<br>Buncombe County, NC<br>Haywood County, NC<br>Henderson County, NC<br>Madison County, NC | 0.9057 |
| 12020 | Athens-Clarke County, GA<br>Clarke County, GA<br>Madison County, GA<br>Oconee County, GA<br>Oglethorpe County, GA | 0.9492 |
| 12060 | Atlanta-Sandy Springs-Marietta, GA<br>Barrow County, GA<br>Bartow County, GA<br>Butts County, GA<br>Carroll County, GA<br>Cherokee County, GA<br>Clayton County, GA<br>Cobb County, GA<br>Coweta County, GA<br>Dawson County, GA<br>DeKalb County, GA<br>Douglas County, GA<br>Fayette County, GA<br>Forsyth County, GA<br>Fulton County, GA<br>Gwinnett County, GA<br>Haralson County, GA<br>Heard County, GA<br>Henry County, GA<br>Jasper County, GA<br>Lamar County, GA<br>Meriwether County, GA<br>Newton County, GA<br>Paulding County, GA<br>Pickens County, GA<br>Pike County, GA<br>Rockdale County, GA<br>Spalding County, GA<br>Walton County, GA | 0.9591 |
| 12100 | Atlantic City-Hammonton, NJ<br>Atlantic County, NJ | 1.1554 |
| 12220 | Auburn-Opelika, AL<br>Lee County, AL | 0.8138 |
| 12260 | Augusta-Richmond County, GA-SC<br>Burke County, GA<br>Columbia County, GA<br>McDuffie County, GA<br>Richmond County, GA<br>Aiken County, SC<br>Edgefield County, SC | 0.9409 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 12420 | Austin-Round Rock, TX<br>Bastrop County, TX<br>Caldwell County, TX<br>Hays County, TX<br>Travis County, TX<br>Williamson County, TX | 0.9518 |
| 12540 | Bakersfield, CA<br>Kern County, CA | 1.1232 |
| 12580 | Baltimore-Towson, MD<br>Anne Arundel County, MD<br>Baltimore County, MD<br>Carroll County, MD<br>Harford County, MD<br>Howard County, MD<br>Queen Anne's County, MD<br>Baltimore City, MD | 1.0214 |
| 12620 | Bangor, ME<br>Penobscot County, ME | 1.0154 |
| 12700 | Barnstable Town, MA<br>Barnstable County, MA | 1.2618 |
| 12940 | Baton Rouge, LA<br>Ascension Parish, LA<br>East Baton Rouge Parish, LA<br>East Feliciana Parish, LA<br>Iberville Parish, LA<br>Livingston Parish, LA<br>Pointe Coupee Parish, LA<br>St. Helena Parish, LA<br>West Baton Rouge Parish, LA<br>West Feliciana Parish, LA | 0.8180 |
| 12980 | Battle Creek, MI<br>Calhoun County, MI | 1.0000 |
| 13020 | Bay City, MI<br>Bay County, MI | 0.9267 |
| 13140 | Beaumont-Port Arthur, TX<br>Hardin County, TX<br>Jefferson County, TX<br>Orange County, TX | 0.8383 |
| 13380 | Bellingham, WA<br>Whatcom County, WA | 1.1395 |
| 13460 | Bend, OR<br>Deschutes County, OR | 1.1446 |
| 13644 | Bethesda-Frederick-Gaithersburg, MD<br>Frederick County, MD<br>Montgomery County, MD | 1.0298 |
| 13740 | Billings, MT<br>Carbon County, MT<br>Yellowstone County, MT | 0.8781 |
| 13780 | Binghamton, NY<br>Broome County, NY<br>Tioga County, NY | 0.8780 |
| 13820 | Birmingham-Hoover, AL<br>Bibb County, AL<br>Blount County, AL<br>Chilton County, AL<br>Jefferson County, AL<br>St. Clair County, AL<br>Shelby County, AL<br>Walker County, AL | 0.8554 |
| 13900 | Bismarck, ND<br>Burleigh County, ND<br>Morton County, ND | 0.7637 |
| 13980 | Blacksburg-Christiansburg-Radford, VA<br>Giles County, VA<br>Montgomery County, VA<br>Pulaski County, VA<br>Radford City, VA | 0.8394 |
| 14020 | Bloomington, IN<br>Greene County, IN<br>Monroe County, IN<br>Owen County, IN | 0.9043 |
| 14060 | Bloomington-Normal, IL<br>McLean County, IL | 0.9378 |
| 14260 | Boise City-Nampa, ID<br>Ada County, ID<br>Boise County, ID<br>Canyon County, ID<br>Gem County, ID<br>Owyhee County, ID | 0.9318 |
| 14484 | Boston-Quincy, MA<br>Norfolk County, MA<br>Plymouth County, MA<br>Suffolk County, MA | 1.2186 |
| 14500 | Boulder, CO<br>Boulder County, CO | 1.0266 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 14540 | Bowling Green, KY<br>Edmonson County, KY<br>Warren County, KY | 0.8469 |
| 14600 | Bradenton-Sarasota-Venice, FL<br>Manatee County, FL<br>Sarasota County, FL | 0.9735 |
| 14740 | Bremerton-Silverdale, WA<br>Kitsap County, WA | 1.0755 |
| 14860 | Bridgeport-Stamford-Norwalk, CT<br>Fairfield County, CT | 1.2792 |
| 15180 | Brownsville-Harlingen, TX<br>Cameron County, TX | 0.9020 |
| 15260 | Brunswick, GA<br>Brantley County, GA<br>Glynn County, GA<br>McIntosh County, GA | 0.9178 |
| 15380 | Buffalo-Niagara Falls, NY<br>Erie County, NY<br>Niagara County, NY | 0.9740 |
| 15500 | Burlington, NC<br>Alamance County, NC | 0.8749 |
| 15540 | Burlington-South Burlington, VT<br>Chittenden County, VT<br>Franklin County, VT<br>Grand Isle County, VT | 1.0106 |
| 15764 | Cambridge-Newton-Framingham, MA<br>Middlesex County, MA | 1.1278 |
| 15804 | Camden, NJ<br>Burlington County, NJ<br>Camden County, NJ<br>Gloucester County, NJ | 1.0374 |
| 15940 | Canton-Massillon, OH<br>Carroll County, OH<br>Stark County, OH | 0.8813 |
| 15980 | Cape Coral-Fort Myers, FL<br>Lee County, FL | 0.9076 |
| 16020 | Cape Girardeau-Jackson, MO-IL<br>Alexander County, IL<br>Bollinger County, MO<br>Cape Girardeau County, MO | 0.9047 |
| 16180 | Carson City, NV<br>Carson City, NV | 1.0531 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 16220 | Casper, WY<br>Natrona County, WY | 0.9520 |
| 16300 | Cedar Rapids, IA<br>Benton County, IA<br>Jones County, IA<br>Linn County, IA | 0.8984 |
| 16580 | Champaign-Urbana, IL<br>Champaign County, IL<br>Ford County, IL<br>Piatt County, IL | 1.0108 |
| 16620 | Charleston, WV<br>Boone County, WV<br>Clay County, WV<br>Kanawha County, WV<br>Lincoln County, WV<br>Putnam County, WV | 0.8141 |
| 16700 | Charleston-North Charleston-Summerville, SC<br>Berkeley County, SC<br>Charleston County, SC<br>Dorchester County, SC | 0.9279 |
| 16740 | Charlotte-Gastonia-Concord, NC-SC<br>Anson County, NC<br>Cabarrus County, NC<br>Gaston County, NC<br>Mecklenburg County, NC<br>Union County, NC<br>York County, SC | 0.9474 |
| 16820 | Charlottesville, VA<br>Albemarle County, VA<br>Fluvanna County, VA<br>Greene County, VA<br>Nelson County, VA<br>Charlottesville City, VA | 0.9372 |
| 16860 | Chattanooga, TN-GA<br>Catoosa County, GA<br>Dade County, GA<br>Walker County, GA<br>Hamilton County, TN<br>Marion County, TN<br>Sequatchie County, TN | 0.8831 |
| 16940 | Cheyenne, WY<br>Laramie County, WY | 0.9344 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 16974 | Chicago-Naperville-Joliet, IL<br>Cook County, IL<br>DeKalb County, IL<br>DuPage County, IL<br>Grundy County, IL<br>Kane County, IL<br>Kendall County, IL<br>McHenry County, IL<br>Will County, IL | 1.0471 |
| 17020 | Chico, CA<br>Butte County, CA | 1.1198 |
| 17140 | Cincinnati-Middletown, OH-KY-IN<br>Dearborn County, IN<br>Franklin County, IN<br>Ohio County, IN<br>Boone County, KY<br>Bracken County, KY<br>Campbell County, KY<br>Gallatin County, KY<br>Grant County, KY<br>Kenton County, KY<br>Pendleton County, KY<br>Brown County, OH<br>Butler County, OH<br>Clermont County, OH<br>Hamilton County, OH<br>Warren County, OH | 0.9483 |
| 17300 | Clarksville, TN-KY<br>Christian County, KY<br>Trigg County, KY<br>Montgomery County, TN<br>Stewart County, TN | 0.7980 |
| 17420 | Cleveland, TN<br>Bradley County, TN<br>Polk County, TN | 0.7564 |
| 17460 | Cleveland-Elyria-Mentor, OH<br>Cuyahoga County, OH<br>Geauga County, OH<br>Lake County, OH<br>Lorain County, OH<br>Medina County, OH | 0.8914 |
| 17660 | Coeur d'Alene, ID<br>Kootenai County, ID | 0.9235 |
| 17780 | College Station-Bryan, TX<br>Brazos County, TX<br>Burleson County, TX<br>Robertson County, TX | 0.9498 |
| 17820 | Colorado Springs, CO<br>El Paso County, CO<br>Teller County, CO | 0.9821 |
| 17860 | Columbia, MO<br>Boone County, MO<br>Howard County, MO | 0.8618 |
| 17900 | Columbia, SC<br>Calhoun County, SC<br>Fairfield County, SC<br>Kershaw County, SC<br>Lexington County, SC<br>Richland County, SC<br>Saluda County, SC | 0.8789 |
| 17980 | Columbus, GA-AL<br>Russell County, AL<br>Chattahoochee County, GA<br>Harris County, GA<br>Marion County, GA<br>Muscogee County, GA | 0.8724 |
| 18020 | Columbus, IN<br>Bartholomew County, IN | 0.9536 |
| 18140 | Columbus, OH<br>Delaware County, OH<br>Fairfield County, OH<br>Franklin County, OH<br>Licking County, OH<br>Madison County, OH<br>Morrow County, OH<br>Pickaway County, OH<br>Union County, OH | 1.0101 |
| 18580 | Corpus Christi, TX<br>Aransas County, TX<br>Nueces County, TX<br>San Patricio County, TX | 0.8693 |
| 18700 | Corvallis, OR<br>Benton County, OR | 1.1002 |
| 19060 | Cumberland, MD-WV<br>Allegany County, MD<br>Mineral County, WV | 0.8045 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 19124 | Dallas-Plano-Irving, TX<br>Collin County, TX<br>Dallas County, TX<br>Delta County, TX<br>Denton County, TX<br>Ellis County, TX<br>Hunt County, TX<br>Kaufman County, TX<br>Rockwall County, TX | 0.9853 |
| 19140 | Dalton, GA<br>Murray County, GA<br>Whitfield County, GA | 0.8666 |
| 19180 | Danville, IL<br>Vermilion County, IL | 0.8738 |
| 19260 | Danville, VA<br>Pittsylvania County, VA<br>Danville City, VA | 0.8323 |
| 19340 | Davenport-Moline-Rock Island, IA-IL<br>Henry County, IL<br>Mercer County, IL<br>Rock Island County, IL<br>Scott County, IA | 0.8284 |
| 19380 | Dayton, OH<br>Greene County, OH<br>Miami County, OH<br>Montgomery County, OH<br>Preble County, OH | 0.9211 |
| 19460 | Decatur, AL<br>Lawrence County, AL<br>Morgan County, AL | 0.7799 |
| 19500 | Decatur, IL<br>Macon County, IL | 0.7995 |
| 19660 | Deltona-Daytona Beach-Ormond Beach, FL<br>Volusia County, FL | 0.8865 |
| 19740 | Denver-Aurora-Broomfield, CO<br>Adams County, CO<br>Arapahoe County, CO<br>Broomfield County, CO<br>Clear Creek County, CO<br>Denver County, CO<br>Douglas County, CO<br>Elbert County, CO<br>Gilpin County, CO<br>Jefferson County, CO<br>Park County, CO | 1.0731 |
| 19780 | Des Moines-West Des Moines, IA<br>Dallas County, IA<br>Guthrie County, IA<br>Madison County, IA<br>Polk County, IA<br>Warren County, IA | 0.9649 |
| 19804 | Detroit-Livonia-Dearborn, MI<br>Wayne County, MI | 0.9729 |
| 20020 | Dothan, AL<br>Geneva County, AL<br>Henry County, AL<br>Houston County, AL | 0.7406 |
| 20100 | Dover, DE<br>Kent County, DE | 0.9931 |
| 20220 | Dubuque, IA<br>Dubuque County, IA | 0.8869 |
| 20260 | Duluth, MN-WI<br>Carlton County, MN<br>St. Louis County, MN<br>Douglas County, WI | 1.0448 |
| 20500 | Durham-Chapel Hill, NC<br>Chatham County, NC<br>Durham County, NC<br>Orange County, NC<br>Person County, NC | 0.9618 |
| 20740 | Eau Claire, WI<br>Chippewa County, WI<br>Eau Claire County, WI | 0.9567 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 20764 | Edison-New Brunswick, NJ<br>Middlesex County, NJ<br>Monmouth County, NJ<br>Ocean County, NJ<br>Somerset County, NJ | 1.1061 |
| 20940 | El Centro, CA<br>Imperial County, CA | 0.8766 |
| 21060 | Elizabethtown, KY<br>Hardin County, KY<br>Larue County, KY | 0.8388 |
| 21140 | Elkhart-Goshen, IN<br>Elkhart County, IN | 0.9489 |
| 21300 | Elmira, NY<br>Chemung County, NY | 0.8341 |
| 21340 | El Paso, TX<br>El Paso County, TX | 0.8541 |
| 21500 | Erie, PA<br>Erie County, PA | 0.8779 |
| 21660 | Eugene-Springfield, OR<br>Lane County, OR | 1.1034 |
