

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Centers for Medicare & Medicaid Services

#### 42 CFR Parts 409, 424, and 484

[CMS–1353–P]

RIN 0938–AQ30

#### Medicare Program; Home Health Prospective Payment System Rate Update for Calendar Year 2012

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

**ACTION:** Proposed rule.

**SUMMARY:** This proposed rule would update the Home Health Prospective Payment System (HH PPS) rates, including: The national standardized 60-day episode rates, the national per-visit rates, the low utilization payment amount (LUPA), and outlier payments under the Medicare prospective payment system for home health agencies effective January 1, 2012.

**DATES:** To be assured consideration, comments must be received at one of the addresses provided below, no later than 5 p.m. on September 6, 2011.

**ADDRESSES:** In commenting, please refer to file code CMS–1353–P. Because of staff and resource limitations, we cannot accept comments by facsimile (FAX) transmission.

You may submit comments in one of four ways (please choose only one of the ways listed):

1. *Electronically.* You may submit electronic comments on this regulation to <http://www.regulations.gov>. Follow the instructions under the “More Search Options” tab.

2. *By regular mail.* You may mail written comments to the following address only: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1353–P, P.O. Box 8016, Baltimore, MD 21244–8016.

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

3. *By express or overnight mail.* You may send written comments to the following address only: Centers for Medicare & Medicaid Services, Department of Health and Human Services, Attention: CMS–1353–P, Mail Stop C4–26–05, 7500 Security Boulevard, Baltimore, MD 21244–1850.

4. *By hand or courier.* If you prefer, you may deliver (by hand or courier) your written comments before the close of the comment period to either of the following addresses:

a. For delivery in Washington, DC—Centers for Medicare & Medicaid Services, Department of Health and Human Services, Room 445–G, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201.

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

b. For delivery in Baltimore, MD—Centers for Medicare & Medicaid Services, Department of Health and Human Services, 7500 Security Boulevard, Baltimore, MD 21244–1850.

If you intend to deliver your comments to the Baltimore address, please call (410) 786–7195 in advance to schedule your arrival with one of our staff members.

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

For information on viewing public comments, see the beginning of the **SUPPLEMENTARY INFORMATION** section.

#### FOR FURTHER INFORMATION CONTACT:

Elizabeth Goldstein, (410) 786–6665, for CAHPS issues.

Mary Pratt, (410) 786–6867, for quality issues.

Randy Thronset, (410) 786–0131 (overall HH PPS).

#### SUPPLEMENTARY INFORMATION:

*Inspection of Public Comments:* All comments received before the close of the comment period are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received before the close of the comment period on the following Web site as soon as possible after they have been received: <http://www.regulations.gov>. Follow the search instructions on that Web site to view public comments.

Comments received timely will also be available for public inspection as they are received, generally beginning approximately 3 weeks after publication of a document, at the headquarters of the Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland 21244, Monday through Friday of each week from

8:30 a.m. to 4 p.m. EST. To schedule an appointment to view public comments, phone 1–800–743–3951.

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#### Acronyms

In addition, because of the many terms to which we refer by abbreviation in this proposed rule, we are listing these abbreviations and their

corresponding terms in alphabetical order below:

ACH LOS Acute Care Hospital Length of Stay  
ADL Activities of Daily Living  
APU Annual Payment Update  
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  
CAD Coronary Artery Disease  
CAH Critical Access Hospital  
CBSA Core-Based Statistical Area  
CHF Congestive Heart Failure  
CMI Case-Mix Index  
CMS Centers for Medicare and Medicaid Services  
CoPs Conditions of Participation  
COPD Chronic Obstructive Pulmonary Disease  
CVD Cardiovascular Disease  
DM Diabetes Mellitus  
DRA Deficit Reduction Act of 2005, Public Law 109–171, enacted February 8, 2006  
FDL Fixed Dollar Loss  
FI Fiscal Intermediaries  
FR **Federal Register**  
FY Fiscal Year  
HCC Hierarchical Condition Categories  
HCIS Health Care Information System  
HHCAHPS Home Health Care Consumer Assessment of Healthcare Providers and Systems Survey  
HH PPS Home Health Prospective Payment System  
HHAs Home Health Agencies  
HHRG Home Health Resource Group  
HIPPS Health Insurance Prospective Payment System  
IH Inpatient Hospitalization  
IRF Inpatient Rehabilitation Facility  
LTCH Long-Term Care Hospital  
LUPA Low Utilization Payment Amount  
MEPS Medical Expenditures Panel Survey  
MMA Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Public Law 108–173, enacted December 8, 2003  
MSA Metropolitan Statistical Areas  
MSS Medical Social Services  
NRS Non-Routine Supplies  
OBRA Omnibus Reconciliation Act of 1981, Public Law 97–35, enacted August 13, 1981  
OCESAA Omnibus Consolidated and Emergency Supplemental Appropriations Act, Public Law 105–277, enacted October 21, 1998  
OES Occupational Employment Statistics  
OIG Office of Inspector General  
OT Occupational Therapy  
OMB Office of Management and Budget  
PAC–PRD Post-Acute Care Payment Reform Demonstration  
PEP Partial Episode Payment Adjustment  
PT Physical Therapy  
QAP Quality Assurance Plan  
PRRB Provider Reimbursement Review Board  
RAP Request for Anticipated Payment  
RF Renal Failure  
RFA Regulatory Flexibility Act, Public Law 96–354  
RHHIs Regional Home Health Intermediaries

RIA Regulatory Impact Analysis  
SLP Speech Language Pathology Therapy  
SNF Skilled Nursing Facility  
UMRA Unfunded Mandates Reform Act of 1995

## I. Background

### A. Statutory Background

The Balanced Budget Act of 1997 (BBA) (Pub. L. 105–33, enacted August 5, 1997), significantly changed the way Medicare pays for Medicare home health (HH) services. Section 4603 of the BBA mandated the development of the home health prospective payment system (HH PPS). Until the implementation of a HH PPS on October 1, 2000, home health agencies (HHAs) received payment under a retrospective reimbursement system.

Section 4603(a) of the BBA mandated the development of a HH PPS for all Medicare-covered HH services provided under a plan of care (POC) that were paid on a reasonable cost basis by adding section 1895 of the Social Security Act (the Act), entitled “Prospective Payment For Home Health Services”. Section 1895(b)(1) of the Act requires the Secretary to establish a HH PPS for all costs of HH services paid under Medicare.

Section 1895(b)(3)(A) of the Act requires the following: (1) The computation of a standard prospective payment amount include all costs for HH services covered and paid for on a reasonable cost basis and that such amounts be initially based on the most recent audited cost report data available to the Secretary; and (2) the standardized prospective payment amount be adjusted to account for the effects of case-mix and wage levels among HHAs.

Section 1895(b)(3)(B) of the Act addresses the annual update to the standard prospective payment amounts by the HH applicable percentage increase. Section 1895(b)(4) of the Act governs the payment computation. Sections 1895(b)(4)(A)(i) and (b)(4)(A)(ii) of the Act require the standard prospective payment amount to be adjusted for case-mix and geographic differences in wage levels. Section 1895(b)(4)(B) of the Act requires the establishment of an appropriate case-mix change adjustment factor for significant variation in costs among different units of services.

Similarly, section 1895(b)(4)(C) of the Act requires the establishment of wage adjustment factors that reflect the relative level of wages, and wage-related costs applicable to HH services furnished in a geographic area compared to the applicable national average level. Under section

1895(b)(4)(c) of the Act, the wage-adjustment factors used by the Secretary may be the factors used under section 1886(d)(3)(E) of the Act.

Section 1895(b)(5) of the Act gives the Secretary the option to make additions or adjustments to the payment amount otherwise paid in the case of outliers because of unusual variations in the type or amount of medically necessary care. Section 3131(b) of the Patient Protection and Affordable Care Act of 2010 (the Affordable Care Act) (Pub. L. 111–148, enacted March 23, 2010) revised section 1895(b)(5) of the Act so that total outlier payments in a given fiscal year (FY) or year may not exceed 2.5 percent of total payments projected or estimated. The provision also makes permanent a 10 percent agency level outlier payment cap.

In accordance with the statute, as amended by the BBA, we published a final rule in the July 3, 2000 **Federal Register** (65 FR 41128) to implement the HH PPS legislation. The July 2000 final rule established requirements for the new HH PPS for HH services as required by section 4603 of the BBA, as subsequently amended by section 5101 of the Omnibus Consolidated and Emergency Supplemental Appropriations Act (OCESAA) for Fiscal Year 1999, (Pub. L. 105–277, enacted October 21, 1998); and by sections 302, 305, and 306 of the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act (BBRA) of 1999, (Pub. L. 106–113, enacted November 29, 1999). The requirements include the implementation of a HH PPS for HH services, consolidated billing requirements, and a number of other related changes. The HH PPS described in that rule replaced the retrospective reasonable cost-based system that was used by Medicare for the payment of HH services under Part A and Part B. For a complete and full description of the HH PPS as required by the BBA, see the July 2000 HH PPS final rule (65 FR 41128 through 41214).

Section 5201(c) of the Deficit Reduction Act of 2005 (DRA) (Pub. L. 109–171, enacted February 8, 2006) added new section 1895(b)(3)(B)(v) to the Act, requiring HHAs to submit data for purposes of measuring health care quality, and links the quality data submission to the annual applicable percentage increase. This data submission requirement is applicable for CY 2007 and each subsequent year. If an HHA does not submit quality data, the HH market basket percentage increase is reduced 2 percentage points. In the November 9, 2006 **Federal Register** (71 FR 65884, 65935), we published a final rule to implement the

pay-for-reporting requirement of the DRA, which was codified at § 484.225(h) and (i) in accordance with the statute.

Section 421(a) of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) (Pub. L. 108–173, enacted December 8, 2003) provides an increase of 3 percent of the payment amount otherwise made under section 1886(d)(2)(D) of the Act for HH services furnished in a rural area with respect to episodes and visits ending on or after April 1, 2010, and before January 1, 2016.

#### *B. System for Payment of Home Health Services*

Generally, Medicare makes payment under the HH PPS on the basis of a national standardized 60-day episode payment rate that is adjusted for the applicable case-mix and wage index. The national standardized 60-day episode rate includes the six HH disciplines (skilled nursing, HH aide, physical therapy, speech-language pathology, occupational therapy, and medical social services). Payment for non-routine medical supplies (NRS), is no longer part of the national standardized 60-day episode rate and is computed by multiplying the relative weight for a particular NRS severity level by the NRS conversion factor (See section II.D.4.e). Payment for durable medical equipment covered under the HH benefit is made outside the HH PPS payment system. To adjust for case-mix, the HH PPS uses a 153-category case-mix classification to assign patients to a home health resource group (HHRG). The clinical severity level, functional severity level, and service utilization are computed from responses to selected data elements in the OASIS assessment instrument and are used to place the patient in a particular HHRG. Each HHRG has an associated case-mix weight which is used in calculating the payment for an episode.

For episodes with four or fewer visits, Medicare pays based on a national per-visit rate, adjusted by the discipline(s) providing the services; an episode consisting of four or fewer visits within a 60-day period receives what is referred to as a low utilization payment adjustment (LUPA). Medicare also adjusts the national standardized 60-day episode payment rate for certain intervening events that are subject to a partial episode payment adjustment (PEP adjustment). For certain cases that exceed a specific cost threshold, an outlier adjustment may also be available.

#### *C. Updates to the HH PPS*

As required by section 1895(b)(3)(B) of the Act, we have historically updated the HH PPS rates annually in the **Federal Register**. The August 29, 2007 final rule with comment period set forth an update to the 60-day national episode rates and the national per-visit rates under the Medicare prospective payment system for HHAs for CY 2008. The CY 2008 rule included an analysis performed on CY 2005 HH claims data, which indicated a 12.78 percent increase in the observed case-mix since 2000. The case-mix represented the variations in conditions of the patient population served by the HHAs. Subsequently, a more detailed analysis was performed on the 12.78 percent increase in case-mix to evaluate if any portion of the increase was associated with a change in the actual clinical condition of HH patients. We examined data on demographics, family severity, and non-HH Part A Medicare expenditures to predict the average case-mix weight for 2005. We identified 8.03 percent of the total case-mix change as real and decreased the 12.78 percent of total case-mix change by 8.03 percent to get a final nominal case-mix increase measure of 11.75 percent ( $0.1278 * (1 - 0.0803) = 0.1175$ ).

To account for the changes in case-mix that were not related to an underlying change in patient health status, we implemented a reduction over 4 years in the national standardized 60-day episode payment rates and the NRS conversion factor. That reduction was to be 2.75 percent per year for 3 years beginning in CY 2008 and 2.71 percent for the fourth year in CY 2011.

For CY 2011, we published the November 17, 2010 final rule (75 FR 70372) (hereinafter referred to as the CY 2011 HH PPS final rule) that set forth the update to the 60-day national episode rates and the national per-visit rates under the Medicare prospective payment system for HH services.

As discussed in the CY 2011 rule, our analysis indicated that there was a 19.40 percent increase in overall case-mix from 2000 to 2008 and that only 10.07 percent of that overall observed case-mix percentage increase was due to real case-mix change. As a result of our analysis, we identified a 17.45 percent nominal increase in case-mix. To fully account for the 17.45 percent nominal case-mix growth which was identified from 2000 to 2008, we proposed 3.79 percent payment reductions in both CY 2011 and CY 2012. However, we deferred finalizing a payment reduction for CY 2012 until a further study of the

case-mix data was completed.

Independent review of the case-mix model has been conducted and the results are discussed in section II.A. of this proposed rule.

## **II. Provisions of the Proposed Rule**

### *A. Case-Mix Measurement*

Every year, since the HH PPS CY 2008 proposed rule, we have stated in HH PPS rulemaking that we would continue to monitor case-mix changes in the HH PPS and to update our analysis to measure change in case-mix, both real changes in case-mix and changes which are unrelated to changes in patient acuity (nominal). We have continued to monitor case-mix changes, and our latest analysis continues to support the need to make payment adjustments to account for nominal case-mix growth.

Before measuring nominal case-mix growth, we examined the total case-mix growth every year from 2000 to 2009. Our latest analysis indicates that there was a large 1-year increase, 2.6 percent, in the average case-mix weight from 2008 to 2009. Specifically, the 2008 average case-mix was 1.3095 and the 2009 average case-mix was 1.3435. It should be noted that the average case-mix for 2008 is slightly different than the average case-mix for 2008 that was reported in the CY 2011 HH PPS final rule. The difference in case-mix is due to the increased availability of data and inclusion of more episodes in the 2008 sample. As we did last year, we sought to describe how much of the 1-year change was due to a change in the distribution of episodes according to the number of therapy visits and how much was due to a change in the average case-mix weight at each level of therapy visits.

The method we used first holds the average case-mix weight constant (at the 2008 values) at each level of therapy visits, and measures the effect of the shift to the new distribution of therapy visits. The method then holds the distribution of therapy visits constant (at the 2008 distribution) and measures the effect of the change in average case-mix weight at each level of therapy visits. The results were that 0.0254 or about 75 percent ( $0.0254/0.0340 = 0.75$ ) of the total change in average case-mix weights from 2008 to 2009 was due to the shift in the distribution of therapy visits per episode. The remaining 0.0086 or about 25 percent ( $0.0086/0.0340 = 0.25$ ) in overall average case-mix weight from 2008 to 2009 was due to an increase in the average case-mix weight at each level of therapy visits per episode.

The decomposition suggests that agencies in 2009 were still responding to the 2008 refinements in terms of both coding practices and the definition of therapy treatment plans for patients. This analysis by itself, however, does not isolate real case-mix change within total case-mix change. We discuss our latest analysis of real and nominal case-mix change in the remainder of this section.

Section 1895(b)(3)(B)(iv) of the Act gives CMS the authority to implement payment reductions for nominal case-mix growth, changes in case-mix that are not related to actual changes in patient characteristics over time. Nominal case-mix growth was assessed and reported in CY 2008 and CY 2011 rulemaking, and payment reductions to the base rate were implemented to account for the nominal case-mix growth observed.

In CY 2008 rulemaking, to assess nominal case-mix growth, we first estimated real case-mix growth, changes in case-mix which are related to changes in patient characteristics, using a regression-based, predictive model of individual case-mix weights. The predictive model contained measures of patients' demographic characteristics, clinical status, inpatient history, and Part A Medicare costs in the time period leading up to their home health episodes. The regression coefficients for the predictive model were developed using 2000 as a base year and were applied to episodes from 2005, allowing estimation of the change in real case-mix. We then determined the nominal case-mix growth from 2000 to 2005 using the regression model-predicted real case-mix change and the total case-mix change for the time period of interest.

In 2000, the average case-mix was 1.0960 and in 2005, the average case-mix was 1.2361. As such, the total measure of case-mix change from 2000 to 2005 was 12.78 percent ( $(1.2361 - 1.0960)/1.0960 = 0.1278$ ). Using the regression-based predictive model, we identified 8.03 percent of the total case-mix change as real case-mix change from 2000 to 2005, and we adjusted the 12.78 percent of total change in case-mix, downward, by 8.03 percent to get a final nominal case-mix change measure of 11.75 percent ( $0.1278 * (1 - 0.0803) = 0.1175$ ). To account for the 11.75 percent increase in nominal case-mix, we implemented a payment reduction of 2.75 percent each year for 3 years, beginning in 2008, and we planned to implement a payment reduction of 2.71 in CY 2011.

Since the HH PPS CY 2008 proposed rule, we have continued to monitor

case-mix changes in the HH PPS, and in CY 2011 rulemaking we updated our analysis to measure change in real and nominal case-mix. In CY 2011 rulemaking, we developed two regression-based models to assess nominal case-mix growth from 2000 to 2008. One model was developed using 2000 as a base year and the 80 grouper case-mix system. The regression coefficients in the model were applied to 2007 data to determine the change in real case-mix from 2000 to 2007. The second model was developed using 2008 as a base year and the 153 grouper case-mix system. The regression coefficients in the model were applied to 2007 data to determine the change in real case-mix from 2007 to 2008. The data from both of the models were then used to calculate the overall real and nominal case-mix change from 2000 to 2008. Our analysis indicated that there was a 19.40 percent increase in overall case-mix from 2000 to 2008 and 10.07 percent of that overall observed case-mix change was identified as real case-mix change. Consequently, as a result of our analysis, we identified a 17.45 percent nominal increase in case-mix ( $0.1940 * (1 - 0.1007) = 0.1745$ ) from 2000 to 2008. In other words, there was a growth in case-mix of 17.45 percent that was unrelated to differences in patient characteristics and reflects changes in coding procedures and documentation rather than the treatment of more resource-intensive patients. This 17.45 percent increase was larger than expected. Previously, there was about 1 percent annual case-mix growth from 2000 to 2007. Between 2007 and 2008, we observed a 4 percent overall case-mix growth. As a result of our analysis, in CY 2011, we proposed an increase to the planned 2.71 percent payment reduction in 2011 to a 3.79 percent payment reduction and we proposed another 3.79 percent payment reduction in 2012 to fully account for the 17.45 percent nominal case-mix growth which was identified from 2000 to 2008.

We received many comments on our CY 2011 HH PPS proposed rule that criticized our methodology for assessing real case-mix change. The criticisms from commenters centered on the idea that we underestimated the percentage of case-mix growth that was real. Multiple commenters stated that our model for assessing real case-mix change relies too heavily on hospital discharge data. Commenters stated that we should include more variables which capture the severity of patients entering home health from the community since more than half of

Medicare home health patients are admitted to home health from a setting other than a hospital. Also, commenters suggested that the acute care hospital APR-DRG and other prior use variables in our models may not be relevant for patients with more than one home health episode. Another criticism was that our model should consider that there are shorter hospital stays, and therefore, the patients who are discharged from the hospital into home health may have a higher level of severity of illness than the model recognizes. Moreover, commenters stated that all of the HHAs were being penalized for the actions of a few HHAs and that the nominal case-mix change reductions should be limited to certain types of agencies (such as by region or for-profit/non-profit status or by case-mix index [CMI]). Furthermore, one commenter stated that a recent study by Dr. Partha Deb of Hunter College used data from a nationally representative survey (the Medical Expenditures Panel Survey—MEPS) and found that the health status of Medicare beneficiaries worsened, suggesting a possible increase in real case-mix in the Medicare population from 2000 through 2007 (the study by Partha Deb can be found at <http://www.aha.org/aha/content/2010/pdf/100715-CMI Trends.pdf>). Commenters inferred that the change in real case-mix was larger than the change we measured for the home health population, and therefore, commenters doubted whether our model accounted for the entire real case-mix change in the home health population. The study by Dr. Deb constructed a case-mix measure from medical expenditures and diagnosis-related data and compared results for 2000 and 2007.

In the CY 2011 HH PPS final rule, we implemented the proposed payment reduction of 3.79 percent to the national standardized episode rate in CY 2011. However, due to the extensive comments we received, we deferred finalizing a payment reduction for CY 2012 until further study of the case-mix data and methodology was completed.

#### 1. Independent Review of the Models To Assess Nominal Case-Mix Growth

To assess the validity of the criticisms we received about our models to measure real and nominal case-mix change, we procured an independent review of our methodology by a team at Harvard University led by Dr. David Grabowski. The review included an examination of the predictive regression models and data used in CY 2011 rulemaking, and further analysis consisting of extensions of the model to allow a closer look at nominal case-mix

growth by categorizing the growth according to provider types and subgroups of patients. The extensions

showed a similar rate of nominal case-mix growth from 2000 to 2008 (Table 1A) for the various categories and

subgroups. Below, we discuss these results in terms of the criticisms we received.