| 21780 | Evansville, IN-KY<br>Gibson County, IN<br>Posey County, IN<br>Vanderburgh County, IN<br>Warrick County, IN<br>Henderson County, KY<br>Webster County, KY | 0.8522 |
| 21820 | Fairbanks, AK<br>Fairbanks North Star Borough, AK | 1.1114 |
| 21940 | Fajardo, PR<br>Ceiba Municipio, PR<br>Fajardo Municipio, PR<br>Luquillo Municipio, PR | 0.3790 |
| 22020 | Fargo, ND-MN<br>Cass County, ND<br>Clay County, MN | 0.8172 |
| 22140 | Farmington, NM<br>San Juan County, NM | 0.7889 |
| 22180 | Fayetteville, NC<br>Cumberland County, NC<br>Hoke County, NC | 0.9358 |
| 22220 | Fayetteville-Springdale-Rogers, AR-MO<br>Benton County, AR<br>Madison County, AR<br>Washington County, AR<br>McDonald County, MO | 0.8775 |
| 22380 | Flagstaff, AZ<br>Coconino County, AZ | 1.2475 |
| 22420 | Flint, MI<br>Genesee County, MI | 1.1234 |
| 22500 | Florence, SC<br>Darlington County, SC<br>Florence County, SC | 0.8114 |
| 22520 | Florence-Muscle Shoals, AL<br>Colbert County, AL<br>Lauderdale County, AL | 0.7998 |
| 22540 | Fond du Lac, WI<br>Fond du Lac County, WI | 0.9660 |
| 22660 | Fort Collins-Loveland, CO<br>Larimer County, CO | 1.0175 |
| 22744 | Fort Lauderdale-Pompano Beach-Deerfield Beach, FL<br>Broward County, FL | 1.0383 |
| 22900 | Fort Smith, AR-OK<br>Crawford County, AR<br>Franklin County, AR<br>Sebastian County, AR<br>Le Flore County, OK<br>Sequoyah County, OK | 0.7861 |
| 23020 | Fort Walton Beach-Crestview-Destin, FL<br>Okaloosa County, FL | 0.8758 |
| 23060 | Fort Wayne, IN<br>Allen County, IN<br>Wells County, IN<br>Whitley County, IN | 0.9012 |
| 23104 | Fort Worth-Arlington, TX<br>Johnson County, TX<br>Parker County, TX<br>Tarrant County, TX<br>Wise County, TX | 0.9499 |
| 23420 | Fresno, CA<br>Fresno County, CA | 1.1267 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 23460 | Gadsden, AL<br>Etowah County, AL | 0.8266 |
| 23540 | Gainesville, FL<br>Alachua County, FL<br>Gilchrist County, FL | 0.8978 |
| 23580 | Gainesville, GA<br>Hall County, GA | 0.9123 |
| 23844 | Gary, IN<br>Jasper County, IN<br>Lake County, IN<br>Newton County, IN<br>Porter County, IN | 0.9288 |
| 24020 | Glens Falls, NY<br>Warren County, NY<br>Washington County, NY | 0.8456 |
| 24140 | Goldsboro, NC<br>Wayne County, NC | 0.9056 |
| 24220 | Grand Forks, ND-MN<br>Polk County, MN<br>Grand Forks County, ND | 0.7775 |
| 24300 | Grand Junction, CO<br>Mesa County, CO | 0.9721 |
| 24340 | Grand Rapids-Wyoming, MI<br>Barry County, MI<br>Ionia County, MI<br>Kent County, MI<br>Newaygo County, MI | 0.9178 |
| 24500 | Great Falls, MT<br>Cascade County, MT | 0.8354 |
| 24540 | Greeley, CO<br>Weld County, CO | 0.9578 |
| 24580 | Green Bay, WI<br>Brown County, WI<br>Kewaunee County, WI<br>Oconto County, WI | 0.9621 |
| 24660 | Greensboro-High Point, NC<br>Guilford County, NC<br>Randolph County, NC<br>Rockingham County, NC | 0.9062 |
| 24780 | Greenville, NC<br>Greene County, NC<br>Pitt County, NC | 0.9401 |
| 24860 | Greenville-Mauldin-Easley, SC<br>Greenville County, SC<br>Laurens County, SC<br>Pickens County, SC | 0.9980 |
| 25020 | Guayama, PR<br>Arroyo Municipio, PR<br>Guayama Municipio, PR<br>Patillas Municipio, PR | 0.3537 |
| 25060 | Gulfport-Biloxi, MS<br>Hancock County, MS<br>Harrison County, MS<br>Stone County, MS | 0.8783 |
| 25180 | Hagerstown-Martinsburg, MD-WV<br>Washington County, MD<br>Berkeley County, WV<br>Morgan County, WV | 0.8965 |
| 25260 | Hanford-Corcoran, CA<br>Kings County, CA | 1.1010 |
| 25420 | Harrisburg-Carlisle, PA<br>Cumberland County, PA<br>Dauphin County, PA<br>Perry County, PA | 0.9286 |
| 25500 | Harrisonburg, VA<br>Rockingham County, VA<br>Harrisonburg City, VA | 0.9025 |
| 25540 | Hartford-West Hartford-East Hartford, CT<br>Hartford County, CT<br>Middlesex County, CT<br>Tolland County, CT | 1.1194 |
| 25620 | Hattiesburg, MS<br>Forrest County, MS<br>Lamar County, MS<br>Perry County, MS | 0.7664 |
| 25860 | Hickory-Lenoir-Morganton, NC<br>Alexander County, NC<br>Burke County, NC<br>Caldwell County, NC<br>Catawba County, NC | 0.9000 |
| 25980 | Hinesville-Fort Stewart, GA[1]<br>Liberty County, GA<br>Long County, GA | 0.9028 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 26100 | Holland-Grand Haven, MI<br>Ottawa County, MI | 0.8696 |
| 26180 | Honolulu, HI<br>Honolulu County, HI | 1.1662 |
| 26300 | Hot Springs, AR<br>Garland County, AR | 0.9004 |
| 26380 | Houma-Bayou Cane-Thibodaux, LA<br>Lafourche Parish, LA<br>Terrebonne Parish, LA | 0.7875 |
| 26420 | Houston-Sugar Land-Baytown, TX<br>Austin County, TX<br>Brazoria County, TX<br>Chambers County, TX<br>Fort Bend County, TX<br>Galveston County, TX<br>Harris County, TX<br>Liberty County, TX<br>Montgomery County, TX<br>San Jacinto County, TX<br>Waller County, TX | 0.9841 |
| 26580 | Huntington-Ashland, WV-KY-OH<br>Boyd County, KY<br>Greenup County, KY<br>Lawrence County, OH<br>Cabell County, WV<br>Wayne County, WV | 0.9097 |
| 26620 | Huntsville, AL<br>Limestone County, AL<br>Madison County, AL | 0.9064 |
| 26820 | Idaho Falls, ID<br>Bonneville County, ID<br>Jefferson County, ID | 0.9436 |
| 26900 | Indianapolis-Carmel, IN<br>Boone County, IN<br>Brown County, IN<br>Hamilton County, IN<br>Hancock County, IN<br>Hendricks County, IN<br>Johnson County, IN<br>Marion County, IN<br>Morgan County, IN<br>Putnam County, IN<br>Shelby County, IN | 0.9742 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 26980 | Iowa City, IA<br>Johnson County, IA<br>Washington County, IA | 0.9548 |
| 27060 | Ithaca, NY<br>Tompkins County, NY | 1.0112 |
| 27100 | Jackson, MI<br>Jackson County, MI | 0.8720 |
| 27140 | Jackson, MS<br>Copiah County, MS<br>Hinds County, MS<br>Madison County, MS<br>Rankin County, MS<br>Simpson County, MS | 0.8186 |
| 27180 | Jackson, TN<br>Chester County, TN<br>Madison County, TN | 0.8581 |
| 27260 | Jacksonville, FL<br>Baker County, FL<br>Clay County, FL<br>Duval County, FL<br>Nassau County, FL<br>St. Johns County, FL | 0.9105 |
| 27340 | Jacksonville, NC<br>Onslow County, NC | 0.8026 |
| 27500 | Janesville, WI<br>Rock County, WI | 0.9201 |
| 27620 | Jefferson City, MO<br>Callaway County, MO<br>Cole County, MO<br>Moniteau County, MO<br>Osage County, MO | 0.8709 |
| 27740 | Johnson City, TN<br>Carter County, TN<br>Unicoi County, TN<br>Washington County, TN | 0.7722 |
| 27780 | Johnstown, PA<br>Cambria County, PA | 0.8233 |
| 27860 | Jonesboro, AR<br>Craighead County, AR<br>Poinsett County, AR | 0.7722 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 27900 | Joplin, MO<br>Jasper County, MO<br>Newton County, MO | 0.8285 |
| 28020 | Kalamazoo-Portage, MI<br>Kalamazoo County, MI<br>Van Buren County, MI | 1.0264 |
| 28100 | Kankakee-Bradley, IL<br>Kankakee County, IL | 1.0174 |
| 28140 | Kansas City, MO-KS<br>Franklin County, KS<br>Johnson County, KS<br>Leavenworth County, KS<br>Linn County, KS<br>Miami County, KS<br>Wyandotte County, KS<br>Bates County, MO<br>Caldwell County, MO<br>Cass County, MO<br>Clay County, MO<br>Clinton County, MO<br>Jackson County, MO<br>Lafayette County, MO<br>Platte County, MO<br>Ray County, MO | 0.9679 |
| 28420 | Kennewick-Pasco-Richland, WA<br>Benton County, WA<br>Franklin County, WA | 1.0448 |
| 28660 | Killeen-Temple-Fort Hood, TX<br>Bell County, TX<br>Coryell County, TX<br>Lampasas County, TX | 0.8702 |
| 28700 | Kingsport-Bristol-Bristol, TN-VA<br>Hawkins County, TN<br>Sullivan County, TN<br>Bristol City, VA<br>Scott County, VA<br>Washington County, VA | 0.7999 |
| 28740 | Kingston, NY<br>Ulster County, NY | 0.9367 |
| 28940 | Knoxville, TN<br>Anderson County, TN<br>Blount County, TN<br>Knox County, TN<br>Loudon County, TN<br>Union County, TN | 0.7881 |
| 29020 | Kokomo, IN<br>Howard County, IN<br>Tipton County, IN | 0.9862 |
| 29100 | La Crosse, WI-MN<br>Houston County, MN<br>La Crosse County, WI | 0.9915 |
| 29140 | Lafayette, IN<br>Benton County, IN<br>Carroll County, IN<br>Tippecanoe County, IN | 0.9181 |
| 29180 | Lafayette, LA<br>Lafayette Parish, LA<br>St. Martin Parish, LA | 0.8516 |
| 29340 | Lake Charles, LA<br>Calcasieu Parish, LA<br>Cameron Parish, LA | 0.7985 |
| 29404 | Lake County-Kenosha County, IL-WI<br>Lake County, IL<br>Kenosha County, WI | 1.0475 |
| 29420 | Lake Havasu City-Kingman, AZ<br>Mohave County, AZ | 1.0567 |
| 29460 | Lakeland-Winter Haven, FL<br>Polk County, FL | 0.8390 |
| 29540 | Lancaster, PA<br>Lancaster County, PA | 0.9204 |
| 29620 | Lansing-East Lansing, MI<br>Clinton County, MI<br>Eaton County, MI<br>Ingham County, MI | 0.9770 |
| 29700 | Laredo, TX<br>Webb County, TX | 0.8078 |
| 29740 | Las Cruces, NM<br>Dona Ana County, NM | 0.8939 |
| 29820 | Las Vegas-Paradise, NV<br>Clark County, NV | 1.2130 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 29940 | Lawrence, KS<br>Douglas County, KS | 0.8580 |
| 30020 | Lawton, OK<br>Comanche County, OK | 0.7847 |
| 30140 | Lebanon, PA<br>Lebanon County, PA | 0.8119 |
| 30300 | Lewiston, ID-WA<br>Nez Perce County, ID<br>Asotin County, WA | 0.9570 |
| 30340 | Lewiston-Auburn, ME<br>Androscoggin County, ME | 0.9085 |
| 30460 | Lexington-Fayette, KY<br>Bourbon County, KY<br>Clark County, KY<br>Fayette County, KY<br>Jessamine County, KY<br>Scott County, KY<br>Woodford County, KY | 0.8889 |
| 30620 | Lima, OH<br>Allen County, OH | 0.9379 |
| 30700 | Lincoln, NE<br>Lancaster County, NE<br>Seward County, NE | 0.9563 |
| 30780 | Little Rock-North Little Rock-Conway, AR<br>Faulkner County, AR<br>Grant County, AR<br>Lonoke County, AR<br>Perry County, AR<br>Pulaski County, AR<br>Saline County, AR | 0.8559 |
| 30860 | Logan, UT-ID<br>Franklin County, ID<br>Cache County, UT | 0.8993 |
| 30980 | Longview, TX<br>Gregg County, TX<br>Rusk County, TX<br>Upshur County, TX | 0.8049 |
| 31020 | Longview, WA<br>Cowlitz County, WA | 1.0707 |
| 31084 | Los Angeles-Long Beach-Santa Ana, CA<br>Los Angeles County, CA | 1.2039 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 31140 | Louisville-Jefferson County, KY-IN<br>Clark County, IN<br>Floyd County, IN<br>Harrison County, IN<br>Washington County, IN<br>Bullitt County, KY<br>Henry County, KY<br>Meade County, KY<br>Nelson County, KY<br>Oldham County, KY<br>Shelby County, KY<br>Spencer County, KY<br>Trimble County, KY | 0.8964 |
| 31180 | Lubbock, TX<br>Crosby County, TX<br>Lubbock County, TX | 0.8751 |
| 31340 | Lynchburg, VA<br>Amherst County, VA<br>Appomattox County, VA<br>Bedford County, VA<br>Campbell County, VA<br>Bedford City, VA<br>Lynchburg City, VA | 0.8521 |
| 31420 | Macon, GA<br>Bibb County, GA<br>Crawford County, GA<br>Jones County, GA<br>Monroe County, GA<br>Twiggs County, GA | 0.9826 |
| 31460 | Madera-Chowchilla, CA<br>Madera County, CA | 0.7958 |
| 31540 | Madison, WI<br>Columbia County, WI<br>Dane County, WI<br>Iowa County, WI | 1.1234 |
| 31700 | Manchester-Nashua, NH<br>Hillsborough County, NH | 1.0171 |
| 31740 | Manhattan, KS<br>Geary County, KS<br>Pottawatomie County, KS<br>Riley County, KS | 0.7878 |

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|---|---|---|
| 31860 | Mankato-North Mankato, MN<br>Blue Earth County, MN<br>Nicollet County, MN | 0.9177 |
| 31900 | Mansfield, OH<br>Richland County, OH | 0.9100 |
| 32420 | Mayagüez, PR<br>Hormigueros Municipio, PR<br>Mayagüez Municipio, PR | 0.3704 |
| 32580 | McAllen-Edinburg-Mission, TX<br>Hidalgo County, TX | 0.8852 |
| 32780 | Medford, OR<br>Jackson County, OR | 1.0070 |
| 32820 | Memphis, TN-MS-AR<br>Crittenden County, AR<br>DeSoto County, MS<br>Marshall County, MS<br>Tate County, MS<br>Tunica County, MS<br>Fayette County, TN<br>Shelby County, TN<br>Tipton County, TN | 0.9268 |
| 32900 | Merced, CA<br>Merced County, CA | 1.2123 |
| 33124 | Miami-Miami Beach-Kendall, FL<br>Miami-Dade County, FL | 0.9954 |
| 33140 | Michigan City-La Porte, IN<br>LaPorte County, IN | 0.9311 |
| 33260 | Midland, TX<br>Midland County, TX | 0.9546 |
| 33340 | Milwaukee-Waukesha-West Allis, WI<br>Milwaukee County, WI<br>Ozaukee County, WI<br>Washington County, WI<br>Waukesha County, WI | 1.0151 |
| 33460 | Minneapolis-St. Paul-Bloomington, MN-WI<br>Anoka County, MN<br>Carver County, MN<br>Chisago County, MN<br>Dakota County, MN<br>Hennepin County, MN<br>Isanti County, MN<br>Ramsey County, MN<br>Scott County, MN<br>Sherburne County, MN<br>Washington County, MN<br>Wright County, MN<br>Pierce County, WI<br>St. Croix County, WI | 1.1095 |
| 33540 | Missoula, MT<br>Missoula County, MT | 0.9206 |
| 33660 | Mobile, AL<br>Mobile County, AL | 0.7785 |
| 33700 | Modesto, CA<br>Stanislaus County, CA | 1.2502 |
| 33740 | Monroe, LA<br>Ouachita Parish, LA<br>Union Parish, LA | 0.7752 |
| 33780 | Monroe, MI<br>Monroe County, MI | 0.8885 |
| 33860 | Montgomery, AL<br>Autauga County, AL<br>Elmore County, AL<br>Lowndes County, AL<br>Montgomery County, AL | 0.8304 |
| 34060 | Morgantown, WV<br>Monongalia County, WV<br>Preston County, WV | 0.8459 |
| 34100 | Morristown, TN<br>Grainger County, TN<br>Hamblen County, TN<br>Jefferson County, TN | 0.7201 |
| 34580 | Mount Vernon-Anacortes, WA<br>Skagit County, WA | 1.0452 |
| 34620 | Muncie, IN<br>Delaware County, IN | 0.8386 |