TABLE 1A—MODELS FOR ASSESSING REAL CASE-MIX CHANGE

Model	Nominal case-mix percent increase from 2000 to 2008
(ALL) Total Nominal growth using Full Data Set (Replication) .....	17.45
(ALL) Full Data Set using MEDIAN ACH LOS (Replication) .....	17.38
(ALL) Full Data Set using Q3 ACH LOS (Replication) .....	17.47
(1a) Pre-HHA: With IH in prior 14 days .....	21.16
(1b) Pre-HHA: With IH in prior 15–120 days .....	16.81
(2a) Pre-HHA: Without IH in prior 14 days .....	15.85
(2b) Pre-HHA: Without IH in prior 15–120 days .....	18.19
(3a) Pre-HHA: With IRF/SNF/LTCH in prior 14 days .....	13.90
(3b) Pre-HHA: With IRF/SNF/LTCH in prior 15–120 days .....	14.11
(4a) Pre-HHA: Without IRF/SNF/LTCH in prior 14 days .....	18.51
(4b) Pre-HHA: Without IRF/SNF/LTCH in prior 15–120 days .....	18.33
(5a) Pre-HHA: With IH/IRF/SNF/LTCH in prior 14 days .....	18.97
(5b) Pre-HHA: With IH/IRF/SNF/LTCH in prior 15–120 days .....	16.74
(6a) Pre-HHA: Without IH/IRF/SNF/LTCH in prior 14 days .....	16.95
(6b) Pre-HHA: Without IH/IRF/SNF/LTCH in prior 15–120 days .....	18.29
(7a) AGENCY-LEVEL: Owner: Non-Profit .....	14.49
(7b) AGENCY-LEVEL: Owner: For-Profit .....	18.63
(7c) AGENCY-LEVEL: Owner: Government .....	15.22
(8a) AGENCY-LEVEL: Facility-Based HHA .....	14.17
(8b) AGENCY-LEVEL: Free-Standing HHA .....	17.86
(9a) AGENCY-LEVEL: West Region .....	17.51
(9b) AGENCY-LEVEL: Midwest Region .....	16.76
(9c) AGENCY-LEVEL: South Region .....	18.01
(9d) AGENCY-LEVEL: Northeast Region .....	14.81
(10a) AGENCY-LEVEL: Large Agency .....	17.21
(10b) AGENCY-LEVEL: Small Agency .....	17.53
(11a) AGENCY-LEVEL: Urban HHA .....	17.75
(11b) AGENCY-LEVEL: Rural HHA .....	15.36
(12a) AGENCY-LEVEL: Treats predominantly post-acute patients .....	16.67
(12b) AGENCY-LEVEL: Treats predominantly community patients .....	18.87
(13) First Episode Only .....	19.06

HHA = home health agency; IH = Inpatient hospitalization; IRF = inpatient rehabilitation facility; SNF = skilled nursing facility; LTCH = long-term care hospital, ACH LOS = acute care hospital length of stay.

To address the concern about our current models' robustness when there is no prior inpatient or post-acute care setting (when patients are admitted from the community), the Harvard team re-ran our models for separate subgroups; in most cases, subgroups were defined by the prior hospital and post-acute care use measures present on the data file. Specifically, they defined prior inpatient/post-acute care use in six different ways (shown in lines 1a through 6b of Table 1A): Any hospital use over the past 14 days (yes/no); any post-acute use over the prior 14 days (yes/no); any hospital use over the past 15–120 days (yes/no); any post-acute care use over the past 15–120 days (yes/no); any hospital or post-acute care use in the preceding 14 days (yes/no); and any hospital or post-acute care use in the preceding 15–120 days (yes/no). As another test, the team separated agencies according to whether they treated predominantly post-acute patients or not. To calculate this measure, the Harvard team split

agencies above/below the median based on their percentage of home health episodes in 2007 with an inpatient hospital stay in the preceding 14 days.

Across all models, there was evidence of significant and similar nominal case-mix growth, suggesting that high rates of nominal case-mix growth exist regardless of whether there was a preceding inpatient or post-acute stay. Agencies classified as serving predominantly community patients had a slightly higher nominal case-mix percentage increase compared to agencies classified as serving predominately post-acute patients (as shown in lines 12a and 12b in Table 1A). (For a full description of the Harvard team's analysis and results, please see the L&M final report located at <http://www.cms.gov/center/hha.asp>).

Also, to evaluate the validity of the comment that the acute care hospital APR-DRG and other prior use variables in our model may not be relevant for patients with more than one home health episode, the Harvard team re-ran

our current predictive models using only the first home health episode for each patient (shown in line 13 of Table 1A). Once again, results based on this first episode were similar to the overall results of our current model, suggesting that the model is relatively stable across home health episodes. The results show that the inclusion of the later episodes does not dramatically alter the primary finding of significant nominal case-mix growth.

To evaluate the comment that our models should take into account the fact that there are shorter hospital stays and therefore, the patients who are discharged from the hospital into home health may have a higher level of severity of illness than the model recognizes, our predictions were calculated assuming there was a different average length of stay than the actual average length of stay found for the LOS predictor variables in the 2007 and 2008 follow-up years. Harvard developed predictions of real and nominal case-mix growth using the

median acute care hospitalization length of stay, instead of the mean length of stay which is used in our current model. The median is lower than the mean acute care hospitalization length of stay. Harvard also developed predictions of real and nominal case-mix growth using the third quartile acute care hospitalization length of stay, which is longer than the mean. The results were very similar to the overall nominal case-mix percentage increase and therefore, the analysis suggests that our methodology is not particularly limited in capturing length of stay effects, because acute care hospitalization length of stay does not play a big role in determining average patient severity.

To evaluate the suggestion that we should limit nominal case-mix change reductions to certain types of agencies (such as by region or for-profit/non-profit status or by CMI), the Harvard team re-ran our model based on ownership type (non-profit, government, for-profit), agency type (facility-based, freestanding), region of the country (Northeast, South, Midwest, West), urban vs. rural status, and agency size (large vs. small; based on the number of initial episodes), shown in lines 7a through 11b in Table 1A. As noted earlier, the team also examined case-mix growth by whether the agency had a particular focus on post-acute vs. community patients. Across all these different categories (ownership, agency type, region, urban vs. rural status, agency size, agency focus), nominal case-mix growth was present. As expected, nominal case-mix growth was larger for some sub-groups. For example, nominal case-mix growth was higher for for-profit agencies (18.63 percent) than non-profit (14.49 percent) and government agencies (15.22 percent); however, these latter ownership types still exhibited high rates of nominal case-mix growth. As such, the Harvard team asserted that similar high rates of nominal case-mix growth exist for all types of HHAs.

To address the comment that a study which used MEPS data showed a higher rate of real case-mix growth in the entire Medicare population than our model estimated for Medicare home health patients, a more detailed analysis of the MEPS data was performed. The trends in health status of four different populations from 2000 to 2008 were analyzed. The data for the analysis were obtained from the MEPS 2000 and 2008 Full Year Consolidated Data files. The four populations that were analyzed were: (1) The full MEPS sample; (2) all Medicare beneficiaries, defined as all respondents ever having Medicare in a given year; (3) all home health patients,

defined as having at least one home health provider day in a given year; and (4) all home health Medicare beneficiaries, defined as all respondents with any Medicare home health charges. Two measures of self-reported health status and one measure derived from patient information that screened for activities of daily living (ADL) limitations were used to determine the trends in health status. These types of measures have been shown to be highly correlated with actual health (Ware and Sherbourne, 1992; McHorney, Ware, and Raczek, 1993). The three measures which were analyzed for each of the populations were: (1) Whether the respondent indicated perceived health status of “poor” or “fair” as opposed to those indicating health status as “good”, “very good”, or “excellent”; (2) whether the respondent indicated if pain limited normal work (including work in the home) in the past 4 weeks “extremely” or “quite a bit” as opposed to those indicating pain limited work “moderately”, “a little bit”, or “not at all”; and (3) whether respondents had a positive screen for needing assistance with ADL. In all cases, responses such as “refused”, “don’t know”, or “not ascertained” were omitted from the analysis. The Medicare analysis samples consisted of 3,371 and 4,144 beneficiaries in 2000 and 2008, respectively. The Medicare home health subsamples consisted of 174 and 289 beneficiaries in 2000 and 2008, respectively. The survey responses were then weighted using pre-constructed MEPS survey weights to estimate nationally representative changes in the three health status variables.

All three measures indicated a slight increase in the overall health status of the Medicare home health population. Two of these results were not statistically significant, but the percent of home health Medicare beneficiaries experiencing “extreme” or “quite a bit” of work-limiting pain decreased substantially, from 56.6 percent in 2000 to 45.4 percent in 2008 ( $p = 0.039$ ). Unlike Dr. Deb’s original study, the new MEPS analysis focuses specifically on Medicare home health users (as opposed to the entire Medicare population), and it is not reliant on expenditure data. A limitation of the Debs case-mix measure, which relies on expenditure data, is that it could reflect large increases in expenditures, such as drug expenditures, but any relationship to actual increases in impairments and other reasons for using home health resources is unclear. A possible limitation of the new MEPS analysis is that the sample of Medicare home

health respondents is relatively small, notwithstanding that the result of one of the three measures was statistically significant. Also, the ADL screening item may not capture a change in the frequency of very severe ADL limitations since the measure may be insensitive to changes at high levels of disability. However, the Harvard team asserted that the methods of the new MEPS analysis are more appropriate for assessing whether there are increases in the severity of illness burden that would specifically indicate a need for more resources in the Medicare home health population. Based on the two kinds of evidence, and a recognition of the limitations of both, we conclude that the MEPS data provide no evidence of an increase in patient severity from 2000 to 2008.

Based on the findings from the extensions of the current model that were tested, including the finding that the two nominal case-mix percentage increases for the post-acute and community patients are similar (Table 1A), and the results of the MEPS analysis which do not provide evidence to suggest that the Medicare home health population has experienced a decrease in their health status over time, the Harvard team concluded that the current model adequately measures real case-mix growth for home health patients, including patients admitted to home health from the community.

When reviewing the model, the Harvard team found that overall, our models are robust. However, one area of potential refinement to our models that the Harvard team suggested was to incorporate variables derived from Hierarchical Condition Categories (HCC) data, which is used by CMS to risk-adjust payments to managed care organizations in the Medicare program. Currently, the HCC model includes 70 HCCs, each of which is defined based on the presence of particular ICD-9-CM codes identified from Medicare claims data (inpatient and outpatient hospital claims and Part B Physician Claims). Some of the HCCs reflect hierarchies among related conditions, but, for unrelated diseases, each HCC is separately defined. The HCC model also includes demographic items related to gender, age, Medicaid enrollment, and whether Medicare eligibility was originally based on disabled status. We have augmented our modeling data with HCC information, as described in the next section.

## 2. Revised Version of Our Models To Assess Nominal Case-Mix Growth

In the past, we have considered using HCC data to assess real and nominal

case-mix change; however, we have yet to implement a change to our models which would incorporate the HCC data. Based on Dr. Grabowski and his team's recommendation and our previous consideration to incorporate HCC data in our models to assess real case-mix change, we explored the effects of adding the managed care data to our models. To incorporate HCC data into our models, we augmented our analytic files used to measure real case-mix change. We obtained HCC data on all home health users for 2004–2009. There were several different types of HCC variables that could be added to our models to assess real case-mix. Some of the variables we considered are the HCC risk score, binary variables for each of the HCCs, demographic variables, and disease indicators.

In the HCC model used for managed care risk adjustment, each HCC has an associated regression coefficient. Regression coefficients for each beneficiary's HCCs, along with the regression coefficients for their demographic and enrollment characteristics, are summed to calculate predicted expenditures. A risk score for each record can then be calculated based on expected expenditures for the patient divided by the mean expenditures for all patients. The HCC data include several risk score measures, including the HCC community risk score, the institutional risk score, and the risk score for new Medicare enrollees. Because home health patients live in the community, the community risk score seemed more appropriate than the institutional risk score. An alternative to using the HCC risk score was to include binary variables for each of the 70 HCCs, which may better capture a patient's severity. Along with the HCC risk score and the individual HCCs, we considered other elements of the HCC data such as the demographic variables, whether disability was the original reason for Medicare entitlement, and an indicator for whether the individual is a Medicaid beneficiary. Furthermore, we examined interactions involving a number of disease conditions that are included with the HCC data, such as congestive heart failure (CHF), diabetes mellitus (DM), chronic obstructive pulmonary disease (COPD), cardiovascular disease (CVD), renal failure (RF), and coronary artery disease (CAD).

To test the usefulness of these different HCC variables, we developed several models to examine real case-mix and which contained different types of HCC data. We examined models in which we added the HCC community score to our CY 2005 data so that the

HCC score was included with the APR–DRG variables in an equation explaining 2005 case-mix weights. We also examined models which incorporated individual HCCs, instead of the HCC risk score. Furthermore, we examined models in which either the HCC risk score or individual HCCs were added to our model along with demographic and disease indicator variables. Moreover, we examined models which did not include APR–DRGs, but rather the HCC risk score or individual HCCs replaced the APR–DRGs in the model. When we replaced the APR–DRGs in the models with the HCC risk score, there was a low R-squared value, lower than any of the other models we examined. When we replaced the APR–DRG variables in our models with the individual HCC indicators, we observed a negative change in real case-mix. This negative change in real case-mix would indicate that the health status of the Medicare home health population has improved over time and that all of the change in case-mix from 2000–2009 would be nominal case-mix change. As a result of the findings from the various models, we decided to augment our current model with the HCC variables rather than replace our APR–DRG variables with HCC variables.

It should be noted that in addition to examining which HCC variables we should include in our models, we also examined which year of HCC data we should use in our models. There is a 1 year look-back period with HCC data in that the HCC data are based on the previous calendar year's claims history for an individual. Therefore, when developing our models, we assessed whether we should use HCC data from the previous year or HCC data in the same year as when the home health episode occurred (the home health episode is the unit of observation in our models). Our concern was that if we used HCC data in the same year as the episode, the HCC data may partially reflect diseases and conditions identified after a home health episode. However, we decided to use HCC data in the same year as the episode since we thought it best reflected the health status of the patients in that year.

For this year's analysis, we used a similar approach to our previous methods. The basic method is to estimate a prediction model and use coefficients from that model along with predictor variables from a different year to predict the average case-mix for that year. It should be noted that we chose to enhance our models with HCC data starting in 2005 due to the availability of HCC data in our analytic files. Therefore, we analyzed real case-mix

change for three different periods, from 2000 to 2005, from 2005 to 2007, and from 2007 to 2009. The real case-mix change in the period from 2005 to 2007 and the period from 2007 to 2009 were assessed using enhanced models, which included HCC data. The real case-mix change from 2000 to 2005 was assessed using the same variables used in the model described in last year's regulation (75 FR 43238), a variable list consisting of measures of patients' demographic characteristics, clinical status, inpatient history, and Part A Medicare costs in the time period leading up to their home health episodes. The regression coefficients from the model without HCC variables were applied to episodes from 2005, allowing us to estimate how much of the change in observed case-mix was attributable to changes in patient characteristics between the IPS period and 2005.

We added HCC variables for the 2005 to 2007 period, estimating the model using data from 2005. The enhanced model includes HCC community scores, HCC demographic variables, and disease indicator variables for 2005 and later. We chose this version of the HCC-enhanced case-mix change model largely based on its ability to predict higher real case-mix change relative to the other HCC enhanced models. We applied the regression coefficients to means from 2007, allowing estimation of real case-mix change between 2005 and 2007.

For the 2007 to 2009 period, we used the 153 HHRG case-mix weights and data from 2009 to estimate the same set of models as we did for 2005. Using the backwards prediction method that we used in CY 2011 rulemaking, the coefficients from this model were developed using 2009 data and were applied to episodes from 2007. This procedure allows us to estimate how much of the 2007 through 2009 change (based on the HHRG153 case-mix for both periods) was associated with changes in patient characteristics between 2007 and 2009.

From 2000 to 2009, we identified a total change in case-mix of 0.2476 ( $1.3435 - 1.0959 = 0.2476$ ), which results in a case-mix growth of 22.59 percent ( $(1.3435 - 1.0959)/1.0959 = 0.2259$ ). We then estimated the real and nominal change in case-mix for each of the three periods. The change in real case-mix from 2000 to 2005 was 0.0207 case-mix units. The change in real case-mix from 2005 to 2007 was 0.0061 case-mix units. The change in real case-mix from 2007 to 2009 was 0.0122 case-mix units. After adding together the estimated real case-mix change in case-mix units for the three periods, the total



estimated change in real case-mix from 2000 to 2009 was 0.0390 (0.0207 + 0.0061 + 0.0122 = 0.0390). Therefore, we estimate that 15.76 percent of the total percentage change in the national average case-mix weight since the IPS baseline through 2009 is due to change in real case-mix (0.0390/0.2476 = ~0.1576). It should be noted that due to rounding, there is a 0.01 percentage point difference between the calculated and actual value. When taking into account the total measure of case-mix change (22.59 percent) and the 15.76 percent of total case-mix change estimated as real from 2000 to 2009, we obtained a final nominal case-mix change measure of 19.03 percent from 2000 to 2009 (0.2259 \* (1 - 0.1576) = 0.1903). Please see Table 1B for additional information about the calculations used to make the real and nominal case-mix change estimates from 2000 to 2009.

Our estimates of real and nominal case-mix change are consistent with past results. Most of the case-mix change has been due to improved coding, coding practice changes, and other behavioral responses to the prospective payment system, such as increased use of high therapy treatment plans.

TABLE 1B—SUMMARY OF REAL AND NOMINAL CASE-MIX CHANGE ESTIMATES: 2000–2009

Measure	Model
Actual case-mix: 2000 .....	1.0959
Actual case-mix: 2009 .....	1.3435
Total change in case-mix .....	0.2476
Total percentage change .....	22.59%
Estimated real change in case-mix .....	0.0390
Percent of total change estimated as real .....	15.76%
Percent of total change estimated as nominal (creep) .....	84.24%
Real case-mix percent increase ...	3.56%
Nominal case-mix percent increase .....	19.03%

As we described earlier in this proposed rule, our CY 2008 HH PPS final rule finalized a reduction over 4 years in the national standardized 60-day episode payment rates to account for a large increase in case-mix from 2000 to 2005 which we determined was not related to treatment of more intense patients. We implemented a 2.75 percent reduction each year for 2008, 2009, and 2010 and planned to reduce payments by 2.71 percent in 2011. In CY 2011 rulemaking, we updated our analysis of nominal case-mix growth through 2008 and determined that there was 17.45 percent nominal case-mix

growth from 2000 to 2008. Therefore, we proposed and finalized an increase in the planned 2.71 percent reduction to 3.79 percent for CY 2011. Also, in the CY 2011 proposed rule, we stated that if we were to identify further increases in nominal case-mix as more current data becomes available, it would be our intent to account fully for those increases when they are identified, rather than continuing to phase in the reductions over more than 1 year. For the CY 2012 proposed rule, after updating our models to incorporate HCC data, we have determined that there was a 19.03 percent nominal case-mix change from 2000 to 2009. To account for the remainder of the 19.03 percent residual increase in nominal case-mix beyond that which has been accounted for in previous payment reductions, we estimate that the percentage reduction to the national standardized 60-day episode rates for nominal case-mix change for CY 2012 will be 5.06 percent. Therefore, for CY 2012, we propose to implement a 5.06 percent payment reduction to the national standardized 60-day episode rates to fully account for growth in nominal case-mix from the inception of HH PPS through 2009.

#### B. Case-Mix Revision to the Case-Mix Weights

##### 1. Hypertension Diagnosis Coding Under the HH PPS

In CY 2011 rulemaking, we proposed to remove ICD–9–CM code 401.1, Benign Essential Hypertension, and ICD–9–CM code 401.9, Unspecified Essential Hypertension, from the HH PPS case-mix model's hypertension group. Beginning with the HH PPS refinements in 2008, hypertension was included in the HH PPS system because data suggested it was associated with elevated resource use. As a result, the diagnoses Unspecified Essential Hypertension and Benign Essential Hypertension were associated with additional points from the four-equation model and subsequently, potentially higher case-mix weights in the HH PPS case-mix system. When examining the trends in reporting of hypertension codes from 2000 to 2008, our analysis showed a large increase in the reporting of codes 401.1 and 401.9 in 2008. However, when looking at 2008 claims data, the average number of visits for claims with code 401.9 was slightly lower than the average for claims not reporting these hypertension codes. In last year's proposed rule, we proposed to remove codes 401.1 and 401.9 from our case-mix model based on preliminary analysis of the trends in coding and resource use of patients with

these codes. We suspected that the 2008 refinements, which newly awarded points for the diagnosis codes 401.1 and 401.9, led to an increase in reporting of these codes and that this reporting was a key driver of the high 2008 growth in nominal case-mix. In response to this proposed policy change, we received numerous comments, many of which stated that additional analysis was needed to substantiate the rationale for removing hypertension codes 401.1 and 401.9. In the CY 2011 HH PPS final rule, we withdrew our proposal to eliminate 401.1 and 401.9 from our model and described our plans to do a more comprehensive analysis of the resource use of patients with these two hypertension codes. We have since completed a more thorough analysis. Based on the results of our latest analyses, we propose to remove codes 401.1 and 401.9 from the HH PPS case-mix system.

We performed several analyses of the resource use and prevalence of patients with Benign Essential Hypertension and Unspecified Essential Hypertension (codes 401.1 and 401.9) to assess the appropriateness of these codes in our case-mix model. We looked at the HH PPS episode data using two samples to more accurately assess the trends in hypertension prevalence over time. In one sample, we excluded episodes from providers in areas exhibiting suspect billing practices. For the other sample, we excluded outlier episodes. In all of the analyses that follow, we report the results from the sample that excludes outliers because results from the alternate analysis were highly similar. Also, the sample that excludes outliers is more appropriate than one that includes outliers because our case-mix research has been conducted on samples without outliers.

One of our analyses looked at the prevalence of various hypertension codes over time. We compared the change in prevalence of 401.1 and 401.9 diagnoses to the prevalence of other diagnoses in the hypertension group—401.0 (malignant essential hypertension), 402 (hypertensive heart disease), 403 (hypertensive chronic kidney disease), 404 (hypertensive heart and chronic kidney disease), and 405 (secondary hypertension)—from 2005 to 2009 (Table 2). Our analysis shows that the prevalence of episodes with a 401.9 diagnosis continued to increase in 2009, from 50.58 percent of episodes in 2008 to 55.52 percent in 2009, and more than doubled between 2005 and 2009. The prevalence of episodes with a 401.1 diagnosis decreased from 2008 to 2009 but the prevalence remained slightly higher than the prevalence in 2005.