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|---|---|---|
| 34740 | Muskegon-Norton Shores, MI<br>Muskegon County, MI | 0.9823 |
| 34820 | Myrtle Beach-North Myrtle Beach-Conway, SC<br>Horry County, SC | 0.8730 |
| 34900 | Napa, CA<br>Napa County, CA | 1.4453 |
| 34940 | Naples-Marco Island, FL<br>Collier County, FL | 0.9662 |
| 34980 | Nashville-Davidson--Murfreesboro--Franklin, TN<br>Cannon County, TN<br>Cheatham County, TN<br>Davidson County, TN<br>Dickson County, TN<br>Hickman County, TN<br>Macon County, TN<br>Robertson County, TN<br>Rutherford County, TN<br>Smith County, TN<br>Sumner County, TN<br>Trousdale County, TN<br>Williamson County, TN<br>Wilson County, TN | 0.9689 |
| 35004 | Nassau-Suffolk, NY<br>Nassau County, NY<br>Suffolk County, NY | 1.2477 |
| 35084 | Newark-Union, NJ-PA<br>Essex County, NJ<br>Hunterdon County, NJ<br>Morris County, NJ<br>Sussex County, NJ<br>Union County, NJ<br>Pike County, PA | 1.1419 |
| 35300 | New Haven-Milford, CT<br>New Haven County, CT | 1.1545 |
| 35380 | New Orleans-Metairie-Kenner, LA<br>Jefferson Parish, LA<br>Orleans Parish, LA<br>Plaquemines Parish, LA<br>St. Bernard Parish, LA<br>St. Charles Parish, LA<br>St. John the Baptist Parish, LA<br>St. Tammany Parish, LA | 0.9092 |
| 35644 | New York-White Plains-Wayne, NY-NJ<br>Bergen County, NJ<br>Hudson County, NJ<br>Passaic County, NJ<br>Bronx County, NY<br>Kings County, NY<br>New York County, NY<br>Putnam County, NY<br>Queens County, NY<br>Richmond County, NY<br>Rockland County, NY<br>Westchester County, NY | 1.3005 |
| 35660 | Niles-Benton Harbor, MI<br>Berrien County, MI | 0.8903 |
| 35980 | Norwich-New London, CT<br>New London County, CT | 1.1399 |
| 36084 | Oakland-Fremont-Hayward, CA<br>Alameda County, CA<br>Contra Costa County, CA | 1.6404 |
| 36100 | Ocala, FL<br>Marion County, FL | 0.8556 |
| 36140 | Ocean City, NJ<br>Cape May County, NJ | 1.0160 |
| 36220 | Odessa, TX<br>Ector County, TX | 0.9862 |
| 36260 | Ogden-Clearfield, UT<br>Davis County, UT<br>Morgan County, UT<br>Weber County, UT | 0.9361 |
| 36420 | Oklahoma City, OK<br>Canadian County, OK<br>Cleveland County, OK<br>Grady County, OK<br>Lincoln County, OK<br>Logan County, OK<br>McClain County, OK<br>Oklahoma County, OK | 0.8900 |
| 36500 | Olympia, WA<br>Thurston County, WA | 1.1531 |