TABLE 2—PREVALENCE OF HYPERTENSION—2005–2009  
[In percent]

Diagnosis	2005	2006	2007	2008	2009
Any hypertension .....	33.32	40.22	46.26	60.37	65.65
401.0 Malignant essential hypertension .....	0.56	0.54	0.53	0.56	0.47
401.1 Benign essential hypertension .....	2.89	3.36	3.44	3.79	2.95
401.9 Essential hypertension, unspecified .....	27.23	33.22	38.74	50.58	55.52
402 Hypertensive heart disease .....	2.19	2.38	2.49	2.99	2.76
403 Hypertensive renal disease .....	0.31	0.56	0.92	2.24	3.66
404 Hypertensive heart and renal disease .....	0.14	0.17	0.20	0.31	0.39
405 Secondary hypertension .....	0.04	0.04	0.03	0.03	0.04

Outlier episodes are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file for 2005–2009.

We also examined the prevalence of hypertension coding by various agency characteristics, such as agency type, region, and provider size, in 2005 versus 2009 (Tables 3 and 4). We compared the 2005 data (Table 3) to more current data (Table 4) because the 2005 data were used to simulate the 2008 refinements for the CY 2008 HH PPS final rule implementing the 153-group case-mix system (72 FR 49762 through 49945). Based on our analysis, except for government-owned agencies and agencies in a few regions, agencies (regardless of type) had a similar prevalence of episodes with a 401.9 diagnosis across the board in 2009 (Table 4). Also, agencies had a relatively

similar prevalence of episodes with a 401.1 diagnosis across the board in 2009, except for West South Central, which had a high prevalence of 6.68 percent (Table 4)—about 9 times the region's prevalence in 2005. In addition, small facilities with less than 19 home health episodes in a year in the 20 percent sample of the Home Health Datalink file had a high prevalence of diagnosis 401.1; 8.30 percent of their episodes had a 401.1 diagnosis. All categories of agencies appear to have a significant increase in the reporting of a 401.9 diagnosis when comparing 2005 HH PPS claims and OASIS data to 2009 HH PPS claims and OASIS data. The reporting of a 401.9 diagnosis in 2009

was typically 1.8 to 2.1 times the reporting of a 401.9 diagnosis in 2005, with the exception of the East North and the West North Central regions which had an increase of around 1.7 and 1.5 fold respectively. Also, it should be noted that the Mid-Atlantic region had around a 2.4 fold increase in the reporting of a 401.9 diagnosis between 2005 and 2009 and the West South Central region had almost a threefold increase in the reporting of a 401.9 diagnosis between 2005 and 2009. Furthermore, many categories had an increase in the reporting of a 401.1 diagnosis when comparing 2005 data to 2009.

TABLE 3—PREVALENCE OF HYPERTENSION BY VARIOUS AGENCY CHARACTERISTICS—2005  
[In percent]

	Any	401.0	401.1	401.9	402	403	404	405
All Agencies .....	33.59	0.56	2.96	27.34	2.26	0.32	0.15	0.04
<b>Type of Facility</b>								
Free-Standing/Other Vol/NP .....	27.50	0.21	0.63	25.49	0.83	0.30	0.06	0.01
Free-Standing/Other Prop .....	39.35	0.86	4.86	29.63	3.48	0.30	0.19	0.06
Free-Standing/Other Govt .....	29.01	0.41	1.35	25.36	1.51	0.22	0.17	0.04
Hospital-Based Vol/NP .....	25.11	0.17	0.68	23.33	0.51	0.35	0.09	0.01
Hospital-Based Prop .....	29.79	0.30	0.68	27.50	0.83	0.37	0.16	0.01
Agency-Based Govt .....	30.94	0.80	3.04	24.46	1.92	0.53	0.23	0.02
<b>Facility Location</b>								
New England .....	39.36	1.06	5.25	27.83	4.63	0.37	0.30	0.01
Mid Atlantic .....	26.09	0.22	0.81	23.79	0.65	0.24	0.09	0.01
South Atlantic .....	36.87	0.81	5.93	27.41	2.21	0.30	0.14	0.09
East South Central .....	31.97	0.42	0.90	29.15	1.26	0.24	0.07	0.01
West South Central .....	21.15	0.25	0.74	19.57	0.32	0.19	0.09	0.01
East North Central .....	36.54	0.20	0.62	34.59	0.47	0.62	0.06	0.02
West North Central .....	37.81	0.56	1.46	32.10	3.17	0.35	0.21	0.01
Mountain .....	29.95	0.45	1.58	24.74	2.70	0.35	0.16	0.03
Pacific .....	25.33	0.32	1.81	22.17	0.76	0.21	0.07	0.02
Other .....	36.33	0.46	2.46	28.89	4.30	0.16	0.12	0.01
<b>Facility Size</b>								
< 19 episodes .....	36.71	0.79	3.86	28.75	2.53	0.52	0.19	0.10
20 to 49 .....	36.11	0.74	4.42	27.39	2.98	0.38	0.17	0.04
50 to 99 .....	35.98	0.80	4.06	27.97	2.73	0.31	0.11	0.02
100 to 199 .....	36.78	0.73	4.11	28.60	2.81	0.33	0.16	0.07

TABLE 3—PREVALENCE OF HYPERTENSION BY VARIOUS AGENCY CHARACTERISTICS—2005—Continued  
[In percent]

	Any	401.0	401.1	401.9	402	403	404	405
200+ .....	32.86	0.53	2.72	27.06	2.09	0.31	0.14	0.03

Outlier episodes are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file.

TABLE 4—PREVALENCE OF HYPERTENSION BY VARIOUS AGENCY CHARACTERISTICS—2009  
[In percent]

	Any	401.0	401.1	401.9	402	403	404	405
All Agencies .....	65.95	0.48	3.17	55.36	3.00	3.64	0.40	0.04

**Type of Facility**

Free-Standing/Other Vol/NP .....	60.11	0.17	0.94	53.06	0.71	5.05	0.24	0.01
Free-Standing/Other Prop .....	69.42	0.62	3.86	57.81	3.74	3.07	0.44	0.05
Free-Standing/Other Govt .....	54.60	0.45	3.13	44.98	2.00	3.41	0.72	0.02
Hospital-Based Vol/NP .....	56.82	0.16	1.22	49.49	0.78	4.93	0.32	0.02
Hospital-Based Prop .....	61.41	0.21	1.45	54.61	1.83	3.31	0.16	0.01
Agency-Based Govt .....	54.89	0.48	2.29	46.53	1.68	3.57	0.48	0.03

**Facility Location**

New England .....	58.71	0.10	0.54	53.96	0.43	3.50	0.23	0.02
Mid Atlantic .....	62.45	0.12	0.65	56.04	0.58	4.98	0.16	0.01
South Atlantic .....	64.09	0.28	1.74	56.80	1.49	3.46	0.31	0.08
East South Central .....	69.52	0.22	2.13	59.69	3.27	3.73	0.61	0.01
West South Central .....	73.22	0.92	6.68	57.28	4.47	3.53	0.50	0.05
East North Central .....	67.01	0.52	2.16	57.42	3.04	3.68	0.34	0.02
West North Central .....	55.97	0.46	1.84	48.00	1.12	4.15	0.46	0.06
Mountain .....	56.02	0.52	2.21	49.13	1.29	2.51	0.32	0.10
Pacific .....	57.42	0.52	3.00	45.06	5.50	3.02	0.51	0.03
Other .....	63.20	0.33	1.58	55.53	1.52	4.00	0.35	0.00

**Facility Size**

< 19 episodes .....	71.19	1.77	8.30	51.27	7.35	2.01	0.71	0.08
20 to 49 .....	68.39	1.35	6.13	53.07	5.63	2.04	0.44	0.04
50 to 99 .....	67.67	0.66	4.27	54.27	5.26	2.82	0.52	0.07
100 to 199 .....	65.99	0.52	4.03	54.90	3.12	3.07	0.41	0.08
200+ .....	64.37	0.21	1.52	56.61	1.38	4.38	0.33	0.02

Outlier episodes are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file.

In last year's final regulation, we received a comment stating that a multivariate analysis of the costliness of hypertension is advisable to strengthen the evidence for the proposal to eliminate the 401.1 and 401.9 diagnoses from the case-mix model. In response to this comment, we estimated a set of multivariate regression models to examine the resources associated with the 401.1 and 401.9 diagnoses while adjusting for other factors in the case-mix system (Tables 5 and 6). The multivariate regression models used 2008 HH PPS claims and OASIS data which excluded PEP, LUPA, and outlier episodes. Model 1 included variables for the number of therapy visits, the clinical score, the functional score, and indicators for whether a 401.1 or 401.9 diagnosis was present. In this model, both the 401.1 and 401.9 diagnoses were

associated with significantly lower costs (–19 and –18 resource units, respectively). This model indicates that an episode with a 401.1 or 401.9 code has less resource costs than an episode without a 401.1 or 401.9 code, when the amount of therapy, clinical score, and functional score are held constant. Model 2 included variables for the payment weight and the 401.1 and 401.9 indicators. In this model, both 401.1 and 401.9 were associated with lower costs and these impacts were statistically significant. The diagnosis code 401.1 was associated with significantly lower costs (–22 resource units) while the 401.9 indicator was associated with about –2 resource units. This model most accurately shows the impact of codes 401.1 and 401.9 on resource use within the payment system, because it directly controls for the payment

weight, which represents in a summary variable all the other conditions paid for in the case-mix algorithm. Both models provide strong evidence for removing the 401.1 diagnosis from the case-mix model, since it is associated with significantly lower resource costs. The models also provide strong evidence for removing the 401.9 diagnosis, since they do not indicate that this condition is responsible for additional resource costs beyond what is already accounted for in the case-mix model.

In addition, it should be noted that when we estimated the multivariate regression models when excluding episodes from providers in areas exhibiting suspect billing practices, ICD–9–CM diagnosis code 401.9 was associated with slightly lower costs and ICD–9–CM diagnosis code 401.1 was associated with a slight increase in

resource costs (about +3 resource units). However, we believe that relying on analyses that include outliers, as this sample does, is problematic. In 2008 and 2009, outliers reached a historically high rate per 100 episodes in home health, and the abuse of the PPS outlier policy was subsequently recognized as a significant problem. In a 10 percent

random beneficiary sample, there is a strong association between the reporting of code 401.1 and outliers, and this association could be contributing to the higher resource costs for episodes with the 401.1 code in the regression that excludes episodes from suspect areas. Although it is not certain whether the use of this code in outlier cases is

related to abusive outlier utilization, we are cautious about relying on data that include outliers. In addition, even absent any concerns about suspect billing practices, the increase in resource costs associated with a 401.1 diagnosis is not large enough to warrant awarding additional points in our case-mix system for the diagnosis.

TABLE 5—REGRESSION RESULTS: RESOURCES ASSOCIATED WITH A 401.1 OR 401.9 DIAGNOSIS: MODEL 1 (2008)

Variable	Parameter estimate	Standard error	T value	Pr >  t
Intercept .....	171.1183	0.74992	228.18	< .0001
Number of therapy visits .....	34.72435	0.0371	936.03	< .0001
Clinical score .....	8.7105	0.03774	230.8	< .0001
Functional score .....	8.63246	0.08876	97.26	< .0001
ICD9 401.1 present .....	−18.72875	1.38201	−13.55	< .0001
ICD9 401.9 present .....	−18.19412	0.53904	−33.75	< .0001

PEP, LUPA and outlier episodes are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file for 2008.

TABLE 6—REGRESSION RESULTS: RESOURCES ASSOCIATED WITH A 401.1 OR 401.9 DIAGNOSIS: MODEL 2 (2008)

Variable	Parameter estimate	Standard error	T value	Pr >  t
Intercept .....	−35.5089	0.68637	−51.73	< .0001
Payment weight .....	530.9656	0.51853	1023.98	< .0001
ICD9 401.1 present .....	−21.96335	1.43741	−15.28	< .0001
ICD9 401.9 present .....	−1.73284	0.55998	−3.09	0.002

PEP, LUPA and outlier episodes are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file for 2008.

We also examined whether there were any subsets of patients with a 401.1 or 401.9 diagnosis who had higher resource costs. Potentially such information could lead to adding interaction variables involving the two hypertension diagnoses to the case-mix model. The model currently includes several interactions (for example, gastrointestinal disorders and ostomy). There was speculation that patients who required respiratory treatments may have higher than expected resource costs in the presence of either of the two hypertension codes—for example,

patients who are smokers. We therefore examined the resource costs for patients with a 401.1 or a 401.9 diagnosis and different types of respiratory treatments (Tables 7 and 8). The results showed that there was a decrease in resource costs for episodes with patients with a 401.1 diagnosis and who received respiratory treatments (Table 7). In addition, it can be noted that there was a decrease in resource costs for episodes with patients with a 401.1 diagnosis and no respiratory treatment. Table 8 shows that there was a decrease in average cost for episodes with patients with a 401.9

diagnosis and who were on oxygen or receiving continuous positive airway treatment. There was also an increase in resource costs for episodes with 401.9 compared to those without 401.9 for patients on ventilators. However, this increase in resource costs associated with the presence of a 401.9 diagnosis is not statistically significant. Overall, the results from Tables 7 and 8 show that there is little support for keeping 401.1 and 401.9 codes for patients receiving respiratory treatments.

TABLE 7—RESOURCE COSTS FOR PATIENTS WITH A 401.1 DIAGNOSIS AND RESPIRATORY TREATMENT (2008)

	401.1 Present		Difference	% Difference
	No	Yes		
Oxygen .....	\$575.79	\$567.52	(\$8.27)	−1.44
Ventilator .....	662.71	612.24	(50.47)	−7.62
Continuous positive airway pressure .....	587.05	530.93	(56.12)	−9.56
None .....	567.88	554.61	(13.27)	−2.34

Outliers are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file for 2008.

TABLE 8—RESOURCE COSTS FOR PATIENTS WITH A 401.9 DIAGNOSIS AND RESPIRATORY TREATMENT (2008)

	401.9 Present		Difference	% Difference
	No	Yes		
Oxygen .....	\$581.66	\$568.46	(13.20)	− 2.27
Ventilator .....	648.94	683.77	34.83	5.37
Continuous positive airway pressure .....	599.69	572.08	(27.61)	− 4.60
None .....	568.42	566.75	(1.67)	− 0.29

Outliers are excluded.

Source: Abt Associates analysis of 20 percent sample of Home Health Datalink file for 2008.

We also looked at the average resource cost of episodes for patients categorized by primary diagnosis, with and without a 401.9 diagnosis code, to determine whether there are other sub-categories of patients diagnosed with 401.9 who are more resource intensive (Table 9). Many primary diagnoses had a lower average cost when code 401.9 was present. Heart disease was among the primary diagnoses in which the average resource cost for episodes with a 401.9 diagnosis was less than the average cost without a 401.9 diagnosis. For six primary diagnoses, there was an increase in resource cost when a 401.9 diagnosis was present. However, the increases in resource costs for four of the six diagnoses were not statistically

significant. It should be noted that while there was a large increase in resource costs for patients with blindness/low vision when a 401.9 diagnosis was present, the results were not statistically significant. There are few patients with a primary diagnosis of blindness/low vision. The two diagnoses which resulted in a significant increase in resource cost when a 401.9 diagnosis was present were stroke and gait abnormality (Table 9).

When further examining the data, we questioned the hypertension coding for the episodes with stroke as a primary diagnosis. For the 28,923 episodes with a primary diagnosis of stroke, only 18,063 episodes had a 401.9 diagnosis present. Furthermore, of those 28,923 episodes, only 71 percent of the

episodes had a hypertension diagnosis. Because stroke is so strongly associated with hypertension, we would expect more episodes with a primary diagnosis of stroke to also have a hypertension diagnosis. Therefore, we believe that the data in the table corresponding to the episodes with stroke as a primary diagnosis is affected by incomplete coding. Also, if stroke almost always should be listed followed by hypertension, there would be no reason for an interaction term in the model involving stroke and hypertension. An interaction in the model—identifying a subset of patients with a condition who have another condition that changes the patient's resource cost utilization—cannot apply in this case.

TABLE 9—TOTAL RESOURCE COSTS BY PRIMARY DIAGNOSIS AND WHETHER 401.9 IS PRESENT (2008)

Primary diagnosis	N	N with 401.9 present	401.9 not present	401.9 present	Difference	% Difference
Blindness/low vision .....	392	213	\$392.95	\$415.11	\$22.16	5.64
Stroke .....	28,923	18,063	742.54	768.66	26.12	3.52
Gait Abnormality .....	22,946	11,567	641.28	656.97	15.69	2.45
Hypertension .....	13,446	202	406.91	414.20	7.29	1.79
Neurological .....	14,869	6,583	622.88	628.27	5.39	0.86
Blood disorders .....	14,985	7,264	367.44	369.81	2.37	0.65
Orthopedic .....	33,468	17,757	529.46	529.46	0.00	0.00
Cystostomy Care .....	2,469	915	436.92	433.80	(3.12)	− 0.71
Cancer .....	20,885	9,298	459.59	452.73	(6.86)	− 1.49
Diabetes .....	96,018	54,461	462.55	450.32	(12.23)	− 2.64
Gastrointestinal .....	14,496	7,170	457.55	445.29	(12.26)	− 2.68
Traumatic wounds .....	27,855	13,849	554.73	539.44	(15.29)	− 2.76
Heart disease .....	68,297	36,040	484.49	469.11	(15.37)	− 3.17
MS .....	4,206	1,329	651.37	620.30	(31.07)	− 4.77
Dysphagia .....	1,430	595	651.95	598.26	(53.69)	− 8.24
Tracheostomy .....	414	176	598.77	508.91	(89.86)	− 15.01

Outlier episodes are excluded.

Source: Abt Associates analysis of 20% sample of Home Health Datalink file for 2008.

To further investigate the increase in average resource cost when 401.9 was present in patients with gait abnormality, we looked at average resources and average visits for joint replacement patients, which are patient groups strongly associated with a diagnosis of gait abnormality. We chose to look at patients with joint, hip, and knee replacements since they would be the sorts of patients in home health that

would have a skilled need as a result of gait abnormality and they would typically have high therapy and resource costs. We also examined the subgroups of these patients who were reported on the OASIS to have a diagnosis of gait abnormality (Table 10). For patients with joint, hip, and knee replacements that had a 401.9 diagnosis, resource costs and visits differed little compared to such patients who did not

have the 401.9 diagnosis. None of the differences were statistically significant. In addition, we saw that for the episodes with gait abnormality as a primary diagnosis, there were no statistically significant differences between the resource costs or number of visits for joint, hip, and knee replacement patients when a 401.9 diagnosis was present. These results indicate that there is no significant difference in resource

cost for patients with joint replacements when a 401.9 diagnosis is present.

It should also be noted that when examining the increase in average resources for episodes with patients with a primary diagnosis of stroke or

gait abnormality when a 401.9 diagnosis is present, we could not determine whether the increase in resource cost was due to the 401.9 diagnosis or due to a third confounding variable. As described earlier, we estimated a set of

multivariate regression models to determine the relationship between a 401.9 diagnosis and resource cost, when controlling for other variables in the case-mix model.

**TABLE 10—TOTAL RESOURCE COSTS AND VISITS BY TYPE OF JOINT REPLACEMENT AND WHETHER 401.9 IS PRESENT FOR ALL PATIENTS WITH JOINT REPLACEMENTS AND THE SUBSET OF PATIENTS WITH GAIT ABNORMALITY (2008)**

Diagnosis	N	Costs				Visits			
		401.9 not present	401.9 present	Difference	% Difference	401.9 not present	401.9 present	Difference	% Difference
Joint replacement .....	45,689	\$566.41	\$559.88	(\$6.53)	− 1.15%	15.71	15.86	0.15	0.95
Hip replacement .....	13,658	563.95	564.50	0.55	0.10	16.37	16.43	0.06	0.37
Knee replacement .....	21,580	542.12	539.63	(2.49)	− 0.46	14.9	15.04	0.14	0.94
<b>Episodes with gait abnormality as primary diagnosis</b>									
Joint replacement .....	632	553.68	562.41	8.73	1.58	15.58	16.23	0.65	4.17
Hip replacement .....	315	587.44	609.34	21.90	3.73	16.83	17.99	1.16	6.89
Knee replacement .....	382	554.78	529.23	(25.55)	− 4.61	14.98	14.57	(0.41)	− 2.74

Outlier episodes are excluded.

Source: Abt Associates' analysis of 20 percent sample of Home Health Datalink file for 2008.

Some of our analysis was performed to further investigate issues raised in comments we received on last year's proposed rule. In response to last year's rule, one commenter stated that we should keep the diagnosis code 401.9 in the case-mix system, stating that very often clinically complex patients, such as hypertensive heart disease patients, will be diagnosed with this code while waiting for proper documentation that is required by ICD-9-CM to report a more specific diagnosis code. To investigate the extent to which a 401.9 diagnosis might be coded on an initial assessment while waiting for necessary documentation for other hypertension codes, we looked at the hypertension prevalence for start-of-care episodes (defined as those with segment number equal to one) and recertification episodes (defined as those with segment number greater than one) for various subgroups of related episodes (Table

11). Related episodes are episodes without a gap of more than 60 days in between them. In past rulemaking, we have referred to these as episodes as part of a sequence of adjacent episodes. In those rules, we defined episodes as adjacent if they were separated by no more than a 60-day period between episodes. Some of the subgroups we examined in our analysis were ones in which: (1) The initial episode had a 401.9 code; (2) the 2nd episode in a sequence of adjacent episodes had a 402, 403, 404, or 405 code; (3) codes 402, 403, 404, and 405 were not present on the initial episode, but were present on the second episode in the sequence of adjacent episodes. Table 11 shows that, of the sequence of adjacent episodes where a 401.9 code is reported on the initial episode, very few subsequent episodes had a diagnosis of 402, 403, 404, or 405, and most subsequent episodes continued to have

a 401.9 diagnosis. Also, for those sequences of adjacent episodes where a 402, 403, 404, or 405 code exists on the second episode, many (over 60 percent) had the same code reported for the initial episode. For patients that had a 402, 403, 404, or 405 diagnosis on their second episode but not their initial episode, many had a 401.9 diagnosis on their initial episode. However, there were only a small number of episodes with this pattern and it is not clear if this pattern is related to the comment about coding 401.9 while waiting for documentation or if this occurs due to the random fluctuation in hypertension coding patterns. In summary, the results of this analysis do not provide support for keeping 401.9 as a diagnosis in the case-mix model based on the reason that it is used as a placeholder while waiting for documentation to support another ICD-9-CM hypertension code.