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|---|---|---|
| 36540 | Omaha-Council Bluffs, NE-IA<br>Harrison County, IA<br>Mills County, IA<br>Pottawattamie County, IA<br>Cass County, NE<br>Douglas County, NE<br>Sarpy County, NE<br>Saunders County, NE<br>Washington County, NE | 0.9608 |
| 36740 | Orlando-Kissimmee, FL<br>Lake County, FL<br>Orange County, FL<br>Osceola County, FL<br>Seminole County, FL | 0.8951 |
| 36780 | Oshkosh-Neenah, WI<br>Winnebago County, WI | 0.9152 |
| 36980 | Owensboro, KY<br>Daviess County, KY<br>Hancock County, KY<br>McLean County, KY | 0.8357 |
| 37100 | Oxnard-Thousand Oaks-Ventura, CA<br>Ventura County, CA | 1.2301 |
| 37340 | Palm Bay-Melbourne-Titusville, FL<br>Brevard County, FL | 0.9060 |
| 37380 | Palm Coast, FL<br>Flagler County, FL | 0.9603 |
| 37460 | Panama City-Lynn Haven-Panama City Beach, FL<br>Bay County, FL | 0.8324 |
| 37620 | Parkersburg-Marietta-Vienna, WV-OH<br>Washington County, OH<br>Pleasants County, WV<br>Wirt County, WV<br>Wood County, WV | 0.7716 |
| 37700 | Pascagoula, MS<br>George County, MS<br>Jackson County, MS | 0.8433 |
| 37764 | Peabody, MA<br>Essex County, MA | 1.0871 |
| 37860 | Pensacola-Ferry Pass-Brent, FL<br>Escambia County, FL<br>Santa Rosa County, FL | 0.8312 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 37900 | Peoria, IL<br>Marshall County, IL<br>Peoria County, IL<br>Stark County, IL<br>Tazewell County, IL<br>Woodford County, IL | 0.9155 |
| 37964 | Philadelphia, PA<br>Bucks County, PA<br>Chester County, PA<br>Delaware County, PA<br>Montgomery County, PA<br>Philadelphia County, PA | 1.0739 |
| 38060 | Phoenix-Mesa-Scottsdale, AZ<br>Maricopa County, AZ<br>Pinal County, AZ | 1.0630 |
| 38220 | Pine Bluff, AR<br>Cleveland County, AR<br>Jefferson County, AR<br>Lincoln County, AR | 0.7281 |
| 38300 | Pittsburgh, PA<br>Allegheny County, PA<br>Armstrong County, PA<br>Beaver County, PA<br>Butler County, PA<br>Fayette County, PA<br>Washington County, PA<br>Westmoreland County, PA | 0.8625 |
| 38340 | Pittsfield, MA<br>Berkshire County, MA | 1.0658 |
| 38540 | Pocatello, ID<br>Bannock County, ID<br>Power County, ID | 0.9239 |
| 38660 | Ponce, PR<br>Juana Díaz Municipio, PR<br>Ponce Municipio, PR<br>Villalba Municipio, PR | 0.4220 |
| 38860 | Portland-South Portland-Biddeford, ME<br>Cumberland County, ME<br>Sagadahoc County, ME<br>York County, ME | 1.0187 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 38900 | Portland-Vancouver-Beaverton, OR-WA<br>Clackamas County, OR<br>Columbia County, OR<br>Multnomah County, OR<br>Washington County, OR<br>Yamhill County, OR<br>Clark County, WA<br>Skamania County, WA | 1.1498 |
| 38940 | Port St. Lucie, FL<br>Martin County, FL<br>St. Lucie County, FL | 0.9896 |
| 39100 | Poughkeepsie-Newburgh-Middletown, NY<br>Dutchess County, NY<br>Orange County, NY | 1.1216 |
| 39140 | Prescott, AZ<br>Yavapai County, AZ | 1.0121 |
| 39300 | Providence-New Bedford-Fall River, RI-MA<br>Bristol County, MA<br>Bristol County, RI<br>Kent County, RI<br>Newport County, RI<br>Providence County, RI<br>Washington County, RI | 1.0782 |
| 39340 | Provo-Orem, UT<br>Juab County, UT<br>Utah County, UT | 0.9548 |
| 39380 | Pueblo, CO<br>Pueblo County, CO | 0.8570 |
| 39460 | Punta Gorda, FL<br>Charlotte County, FL | 0.8774 |
| 39540 | Racine, WI<br>Racine County, WI | 0.9373 |
| 39580 | Raleigh-Cary, NC<br>Franklin County, NC<br>Johnston County, NC<br>Wake County, NC | 0.9663 |
| 39660 | Rapid City, SD<br>Meade County, SD<br>Pennington County, SD | 1.0046 |
| 39740 | Reading, PA<br>Berks County, PA | 0.9263 |
| 39820 | Redding, CA<br>Shasta County, CA | 1.4039 |
| 39900 | Reno-Sparks, NV<br>Storey County, NV<br>Washoe County, NV | 1.0285 |
| 40060 | Richmond, VA<br>Amelia County, VA<br>Caroline County, VA<br>Charles City County, VA<br>Chesterfield County, VA<br>Cumberland County, VA<br>Dinwiddie County, VA<br>Goochland County, VA<br>Hanover County, VA<br>Henrico County, VA<br>King and Queen County, VA<br>King William County, VA<br>Louisa County, VA<br>New Kent County, VA<br>Powhatan County, VA<br>Prince George County, VA<br>Sussex County, VA<br>Colonial Heights City, VA<br>Hopewell City, VA<br>Petersburg City, VA<br>Richmond City, VA | 0.9521 |
| 40140 | Riverside-San Bernardino-Ontario, CA<br>Riverside County, CA<br>San Bernardino County, CA | 1.1285 |
| 40220 | Roanoke, VA<br>Botetourt County, VA<br>Craig County, VA<br>Franklin County, VA<br>Roanoke County, VA<br>Roanoke City, VA<br>Salem City, VA | 0.8671 |
| 40340 | Rochester, MN<br>Dodge County, MN<br>Olmsted County, MN<br>Wabasha County, MN | 1.1136 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 40380 | Rochester, NY<br>Livingston County, NY<br>Monroe County, NY<br>Ontario County, NY<br>Orleans County, NY<br>Wayne County, NY | 0.8724 |
| 40420 | Rockford, IL<br>Boone County, IL<br>Winnebago County, IL | 1.0152 |
| 40484 | Rockingham County, NH<br>Rockingham County, NH<br>Strafford County, NH | 1.0125 |
| 40580 | Rocky Mount, NC<br>Edgecombe County, NC<br>Nash County, NC | 0.8845 |
| 40660 | Rome, GA<br>Floyd County, GA | 0.8915 |
| 40900 | Sacramento--Arden-Arcade--Roseville, CA<br>El Dorado County, CA<br>Placer County, CA<br>Sacramento County, CA<br>Yolo County, CA | 1.4073 |
| 40980 | Saginaw-Saginaw Township North, MI<br>Saginaw County, MI | 0.9122 |
| 41060 | St. Cloud, MN<br>Benton County, MN<br>Stearns County, MN | 1.1107 |
| 41100 | St. George, UT<br>Washington County, UT | 0.9236 |
| 41140 | St. Joseph, MO-KS<br>Doniphan County, KS<br>Andrew County, MO<br>Buchanan County, MO<br>DeKalb County, MO | 1.0189 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 41180 | St. Louis, MO-IL<br>Bond County, IL<br>Calhoun County, IL<br>Clinton County, IL<br>Jersey County, IL<br>Macoupin County, IL<br>Madison County, IL<br>Monroe County, IL<br>St. Clair County, IL<br>Crawford County, MO<br>Franklin County, MO<br>Jefferson County, MO<br>Lincoln County, MO<br>St. Charles County, MO<br>St. Louis County, MO<br>Warren County, MO<br>Washington County, MO<br>St. Louis City, MO | 0.9102 |
| 41420 | Salem, OR<br>Marion County, OR<br>Polk County, OR | 1.0974 |
| 41500 | Salinas, CA<br>Monterey County, CA | 1.5207 |
| 41540 | Salisbury, MD<br>Somerset County, MD<br>Wicomico County, MD | 0.9110 |
| 41620 | Salt Lake City, UT<br>Salt Lake County, UT<br>Summit County, UT<br>Tooele County, UT | 0.9378 |
| 41660 | San Angelo, TX<br>Irion County, TX<br>Tom Green County, TX | 0.7914 |
| 41700 | San Antonio, TX<br>Atascosa County, TX<br>Bandera County, TX<br>Bexar County, TX<br>Comal County, TX<br>Guadalupe County, TX<br>Kendall County, TX<br>Medina County, TX<br>Wilson County, TX | 0.8857 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 41740 | San Diego-Carlsbad-San Marcos, CA<br>San Diego County, CA | 1.1752 |
| 41780 | Sandusky, OH<br>Erie County, OH | 0.8888 |
| 41884 | San Francisco-San Mateo-Redwood City, CA<br>Marin County, CA<br>San Francisco County, CA<br>San Mateo County, CA | 1.5874 |
| 41900 | San Germán-Cabo Rojo, PR<br>Cabo Rojo Municipio, PR<br>Lajas Municipio, PR<br>Sabana Grande Municipio, PR<br>San Germán Municipio, PR | 0.4740 |
| 41940 | San Jose-Sunnyvale-Santa Clara, CA<br>San Benito County, CA<br>Santa Clara County, CA | 1.6404 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 41980 | San Juan-Caguas-Guaynabo, PR<br>Aguas Buenas Municipio, PR<br>Aibonito Municipio, PR<br>Arecibo Municipio, PR<br>Barceloneta Municipio, PR<br>Barranquitas Municipio, PR<br>Bayamón Municipio, PR<br>Caguas Municipio, PR<br>Camuy Municipio, PR<br>Canóvanas Municipio, PR<br>Carolina Municipio, PR<br>Cataño Municipio, PR<br>Cayey Municipio, PR<br>Ciales Municipio, PR<br>Cidra Municipio, PR<br>Comerío Municipio, PR<br>Corozal Municipio, PR<br>Dorado Municipio, PR<br>Florida Municipio, PR<br>Guaynabo Municipio, PR<br>Gurabo Municipio, PR<br>Hatillo Municipio, PR<br>Humacao Municipio, PR<br>Juncos Municipio, PR<br>Las Piedras Municipio, PR<br>Loíza Municipio, PR<br>Manatí Municipio, PR<br>Maunabo Municipio, PR<br>Morovis Municipio, PR<br>Naguabo Municipio, PR<br>Naranjito Municipio, PR<br>Orocovis Municipio, PR<br>Quebradillas Municipio, PR<br>Río Grande Municipio, PR<br>San Juan Municipio, PR<br>San Lorenzo Municipio, PR<br>Toa Alta Municipio, PR<br>Toa Baja Municipio, PR<br>Trujillo Alto Municipio, PR<br>Vega Alta Municipio, PR<br>Vega Baja Municipio, PR<br>Yabucoa Municipio, PR | 0.4363 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 42020 | San Luis Obispo-Paso Robles, CA<br>San Luis Obispo County, CA | 1.2550 |
| 42044 | Santa Ana-Anaheim-Irvine, CA<br>Orange County, CA | 1.1972 |
| 42060 | Santa Barbara-Santa Maria-Goleta, CA<br>Santa Barbara County, CA | 1.2213 |
| 42100 | Santa Cruz-Watsonville, CA<br>Santa Cruz County, CA | 1.6735 |
| 42140 | Santa Fe, NM<br>Santa Fe County, NM | 1.0694 |
| 42220 | Santa Rosa-Petaluma, CA<br>Sonoma County, CA | 1.5891 |
| 42340 | Savannah, GA<br>Bryan County, GA<br>Chatham County, GA<br>Effingham County, GA | 0.9043 |
| 42540 | Scranton--Wilkes-Barre, PA<br>Lackawanna County, PA<br>Luzerne County, PA<br>Wyoming County, PA | 0.8375 |
| 42644 | Seattle-Bellevue-Everett, WA<br>King County, WA<br>Snohomish County, WA | 1.1577 |
| 42680 | Sebastian-Vero Beach, FL<br>Indian River County, FL | 0.9362 |
| 43100 | Sheboygan, WI<br>Sheboygan County, WI | 0.9166 |
| 43300 | Sherman-Denison, TX<br>Grayson County, TX | 0.8064 |
| 43340 | Shreveport-Bossier City, LA<br>Bossier Parish, LA<br>Caddo Parish, LA<br>De Soto Parish, LA | 0.8383 |
| 43580 | Sioux City, IA-NE-SD<br>Woodbury County, IA<br>Dakota County, NE<br>Dixon County, NE<br>Union County, SD | 0.9094 |
| 43620 | Sioux Falls, SD<br>Lincoln County, SD<br>McCook County, SD<br>Minnehaha County, SD<br>Turner County, SD | 0.8983 |
| 43780 | South Bend-Mishawaka, IN-MI<br>St. Joseph County, IN<br>Cass County, MI | 0.9690 |
| 43900 | Spartanburg, SC<br>Spartanburg County, SC | 0.9341 |
| 44060 | Spokane, WA<br>Spokane County, WA | 1.0444 |
| 44100 | Springfield, IL<br>Menard County, IL<br>Sangamon County, IL | 0.9545 |
| 44140 | Springfield, MA<br>Franklin County, MA<br>Hampden County, MA<br>Hampshire County, MA | 1.0373 |
| 44180 | Springfield, MO<br>Christian County, MO<br>Dallas County, MO<br>Greene County, MO<br>Polk County, MO<br>Webster County, MO | 0.8453 |
| 44220 | Springfield, OH<br>Clark County, OH | 0.9195 |
| 44300 | State College, PA<br>Centre County, PA | 0.9096 |
| 44700 | Stockton, CA<br>San Joaquin County, CA | 1.2331 |
| 44940 | Sumter, SC<br>Sumter County, SC | 0.8152 |
| 45060 | Syracuse, NY<br>Madison County, NY<br>Onondaga County, NY<br>Oswego County, NY | 0.9785 |
| 45104 | Tacoma, WA<br>Pierce County, WA | 1.1195 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 45220 | Tallahassee, FL<br>Gadsden County, FL<br>Jefferson County, FL<br>Leon County, FL<br>Wakulla County, FL | 0.8406 |
| 45300 | Tampa-St. Petersburg-Clearwater, FL<br>Hernando County, FL<br>Hillsborough County, FL<br>Pasco County, FL<br>Pinellas County, FL | 0.8982 |
| 45460 | Terre Haute, IN<br>Clay County, IN<br>Sullivan County, IN<br>Vermillion County, IN<br>Vigo County, IN | 0.9061 |
| 45500 | Texarkana, TX-Texarkana, AR<br>Miller County, AR<br>Bowie County, TX | 0.8113 |
| 45780 | Toledo, OH<br>Fulton County, OH<br>Lucas County, OH<br>Ottawa County, OH<br>Wood County, OH | 0.9541 |
| 45820 | Topeka, KS<br>Jackson County, KS<br>Jefferson County, KS<br>Osage County, KS<br>Shawnee County, KS<br>Wabaunsee County, KS | 0.9026 |
| 45940 | Trenton-Ewing, NJ<br>Mercer County, NJ | 1.0552 |
| 46060 | Tucson, AZ<br>Pima County, AZ | 0.9505 |
| 46140 | Tulsa, OK<br>Creek County, OK<br>Okmulgee County, OK<br>Osage County, OK<br>Pawnee County, OK<br>Rogers County, OK<br>Tulsa County, OK<br>Wagoner County, OK | 0.8662 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 46220 | Tuscaloosa, AL<br>Greene County, AL<br>Hale County, AL<br>Tuscaloosa County, AL | 0.8698 |
| 46340 | Tyler, TX<br>Smith County, TX | 0.8312 |
| 46540 | Utica-Rome, NY<br>Herkimer County, NY<br>Oneida County, NY | 0.8460 |
| 46660 | Valdosta, GA<br>Brooks County, GA<br>Echols County, GA<br>Lanier County, GA<br>Lowndes County, GA | 0.7944 |
| 46700 | Vallejo-Fairfield, CA<br>Solano County, CA | 1.4934 |
| 47020 | Victoria, TX<br>Calhoun County, TX<br>Goliad County, TX<br>Victoria County, TX | 0.8054 |
| 47220 | Vineland-Millville-Bridgeton, NJ<br>Cumberland County, NJ | 1.0207 |
| 47260 | Virginia Beach-Norfolk-Newport News, VA-NC<br>Currituck County, NC<br>Gloucester County, VA<br>Isle of Wight County, VA<br>James City County, VA<br>Mathews County, VA<br>Surry County, VA<br>York County, VA<br>Chesapeake City, VA<br>Hampton City, VA<br>Newport News City, VA<br>Norfolk City, VA<br>Poquoson City, VA<br>Portsmouth City, VA<br>Suffolk City, VA<br>Virginia Beach City, VA<br>Williamsburg City, VA | 0.8960 |
| 47300 | Visalia-Porterville, CA<br>Tulare County, CA | 1.0221 |
| 47380 | Waco, TX<br>McLennan County, TX | 0.8377 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 47580 | Warner Robins, GA<br>Houston County, GA | 0.8754 |
| 47644 | Warren-Troy-Farmington Hills, MI<br>Lapeer County, MI<br>Livingston County, MI<br>Macomb County, MI<br>Oakland County, MI<br>St. Clair County, MI | 0.9806 |
| 47894 | Washington-Arlington-Alexandria, DC-VA-MD-WV<br>District of Columbia, DC<br>Calvert County, MD<br>Charles County, MD<br>Prince George's County, MD<br>Arlington County, VA<br>Clarke County, VA<br>Fairfax County, VA<br>Fauquier County, VA<br>Loudoun County, VA<br>Prince William County, VA<br>Spotsylvania County, VA<br>Stafford County, VA<br>Warren County, VA<br>Alexandria City, VA<br>Fairfax City, VA<br>Falls Church City, VA<br>Fredericksburg City, VA<br>Manassas City, VA<br>Manassas Park City, VA<br>Jefferson County, WV | 1.0882 |
| 47940 | Waterloo-Cedar Falls, IA<br>Black Hawk County, IA<br>Bremer County, IA<br>Grundy County, IA | 0.8518 |
| 48140 | Wausau, WI<br>Marathon County, WI | 0.9440 |
| 48260 | Weirton-Steubenville, WV-OH<br>Jefferson County, OH<br>Brooke County, WV<br>Hancock County, WV | 0.7368 |
| 48300 | Wenatchee-East Wenatchee, WA<br>Chelan County, WA<br>Douglas County, WA | 0.9719 |
| 48424 | West Palm Beach-Boca Raton-Boynton Beach, FL<br>Palm Beach County, FL | 0.9879 |
| 48540 | Wheeling, WV-OH<br>Belmont County, OH<br>Marshall County, WV<br>Ohio County, WV | 0.6869 |
| 48620 | Wichita, KS<br>Butler County, KS<br>Harvey County, KS<br>Sedgwick County, KS<br>Sumner County, KS | 0.9018 |
| 48660 | Wichita Falls, TX<br>Archer County, TX<br>Clay County, TX<br>Wichita County, TX | 0.9197 |
| 48700 | Williamsport, PA<br>Lycoming County, PA | 0.7877 |
| 48864 | Wilmington, DE-MD-NJ<br>New Castle County, DE<br>Cecil County, MD<br>Salem County, NJ | 1.0555 |
| 48900 | Wilmington, NC<br>Brunswick County, NC<br>New Hanover County, NC<br>Pender County, NC | 0.8986 |
| 49020 | Winchester, VA-WV<br>Frederick County, VA<br>Winchester City, VA<br>Hampshire County, WV | 0.9777 |
| 49180 | Winston-Salem, NC<br>Davie County, NC<br>Forsyth County, NC<br>Stokes County, NC<br>Yadkin County, NC | 0.8953 |
| 49340 | Worcester, MA<br>Worcester County, MA | 1.1089 |
| 49420 | Yakima, WA<br>Yakima County, WA | 0.9949 |

| CBSA Code | Urban Area (Constituent Counties) | Wage Index |
|---|---|---|
| 49500 | Yauco, PR<br>Guánica Municipio, PR<br>Guayanilla Municipio, PR<br>Peñuelas Municipio, PR<br>Yauco Municipio, PR | 0.3348 |
| 49620 | York-Hanover, PA<br>York County, PA | 0.9299 |
| 49660 | Youngstown-Warren-Boardman, OH-PA<br>Mahoning County, OH<br>Trumbull County, OH<br>Mercer County, PA | 0.8679 |
| 49700 | Yuba City, CA<br>Sutter County, CA<br>Yuba County, CA | 1.1265 |
| 49740 | Yuma, AZ<br>Yuma County, AZ | 0.9143 |

[1] At this time, there are no hospitals located in this urban area on which to base a wage index.

**Table B: FY 2010 WAGE INDEX BASED ON CBSA LABOR MARKET AREAS FOR RURAL AREAS**

| State Code | Nonurban Area | Wage Index |
|---|---|---|
| 1 | Alabama | 0.7327 |
| 2 | Alaska | 1.1669 |
| 3 | Arizona | 0.8790 |
| 4 | Arkansas | 0.7332 |
| 5 | California | 1.2001 |
| 6 | Colorado | 0.9929 |
| 7 | Connecticut | 1.1093 |
| 8 | Delaware | 0.9910 |
| 10 | Florida | 0.8566 |
| 11 | Georgia | 0.7623 |
| 12 | Hawaii | 1.1113 |
| 13 | Idaho | 0.7733 |
| 14 | Illinois | 0.8312 |
| 15 | Indiana | 0.8529 |
| 16 | Iowa | 0.8624 |
| 17 | Kansas | 0.8167 |
| 18 | Kentucky | 0.7813 |
| 19 | Louisiana | 0.7611 |
| 20 | Maine | 0.8579 |
| 21 | Maryland | 0.9131 |
| 22 | Massachusetts[1] | 1.1700 |
| 23 | Michigan | 0.8778 |
| 24 | Minnesota | 0.9160 |
| 25 | Mississippi | 0.7638 |
| 26 | Missouri | 0.7671 |
| 27 | Montana | 0.8399 |
| 28 | Nebraska | 0.8705 |
| 29 | Nevada | 0.9674 |
| 30 | New Hampshire | 0.9957 |
| 31 | New Jersey[1] | ----- |
| 32 | New Mexico | 0.8938 |
| 33 | New York | 0.8269 |
| 34 | North Carolina | 0.8535 |
| 35 | North Dakota | 0.7813 |
| 36 | Ohio | 0.8506 |
| 37 | Oklahoma | 0.7654 |
| 38 | Oregon | 1.0236 |
| 39 | Pennsylvania | 0.8306 |
| 40 | Puerto Rico[1] | 0.4047 |
| 41 | Rhode Island[1] | ----- |
| 42 | South Carolina | 0.8394 |
| 43 | South Dakota | 0.8510 |
| 44 | Tennessee | 0.7808 |
| 45 | Texas | 0.7759 |
| 46 | Utah | 0.8363 |
| 47 | Vermont | 0.9763 |
| 48 | Virgin Islands | 0.7416 |
| 49 | Virginia | 0.7869 |
| 50 | Washington | 1.0224 |
| 51 | West Virginia | 0.7396 |
| 52 | Wisconsin | 0.9206 |
| 53 | Wyoming | 0.9535 |
| 65 | Guam | 0.9611 |

[1] All counties within the State are classified as urban, with the exception of Massachusetts and Puerto Rico. Massachusetts and Puerto Rico have areas designated as rural; however, no short-term, acute care hospitals are located in the area(s) for FY 2010. The rural Massachusetts wage index is calculated as the average of all contiguous CBSAs. The Puerto Rico wage index is the same as FY 2009.