**TABLE 11—HYPERTENSION PREVALENCE BY SEGMENT AND TYPE OF HYPERTENSION REPORTED ON SEGMENT 1 OR SEGMENT 2 (2009)**

Diagnosis	N	401.9 (%)	401.1 (%)	402 (%)	403 (%)	404 (%)	405 (%)
<b>401.1 Benign Essential hypertension, unspecified (segment 1)</b>							
Segment 1 .....	10,859	0.04	100.00	0.19	0.12	0.06	0.00
Segment 2 .....	3,463	12.21	75.69	1.70	0.78	0.20	0.03
Segment 3 .....	1,734	17.42	68.86	2.42	0.69	0.23	0.06
Segment 4 .....	997	19.76	64.79	3.21	0.80	0.30	0.10
<b>401.9 Essential hypertension, unspecified (segment 1)</b>							
Segment 1 .....	305,530	100.00	0.00	0.08	0.06	0.01	0.00
Segment 2 .....	70,493	87.63	0.44	0.74	1.41	0.11	0.00
Segment 3 .....	29,235	84.76	0.73	1.14	1.82	0.15	0.01
Segment 4 .....	14,255	82.94	0.98	1.35	2.13	0.18	0.01

TABLE 11—HYPERTENSION PREVALENCE BY SEGMENT AND TYPE OF HYPERTENSION REPORTED ON SEGMENT 1 OR SEGMENT 2 (2009)—Continued

Diagnosis	N	401.9 (%)	401.1 (%)	402 (%)	403 (%)	404 (%)	405 (%)
<b>402 Hypertensive heart disease (segment 1)</b>							
Segment 1 .....	8,777	2.83	0.24	100.00	0.24	0.09	0.01
Segment 2 .....	3,165	14.00	1.07	79.05	1.23	0.73	0.00
Segment 3 .....	1,563	20.47	1.66	70.12	1.15	1.02	0.06
Segment 4 .....	859	23.40	1.40	65.19	0.70	1.28	0.00
<b>403 Hypertensive renal disease (segment 1)</b>							
Segment 1 .....	18,740	1.02	0.07	0.11	100.00	0.03	0.01
Segment 2 .....	4,497	9.12	0.18	0.51	79.25	0.78	0.04
Segment 3 .....	1,806	11.46	0.39	0.44	73.75	1.33	0.06
Segment 4 .....	843	12.81	0.47	0.59	72.00	1.66	0.00
<b>404 Hypertensive heart and renal disease (segment 1)</b>							
Segment 1 .....	1,331	2.93	0.45	0.60	0.38	100.00	0.00
Segment 2 .....	404	8.66	1.98	2.23	6.44	73.51	0.00
Segment 3 .....	191	12.57	1.57	2.62	7.33	67.54	0.00
Segment 4 .....	101	12.87	1.98	0.99	10.89	67.33	0.00
<b>405 Secondary hypertension (segment 1)</b>							
Segment 1 .....	192	1.04	0.00	0.52	0.52	0.00	100.00
Segment 2 .....	56	8.93	0.00	0.00	1.79	1.79	75.00
Segment 3 .....	29	6.90	0.00	0.00	6.90	0.00	58.62
Segment 4 .....	13	23.08	0.00	0.00	0.00	0.00	61.54
<b>401.1 Secondary hypertension (segment 2)</b>							
Segment 1 .....	3,269	9.51	80.18	1.04	0.24	0.24	0.00
Segment 2 .....	3,269	0.06	100.00	0.28	0.12	0.15	0.00
Segment 3 .....	1,548	9.95	80.68	1.68	0.32	0.06	0.00
Segment 4 .....	987	15.40	72.10	3.00	0.20	0.20	0.00
<b>401.9 Essential hypertension, unspecified (segment 2)</b>							
Segment 1 .....	70,616	87.48	0.60	0.63	0.58	0.05	0.01
Segment 2 .....	70,616	100.00	0.00	0.12	0.08	0.02	0.00
Segment 3 .....	27,347	89.83	0.41	0.74	1.02	0.10	0.01
Segment 4 .....	13,622	86.46	0.70	0.99	1.50	0.10	0.01
<b>402 Hypertensive heart disease (segment 2)</b>							
Segment 1 .....	3,298	15.92	1.79	75.86	0.70	0.27	0.00
Segment 2 .....	3,298	2.67	0.27	100.00	0.27	0.06	0.00
Segment 3 .....	1,478	13.94	0.88	81.33	0.68	0.74	0.00
Segment 4 .....	788	17.51	1.02	74.62	0.51	1.27	0.00
<b>403 Hypertensive renal disease (segment 2)</b>							
Segment 1 .....	5,192	19.11	0.52	0.75	68.64	0.50	0.00
Segment 2 .....	5,192	1.02	0.08	0.17	100.00	0.00	0.00
Segment 3 .....	1,861	6.45	0.27	0.21	84.09	0.59	0.00
Segment 4 .....	837	7.89	0.36	0.36	81.84	0.96	0.00
<b>404 Hypertensive heart and renal disease (segment 2)</b>							
Segment 1 .....	478	15.69	1.46	4.81	7.32	62.13	0.21
Segment 2 .....	478	3.14	1.05	0.42	0.00	100.00	0.00
Segment 3 .....	201	7.46	1.99	1.49	5.47	78.61	0.00
Segment 4 .....	106	8.49	0.94	0.94	10.38	72.64	0.00
<b>405 Secondary hypertension (on segment 2)</b>							
Segment 1 .....	51	5.88	1.96	0.00	3.92	0.00	82.35
Segment 2 .....	51	0.00	0.00	0.00	0.00	0.00	100.00
Segment 3 .....	21	0.00	0.00	0.00	4.76	0.00	95.24
Segment 4 .....	11	18.18	0.00	0.00	0.00	0.00	81.82

TABLE 11—HYPERTENSION PREVALENCE BY SEGMENT AND TYPE OF HYPERTENSION REPORTED ON SEGMENT 1 OR SEGMENT 2 (2009)—Continued

Diagnosis	N	401.9 (%)	401.1 (%)	402 (%)	403 (%)	404 (%)	405 (%)
<b>402 Hypertensive heart disease (not present on segment 1 but present on segment 2)</b>							
Segment 1 .....	796	58.67	6.53	0.00	72.01	0.88	0.00
Segment 2 .....	796	3.27	0.25	100.00	64.58	0.00	0.00
Segment 3 .....	318	18.55	1.89	72.01	2.14	0.94	0.00
Segment 4 .....	144	22.22	1.39	64.58	0.38	2.08	0.00
<b>403 Hypertensive renal disease (not present on segment 1 but present on segment 2)</b>							
Segment 1 .....	1,628	59.28	1.41	1.97	0.00	1.54	0.06
Segment 2 .....	1,628	1.47	0.00	0.12	100.00	0.00	0.00
Segment 3 .....	552	9.42	0.18	0.36	76.27	0.72	0.00
Segment 4 .....	231	11.69	0.43	0.43	72.73	1.30	0.00
<b>404 Hypertensive heart disease (not present on segment 1 but present on segment 2)</b>							
Segment 1 .....	181	39.23	2.21	10.50	19.34	0.00	0.55
Segment 2 .....	181	4.97	0.55	0.55	0.00	100.00	0.00
Segment 3 .....	66	10.61	3.03	1.52	9.09	68.18	0.00
Segment 4 .....	36	13.89	0.00	0.00	8.33	63.89	0.00
<b>405 Secondary Hypertension (not present on segment 1 but present on segment 2)</b>							
Segment 1 .....	9	33.33	11.11	0.00	22.22	0.00	0.00
Segment 2 .....	9	0.00	0.00	0.00	0.00	0.00	100.00
Segment 3 .....	4	0.00	0.00	0.00	0.00	0.00	100.00
Segment 4 .....	2	0.00	0.00	0.00	0.00	0.00	100.00

Outlier episodes are excluded.

Source: Abt Associates' analysis of 20 percent sample of Home Health Datalink file for 2009.

To further investigate the issue whether 401.9 is used as a placeholder while waiting for documentation to support coding of other more complex hypertension codes, we looked at the average resource cost for the initial episode, categorized by hypertension diagnosis, for all of the episodes with a hypertension diagnosis of 402, 403, or 404 in their second episode (Table 12). We compared the average cost of an initial episode when there was a 401.9 diagnosis to the average cost of an initial episode when both the initial and second episode had the same diagnosis (both the initial and second episode had either a 402, 403, or 404 code). For example, for all 2nd episodes, in a

sequence of adjacent episodes, with a 402 diagnosis, we compared the average cost of an initial episode when there was a 401.9 diagnosis to the average cost of an initial episode when there was a 402 diagnosis. Considering the comment that a 401.9 is coded while waiting for documentation for a more complex diagnosis like 402 (hypertensive heart disease), one would expect the average resource cost for an initial episode with a 401.9 code to be the same as an initial episode with a 402 code when looking at all of the sequences which have a 402 diagnosis in the second episode. Based on our analysis, the average resource cost for initial episodes with a 401.9 diagnosis is lower than the average

resource cost for initial episodes with a 402, 403, and 404 diagnosis, given that a 402, 403, or 404 diagnosis exists on the second episode respectively. It should be noted that the average resource cost for initial episodes with a 401.9 diagnosis is only slightly lower than the average resource cost for initial episodes with a 404 diagnosis, given a 404 diagnosis on the second episode. However, the samples for this comparison are small (N=69 and N=293). In general, the overall pattern of results of this analysis does not support keeping 401.9 as a diagnosis in the case-mix model based on the reason that 401.9 is coded while waiting for documentation for another ICD-9 code.

TABLE 12—RESOURCE COSTS FOR SEGMENT 1 BY HYPERTENSION DIAGNOSES ON SEGMENT 1 GIVEN A HYPERTENSION DIAGNOSIS REPORTED ON SEGMENT 2 (2009)

Hypertension diagnosis (segment 1)	Hypertension diagnosis (segment 2)					
	402		403		404	
	N	Mean resource cost for initial episode	N	Mean resource cost for initial episode	N	Mean resource cost for initial episode
None .....	254	\$765.28	585	\$725.84	54	\$798.17
401.9 .....	467	651.24	962	660.99	69	683.99
402 .....	2502	692.79	39	565.74	23	624.20
403 .....	17	769.40	3557	741.52	34	650.24



TABLE 12—RESOURCE COSTS FOR SEGMENT 1 BY HYPERTENSION DIAGNOSES ON SEGMENT 1 GIVEN A HYPERTENSION DIAGNOSIS REPORTED ON SEGMENT 2 (2009)—Continued

Hypertension diagnosis (segment 1)	Hypertension diagnosis (segment 2)					
	402		403		404	
	N	Mean resource cost for initial episode	N	Mean resource cost for initial episode	N	Mean resource cost for initial episode
404 .....	7	756.36	25	619.69	293	689.01

Outlier episodes are excluded.

Source: Abt Associates' analysis of 20 percent sample of Home Health Datalink file for 2009.