## Table C: RUG-III to RUG-IV COMPARISON

## RUG-III and RUG-IV COMPARISON

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS | RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|---|---|
| ULTRA HIGH REHABILITATION PLUS EXTENSIVE SERVICES | ULTRA HIGH REHABILITATION PLUS EXTENSIVE SERVICES | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
| Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 720 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>A second rehabilitation discipline at least 3 days/week<br>AND<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more | Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 720 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>A second rehabilitation discipline at least 3 days/week<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score >=2 | 16-18 | RUX | Not used | 11-16 | RUX | Not used |
| | | 7-15 | RUL | Not used | 2-10 | RUL | Not used |

| VERY HIGH REHABILITATION PLUS EXTENSIVE SERVICES | VERY HIGH REHABILITATION PLUS EXTENSIVE SERVICES | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
|---|---|---|---|---|---|---|---|
| Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 500 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more | Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 500 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score >=2 | 16-18 | RVX | Not used | 11-16 | RVX | Not used |
| | | 7-15 | RVL | Not used | 2-10 | RVL | Not used |

| HIGH REHABILITATION PLUS EXTENSIVE SERVICES | HIGH REHABILITATION PLUS EXTENSIVE SERVICES | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
|---|---|---|---|---|---|---|---|
| Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 325 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more | Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 325 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score >=2 | 13-18<br>7-12 | RHX<br>RHL | Not used<br>Not used | 11-16<br>2-10 | RHX<br>RHL | Not used<br>Not used |

| MEDIUM REHABILITATION PLUS EXTENSIVE SERVICES | MEDIUM REHABILITATION PLUS EXTENSIVE SERVICES | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
|---|---|---|---|---|---|---|---|
| Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 150 minutes/week minimum<br>AND<br>5 days any combination of 3 rehabilitation disciplines;<br>AND<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more | Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 150 minutes/week minimum<br>AND<br>5 days any combination of 3 rehabilitation disciplines;<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score >=2 | 15-18<br>7-14 | RMX<br>RML | Not used<br>Not used | 11-16<br>2-10 | RMX<br>RML | Not used<br>Not used |

| LOW REHABILITATION PLUS EXTENSIVE SERVICES | LOW REHABILITATION PLUS EXTENSIVE SERVICES |
|---|---|
| Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>Rehabilitation Rx 45 minutes/week minimum<br>AND<br>3 days any combination of 3 rehabilitation disciplines;<br>AND<br>Nursing rehabilitation, 2 or more services, 6 or more days/week (see Reduced Physical Function for nursing rehab services count)<br>AND<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more | Residents needing both extensive medical services and physical or occupational therapy or speech-language pathology services.<br>AND<br>3 days any combination of 3 rehabilitation disciplines<br>AND<br>Restorative nursing, 2 or more services, 6 or more days/week (see Reduced Physical Function for restorative nursing services)<br>AND<br>Tracheostomy care, ventilator/respirator, or isolation for active infectious disease while a resident<br>AND<br>ADL score >=2 |

| ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
|---|---|---|---|---|---|
| 7-18 | RLX | Not used | 2-16 | RLX | Not used |

# RUG-III and RUG-IV COMPARISON

## Rehabilitation

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS | RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|---|---|
| ULTRA HIGH REHABILITATION | ULTRA HIGH REHABILITATION | ADL | CODES | END SPLITS | ADL | CODES | END |
| Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 720 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>A second rehabilitation discipline at least 3 days/week | Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 720 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week<br>AND<br>A second rehabilitation discipline at least 3 days/week | 16-18 | RUC | Not Used | 11-16 | RUC | Not Used |
| | | 9-15 | RUB | Not Used | 6-10 | RUB | Not Used |
| | | 4-8 | RUA | Not Used | 0-5 | RUA | Not Used |
| VERY HIGH REHABILITATION | VERY HIGH REHABILITATION | ADL | CODES | END | ADL | CODES | END |
| Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 500 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week | Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 500 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week | 16-18 | RVC | Not Used | 11-16 | RVC | Not Used |
| | | 9-15 | RVB | Not Used | 6-10 | RVB | Not Used |
| | | 4-8 | RVA | Not used | 0-5 | RVA | Not Used |
| HIGH REHABILITATION | HIGH REHABILITATION | ADL | CODES | END | ADL | CODES | END |
| Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 325 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week | Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 325 minutes/week minimum<br>AND<br>At least 1 rehabilitation discipline 5 days/week | 13-18 | RHC | Not Used | 11-16 | RHC | Not Used |
| | | 8-12 | RHB | Not Used | 6-10 | RHB | Not Used |
| | | 4-7 | RHA | Not Used | 0-5 | RHA | Not Used |
| MEDIUM REHABILITATION | MEDIUM REHABILITATION | ADL | CODES | END | ADL | CODES | END |
| Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 150 minutes/week minimum<br>AND<br>5 days any combination of 3 rehabilitation disciplines | Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 150 minutes/week minimum<br>AND<br>5 days any combination of 3 rehabilitation disciplines | 15-18 | RMC | Not Used | 11-16 | RMC | Not Used |
| | | 8-14 | RMB | Not Used | 6-10 | RMB | Not Used |
| | | 4-7 | RMA | Not Used | 0-5 | RMA | Not Used |
| LOW REHABILITATION | LOW REHABILITATION | ADL | CODES | END | ADL | CODES | END |
| Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 45 minutes/week minimum<br>AND<br>3 days any combination of 3 rehabilitation disciplines<br>AND<br>Nursing rehabilitation, 2 or more services, 6 or more days/week (see Reduced Physical Function for nursing rehab services count) | Residents receiving physical or occupational therapy, or speech-language pathology services<br>Rehabilitation Rx 45 minutes/week minimum<br>AND<br>3 days any combination of 3 rehabilitation disciplines<br>AND<br>Restorative nursing, 2 or more services, 6 or more days/week (see Reduced Physical Function for restorative nursing services) | 14-18 | RLB | Not Used | 11-16 | RLB | Not Used |
| | | 4-13 | RLA | Not Used | 0-10 | RLA | Not Used |

## RUG-III and RUG-IV COMPARISON
## Extensive Services

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS | RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|---|---|
| EXTENSIVE SERVICES | EXTENSIVE SERVICES | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
| Residents receiving the following complex clinical care:<br>IV feeding in last 7 days<br>OR<br>IV medications, suctioning, tracheostomy care, or, ventilator/respirator in the last 14 days<br>AND<br>ADL score of 7 or more<br>Notes: Comorbidities count for end split | Residents receiving the following complex clinical care:<br>Tracheostomy care while a resident<br>OR<br>Ventilator or respirator while a resident<br>OR<br>Isolation for active infectious disease while a resident<br>AND<br>ADL score >=2<br>Notes: Qualifiers count for end splits | 7-18 | SE3 | Count of other categories (special care, clinically complex, impaired cognition), plus IV medications, plus IV feeding. Extensive Count of 4 or 5 | 2-16 | ES3 | Tracheostomy care (while a resident) **AND** ventilator or respirator (while a resident) |
| | | 7-18 | SE2 | Count of other categories (special care, clinically complex, impaired cognition), plus IV medications, plus IV feeding. Extensive Count of 2 or 3 | 2-16 | ES2 | Tracheostomy care (while a resident) **OR** ventilator or respirator (while a resident) |
| | | 7-18 | SE1 | Count of other categories (special care, clinically complex, impaired cognition), plus IV medications, plus IV feeding. Extensive Count of 0 or 1 | 2-16 | ES1 | Isolation for active infectious disease (while a resident) |

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS | RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|---|---|
| SPECIAL CARE | SPECIAL CARE HIGH | ADL | CODES | END | ADL | CODES | END |
| Extensive Services qualifier | Residents receiving the following complex clinical care or with a following medical condition: | 17-18 | SSC | Not Used | 15-16 | HE2 | Signs of Depression |
| AND | Comatose and completely ADL dependent; | | | | 15-16 | HE1 | No Signs of Depression |
| ADL of 6 or less; | septicemia; | 15-16 | SSB | Not Used | 11-14 | HD2 | Signs of Depression |
| OR | diabetes with daily injections requiring physician order changes on 2 or more days; | | | | 11-14 | HD1 | No Signs of Depression |
| Any one of the following Special Care Qualifiers; | quadriplegia and ADL score >=5; | 4-14 | SSA | Not Used | 6-10 | HC2 | Signs of Depression |
| cerebral palsy, multiple sclerosis or quadriplegia with and ADL sum ≥ 10; | chronic obstructive pulmonary disease and shortness of breath when lying flat; | | | | 6-10 | HC1 | No Signs of Depression |
| respiratory therapy for 7 days; | fever with pneumonia, or vomiting, or weight loss, or feeding tube; | | | | 2-5 | HB2 | Signs of Depression |
| feeding tube (calories ≥ 51%, or calories = 26-50% and fluid ≥ 501 cc) and aphasia; | parenteral/IV feedings; | | | | 2-5 | HB1 | No Signs of Depression |
| radiation therapy; | respiratory therapy for 7 days | | | | | | |
| receiving therapy for surgical wounds/open lesions or ulcers (2 sites, any stage; or 1 site stage 3 or 4); | AND | | | | | | |
| fever with dehydration, pneumonia, vomiting, weight loss, or feeding tube (calories ≥ 51%, or calories = 26-50% and fluid ≥ 501cc) | ADL score >=2 | | | | | | |
| AND | | | | | | | |
| ADL score of 7 or more | | | | | | | |
| | Notes: Signs of depression used for end splits; PHQ score =>9.5 | | | | | | |
| SPECIAL CARE | SPECIAL CARE LOW | ADL | CODES | END | ADL | CODES | END |
| Extensive Services qualifier | Residents receiving the following complex clinical care or with a following medical condition: | 17-18 | SSC | Not Used | 15-16 | LE2 | Signs of Depression |
| AND | Cerebral palsy and ADL score >=5; | | | | 15-16 | LE1 | No Signs of Depression |
| ADL of 6 or less; | multiple sclerosis and ADL score >=5; | 15-16 | SSB | Not Used | 11-14 | LD2 | Signs of Depression |
| OR | Parkinson's disease and ADL score >=5; | | | | 11-14 | LD1 | No Signs of Depression |
| Any one of the following Special Care Qualifiers: | respiratory failure and oxygen therapy while a resident; | 4-14 | SSA | Not Used | 6-10 | LC2 | Signs of Depression |
| cerebral palsy, multiple sclerosis or quadriplegia with and ADL sum ≥ 10; | feeding tube (calories ≥ 51%, or calories = 26 -50% and fluid ≥ 501 cc); | | | | 6-10 | LC1 | No Signs of Depression |
| respiratory therapy for 7 days; | ulcers (2 or more stage II or 1 or more stage III or IV pressure ulcers; or 2 or more venous/arterial ulcers; or 1 stage II pressure ulcer and 1 venous/arterial ulcer) with 2 or more skin treatments; | | | | 2-5 | LB2 | Signs of Depression |
| feeding tube (calories ≥ 51%, or calories = 26-50% and fluid ≥ 501 cc) and aphasia; | foot infection, diabetic foot ulcer, or open lesions on the foot with treatment; | | | | 2-5 | LB1 | No Signs of Depression |
| radiation therapy; | radiation therapy while a resident; | | | | | | |
| receiving therapy for surgical wounds/open lesions or ulcers (2 sites, any stage; or 1 site stage 3 or 4); | dialysis while a resident | | | | | | |
| fever with dehydration, pneumonia, vomiting, weight loss, or feeding tube (calories ≥ 51%, or calories = 26%-50% and fluid ≥ 501cc) | AND | | | | | | |
| AND | ADL score >=2 | | | | | | |
| ADL score of 7 or more | | | | | | | |
| | Notes: Signs of depression used for end splits; PHQ score =>9.5 | | | | | | |

**RUG-III and RUG-IV COMPARISON**

**Clinically Complex**

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS |
|---|---|
| CLINICALLY COMPLEX | CLINICALLY COMPLEX |
| Special Care qualifier | Residents with Extensive Services, Special Care High, or Special Care Low qualifier |
| AND | AND |
| ADL score of 6 or less | ADL score = 0 or 1 |
| OR | OR |
| Any one of the following clinically complex qualifiers: | Residents with any one of the following clinically complex qualifiers: |
| Burns; | Pneumonia; |
| coma and not awake and completely ADL dependent; | hemiplegia and ADL score >=5; |
| septicemia; | surgical wounds or open lesions with treatment; |
| pneumonia, | burns; |
| foot infection/wound with treatment; | chemotherapy while a resident; |
| internal bleeding; | oxygen therapy while a resident; |
| dehydration; | IV medications while a resident; |
| tube feeding (calories ≥ 51%, or calories = 26%-50% and fluid ≥ 501 cc); | transfusions while a resident |
| oxygen therapy; | |
| transfusions; | |
| hemiplegia with ADL score > 10; | |
| chemotherapy; | |
| dialysis; | |
| physician visits 1 or more days and order changes 2 or more days (last 14 days); | |
| diabetes with injection 7 days/week requiring order change 2 days or more days (last 14 days); | |
| AND | |
| ADL of 7 or more | |
| | Notes: Signs of depression used for end splits; PHQ score =>9.5 |
| Notes: Signs of depression used for end splits: three or more of any of the following mood items exhibited in the last 30 days negative statements, repetitive questions, repetitive verbalizations, persistent anger, self deprecation, unrealistic fears, rec | |

| RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|
| ADL | CODES | END | ADL | CODES | END |
| 17-18 | CC2 | Signs of Depression | 15-16 | CE2 | Signs of Depression |
| 17-18 | CC1 | No Signs of Depression | 15-16 | CE1 | No Signs of Depression |
| 12-16 | CB2 | Signs of Depression | 11-14 | CD2 | Signs of Depression |
| 12-16 | CB1 | No Signs of Depression | 11-14 | CD1 | No Signs of Depression |
| 4-11 | CA2 | Signs of Depression | 6-10 | CC2 | Signs of Depression |
| 4-11 | CA1 | No Signs of Depression | 6-10 | CC1 | No Signs of Depression |
| | | | 2-5 | CB2 | Signs of Depression |
| | | | 2-5 | CB1 | No Signs of Depression |
| | | | 0-1 | CA2 | Signs of Depression |
| | | | 0-1 | CA1 | No Signs of Depression |

**RUG-III and RUG-IV COMPARISON**

**Behavioral Symptoms and Cognitive Performance**

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS |
|---|---|
| IMPAIRED COGNITION | BEHAVIORAL SYMPTOMS and COGNITIVE PERFORMANCE |
| Score on MDS 2.0 Cognitive Performance Scale (CPS) ≥ 3<br>AND<br>ADL score of 10 or less<br>NOTES: No clinical variables used;<br>CPS Score of "6" will be assigned Clinically Complex or PE2-PD1<br>See Reduced Physical Function for nursing rehab services count | Residents having cognitive impairment BIMS score <=9 or CPS >= 3<br>OR<br>hallucinations or delusions<br>OR<br>Residents displaying any of the following on 4 or more days over last 7 days: physical or verbal behavioral symptoms toward others, other behavioral symptoms, rejection of care, or wandering<br>AND<br>ADL score <=5 |
| BEHAVIOR PROBLEMS | |
| Wandering, physical abuse, verbal abuse, inappropriate behavior or resisted care on 4+ days/week<br>OR<br>hallucination or delusions<br>AND<br>ADL score of 10 or less<br>Notes: Nursing rehab used for end splits<br>See Reduced Physical Function for nursing rehab services count | Notes: Restorative nursing used for end splits<br>See Reduced Physical Function for restorative nursing services count |

| RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|
| ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
| 6-10 | IB2 | 2 or more nursing rehab services on 6+ days/wk | 2-5 | BB2 | 2 or more restorative nursing, 6 or more days/wk |
| 6-10 | IB1 | Less nursing rehab | 2-5 | BB1 | Less restorative nursing |
| 4-5 | IA2 | 2 or more nursing rehab services on 6+ days/wk | 0-1 | BA2 | 2 or more restorative nursing, 6 or more days/wk |
| 4-5 | IA1 | Less nursing rehab | 0-1 | BA1 | Less restorative nursing |
| ADL | CODES | END SPLITS | | | |
| 6-10 | BB2 | 2 or more nursing rehab services on 6+ days/wk | | | |
| 6-10 | BB1 | Less nursing rehab | | | |
| 4-5 | BA2 | 2 or more nursing rehab services on 6+ days/wk | | | |
| 4-5 | BA1 | Less nursing rehab | | | |

**RUG-III and RUG-IV COMPARISON**
**Reduced Physical Function**

| MAJOR RUG- III CLASSIFICATION CATEGORY REQUIREMENTS | MAJOR RUG- IV CLASSIFICATION CATEGORY REQUIREMENTS | RUG-III | | | RUG-IV | | |
|---|---|---|---|---|---|---|---|
| REDUCED PHYSICAL FUNCTION | REDUCED PHYSICAL FUNCTION | ADL | CODES | END SPLITS | ADL | CODES | END SPLITS |
| Residents whose needs are primarily for activities of daily living and general supervision. | Residents whose needs are primarily for activities of daily living and general supervision. | 16-18 | PE2 | 2 or more nursing rehab services on 6+ days/wk | 15-16 | PE2 | 2 or more restorative nursing, 6 or more days/wk |
| | Residents not qualifying for other categories | 16-18 | PE1 | Less nursing rehab | 15-16 | PE1 | Less restorative nursing |
| Nursing Rehab service count: | Restorative Nursing services: | | | | | | |
| passive and/or active ROM | urinary and/or bowel training program; | 11-15 | PD2 | 2 or more nursing rehab services on 6+ days/wk | 11-14 | PD2 | 2 or more restorative nursing, 6 or more days/wk |
| amputation/prosthesis care training | passive and/or active ROM; | 11-15 | PD1 | Less nursing rehab | 11-14 | PD1 | Less restorative nursing |
| splint or brace assistance | splint and/or brace assistance; | | | | | | |
| dressing or grooming training | bed mobility and/or walking training; | 9-10 | PC2 | 2 or more nursing rehab services on 6+ days/wk | 6-10 | PC2 | 2 or more restorative nursing, 6 or more days/wk |
| eating or swallowing training | transfer training; | 9-10 | PC1 | Less nursing rehab | 6-10 | PC1 | Less restorative nursing |
| transfer training | dressing and/or grooming training; | | | | | | |
| bed mobility and/or walking training | eating and/or swallowing training; | 6-8 | PB2 | 2 or more nursing rehab services on 6+ days/wk | 2-5 | PB2 | 2 or more restorative nursing, 6 or more days/wk |
| communication training | amputation/prosthesis care training; | 6-8 | PB1 | Less nursing rehab | 2-5 | PB1 | Less restorative nursing |
| scheduled toileting plan and/or bladder retraining program | communication training | | | | | | |
| | | 4-5 | PA2 | 2 or more nursing rehab services on 6+ days/wk | 0-1 | PA2 | 2 or more restorative nursing, 6 or more days/wk |
| Notes: No clinical variables used | Notes: No clinical variables used | 4-5 | PA1 | Less nursing rehab | 0-1 | PA1 | Less restorative nursing |

**RUG-III and RUG-IV COMPARISON**

## ADL Index

| RUG-III | RUG-IV |
|---|---|
| Sum scores for 4 ADLs:<br><br>Toileting, bed mobility, and transfer scores:<br>1 for independent or supervision<br>3 for limited assistance<br>4 for extensive assistance or total dependence or activity did not occur AND at most 1 person physical assist<br>5 for extensive assistance or total dependence or activity did not occur AND 2+ person physical assist | Sum scores for 4 ADLs:<br><br>Toileting, bed mobility, and transfer scores:<br>0 for Independent, supervision, or activity did not occur<br>1 for limited assistance<br>2 for extensive assistance with less than 2+ person assist<br>3 for total dependence with less than 2+ person assist<br>4 for extensive assistance or total dependence AND 2+ person assist |
| Eating scores:<br>1 for independent or supervision<br>2 for limited assistance<br>3 for extensive assistance OR parenteral or IV feeding OR tube feeding with calorie and fluid minimums<br><br>Total ranges: 4-18 | Eating scores:<br>0 for independent, supervision, limited assistance, or activity did not occur AND at most set-up help only<br>2 for independent, supervision, limited assistance, or activity did not occur AND 1+ person physical assist;<br>2 for extensive assistance or total dependence AND at most set-up help only<br>3 for extensive assistance AND 1+ person physical assist<br>4 for total dependence AND 1+ person physical assist<br><br>Total ranges: 0-16 |

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