In summary, we propose to remove ICD-9-CM code 401.1, Benign Essential Hypertension, and ICD-9-CM code 401.9, Unspecified Essential Hypertension, from the HH PPS case-mix model's hypertension group. Based on our analysis, there continues to be an increase in the prevalence of ICD-9-CM code 401.9 from 2008 to 2009. In addition, agencies (regardless of type) typically had a twofold or higher increase in the prevalence of a 401.9 diagnosis from 2005 to 2009, with the exception of the East North and the West North Central regions which had an increase of about 1.7 and 1.5 fold respectively. Furthermore, many categories had an increase in the reporting of a 401.1 diagnosis when comparing 2005 data to 2009. Most compelling, current data indicates that these diagnoses are not predictors of higher home health patient resource costs. Rather, current data indicates a lower cost associated with home health

patients when these codes are reported. The results from the two regression models provide strong support for removing the 401.1 and 401.9 diagnoses from the case-mix system, showing that the presence of these diagnoses is associated with lower costs, when controlling for other case-mix related factors. Therefore, we propose to remove codes 401.1 and 401.9 to more accurately align payment with resource use.

In the CY 2011 HH PPS final rule, in response to comments, we described that if we were to finalize removing these codes from our case-mix system, we would do so in such a way that we would revise our case-mix weights to ensure that the removal of the codes would result in the same projected aggregate expenditures. Therefore, we also propose to revise the HH PPS case-mix weights as we describe in detail in the following section. The revisions of the case-mix weights would redistribute HH PPS payments among the case-mix

groups such that removal of these hypertension codes would not result in lower aggregate payments. Rather, the change would be effectuated in a budget neutral way.

## 2. Proposal for Revision of Case-Mix Weights

As we described in section II.B.1 of this preamble, we propose to revise our HH PPS case-mix weights to remove two hypertension codes from our case-mix system while maintaining budget neutrality. We also believe that additional revisions to the case-mix weights are needed.

Our review of HH PPS utilization data shows a shift to an increased share of episodes with very high numbers of therapy visits. This shift was first observed in 2008 and it continued in 2009. Table 13 shows the percentage distribution of episodes according to number of therapy visits for 2001 through 2009.

TABLE 13—DISTRIBUTION OF HOME HEALTH EPISODES ACCORDING TO NUMBER OF THERAPY VISITS (2001–2009)  
[In percent]

Number of therapy visits	2001	2002	2003	2004	2005	2006	2007	2008	2009
None .....	54	52	51	50	50	50	50	49	48
1 to 5 .....	14	15	15	15	15	15	14	14	14
6 .....	3	3	3	3	3	3	3	3	3
7 to 9 .....	6	6	6	6	6	6	6	9	9
10 to 13 .....	10	11	13	14	14	15	15	10	10
14+ .....	12	12	12	12	12	12	12	15	16

**Note:** Based on a 10 percent random beneficiary sample.

The 2009 distribution of episodes by number of therapy visits resembles the 2008 distribution with some important differences. In last year's regulation, we described an increase of 25 percent in the share of episodes with 14 or more therapy visits. In the 2009 sample, the share with 14 or more therapy visits continued to increase while the share of episodes with no therapy visits continued to decrease. The frequencies also indicate that the share of episodes

with 20 or more therapy visits was 6 percent in 2009 (data not shown). This is a 50 percent increase from the share of episodes of 2007, when episodes with at least 20 therapy visits accounted for only 4 percent of episodes.

In their 2010 and 2011 Reports to Congress, MedPAC suggests that the HH PPS contains incentives which likely result in agencies providing more therapy than is needed to maximize their Medicare payments. In their March

2010 Report to the Congress, MedPAC stated that "therapy episodes appear to be overpaid relative to others and that the amount of therapy changed significantly in response to the 2008 revisions to the payment system." In support of this statement, MedPAC showed that there was a quick episode volume shift to the new therapy thresholds, which suggests inappropriate therapy utilization. In their March 2011 Report to the

Congress, MedPAC stated, “The volume data for 2009 indicate that the shifts that occurred in 2008 are continuing \* \* \* Episodes with 14 or more therapy visits increased by more than 20 percent, and those with 20 or more therapy visits increased by 30 percent.”

Also, in their March 2011 Report to Congress, MedPAC suggested that the current HH PPS may “overvalue therapy services and undervalue nontherapy services.” In this report, MedPAC describes that HHA margins average 17.7 percent, with 20 percent of agencies achieving margins of 37 percent. MedPAC further states that their analysis of high-margin and low-margin agencies suggests that the HH PPS overpays for episodes with high case-mix values and underpays for episodes with low-case-mix values. Furthermore, MedPAC reports that home health agencies with high margins had high case-mix values which were attributable to the agencies providing more therapy episodes (MedPAC, March 2011 Report to Congress). MedPAC went on to assert that “unless the case-mix system is revised, agencies will continue to have significant incentives to favor therapy patients, avoid high-cost nontherapy patients, and base the number of therapy visits on payment incentives instead of patient characteristics.”

We concur that the therapy utilization shifts and the correlation between high agency margins and high volumes of therapy episodes strongly suggest that the costs which the HH PPS assigns to therapy services when deriving the relative payment weights are higher than actual costs incurred by agencies for therapy services. We believe that one factor which contributes to this overpayment for therapy services is the growing use of therapy assistants, instead of qualified therapists, to provide home health therapy services. Current data suggest that the percentage of therapy assistants which is reflected in the therapy-wage weighted minutes used in the calculations of HH PPS relative resource costs is too low. For our 2008 refinements, to construct the relative resource costs for episodes, we used the labor mix percentages reported in the Occupational Employment Statistics (OES) data by the Bureau of Labor Statistics. In 2005, which is the year of data that was used to develop the HH PPS refinements, the OES data showed that 15 percent of physical therapy was provided by therapy assistants and that 11 percent of occupational therapy was provided by therapy assistants. This data was then used to develop the resource costs for episodes which were used to develop

the current HH PPS payment weights. In 2008, the OES data showed that 19 percent of physical therapy was provided by therapy assistants and that 13 percent of occupational therapy was provided by therapy assistants. In addition, by 2010, OES data has shown that the percentage of physical therapy provided by therapy assistants was 20 percent and the percentage of occupational therapy provided by therapy assistants was 14 percent. We note that these statistics reflect the mix for all home health providers. Also, preliminary analysis of resource use data collected during Medicare’s Post-Acute Care Demonstration (PAC-PRD) shows a somewhat higher prevalence of assistants providing therapy for patients receiving Medicare’s home health benefit than the OES data. We note that in CY 2011, we began collecting data on HH PPS claims which will enable us to quantify the percentage of therapy assistants who are providing therapy and to assess how the percentages vary relative to the quantity of therapy provided and the type of provider.

We believe that MedPAC has provided strong evidence that our reimbursement for episodes with high therapy is too high. Also, based on MedPAC’s analysis and our own findings, we believe that the resource costs reflected in our current case-mix weights for therapy episodes, in particular for those episodes with high amounts of therapy, are higher than current actual resource costs and that an adjustment to the HH PPS therapy case-mix weights is warranted. We note that fully addressing MedPAC’s concerns with the way the HH PPS factors therapy visits into the case-mix system will be a complex process which will require more comprehensive structural changes to the HH PPS. While we plan to address their concerns in a more comprehensive way in future years, for CY 2012 we propose to revise the current case-mix weights by lowering the relative weights for episodes with high therapy and increasing the weights for episodes with little or no therapy. It should be noted that we propose to revise the case-mix weights in a budget neutral way. In other words, this proposal would redistribute some HH PPS dollars from high therapy payment groups to other HH PPS case-mix groups, such as the groups with little or no therapy. We believe this proposed revision to the payment weights would result in more accurate HH PPS payments for targeted case-mix groups while addressing MedPAC concerns that our reimbursement for therapy episodes is too high and our reimbursement for

non-therapy episodes is too low. Also, we believe our proposed revision of the payment weights will discourage the provision of unnecessary therapy services and will slow the growth of nominal case-mix. Our detailed approach, analysis, and case-mix revision methodology which support this proposal are described below.

During the 2008 HH PPS refinements, in addition to implementing a change from an 80 group case-mix system to a 153 group case-mix system, we developed new payment weights for the HH PPS case-mix system. To derive these payment weights, we developed a four-equation model which estimated an equation explaining an episode’s resource use, as measured in units corresponding to wage-weighted minutes (the dependent variable), in terms of therapy visits and clinical and functional variables (the independent, or explanatory, variables). Each equation was created from a different subset of episodes (for example, early episodes with 13 or fewer therapy visits). The results from the four-equation model were then used to develop the severity levels for the clinical and functional dimensions. Specifically, the coefficients of the four-equation model were divided by 10 and rounded to the nearest integer to create points which correspond to the impact of the variable on the total resource cost of the episode. These points are reported in Table 2a of the CY 2008 HH PPS final rule. For each episode in the sample, the sum of clinical variable points and the sum of functional variable points were calculated. Within each of the four equations, the clinical or functional severity levels were then defined in terms of intervals of the total clinical or functional points in such a way as to create a relatively even distribution of episodes amongst the severity levels. Also, the single 10-therapy visit threshold was changed to three therapy thresholds at 6, 14, and 20 visits to promote appropriate therapy utilization. Graduated steps between each of the three thresholds were also defined to provide an equitable increase in payment that would not otherwise occur between the three threshold levels. After defining the severity levels and thresholds and graduated steps between thresholds, we estimated a payment regression. The payment regression quantifies the relationship between an episode’s resource use as measured in dollars corresponding to wage weighted minutes (the dependent variable) and the episode’s clinical severity indicator variables (low, medium, or high), functional severity

indicator variables (low, medium, or high), four-equation indicator variables (which indicate whether an episode is early/late and has low/high therapy), and therapy visit indicator variables. The therapy visit indicator variables were defined based on the graduated steps between the therapy thresholds. The raw payment weights for the 153 case-mix groups were then derived from the payment regression model coefficients. Note that in the process of developing the weights for episodes with therapy, we decelerated the increase in payment within each grouping of additional therapy visits (that is, we decelerated the increase in payment for each graduated therapy step). Finally, the weights were altered to achieve budget neutrality to 2005.

Initially, for this proposed rule, during the process of revising the case-mix weights, we re-estimated the payment regression model on 2008 data using the same dependent and independent variables we defined for the payment regression model which we used for the HH PPS refinements. We then compared the results to the current payment regression, which was based on 2005 data. We saw that the coefficients for the clinical and functional severity indicators were typically smaller in 2008 compared to 2005. This finding implies that if we were to use 2008 data to revise our payment weights, the clinical and functional severity levels would be associated with lower relative resource costs compared to our current payment regression model, and would result in lower raw payment weights for episodes with little or no therapy when compared to our current case-mix weights. These results would not achieve our intended goals as we describe in more detail below.

As a result of our re-estimation of the payment regression using 2008 data, we decided not to use data from 2008 or later to develop the revised case-mix weights. Instead, we propose to use pre-2008 data, which is before the implementation of the HH PPS refinements and the behavioral and coding changes we described in our discussion of the 2008 therapy utilization and case-mix data in last year's proposed and final regulations (75 FR 43238 through 43244 and 75 FR 70384). In last year's proposed and final rules we presented several analyses that described indications of a large change in coding practices between 2007 and 2008, the first year of the 153-group, refined system. Our initial analysis indicated that if we were to use the 2008 data in our payment regression to develop the revised weights, the

regression would assign a higher relative resource cost to high therapy episodes and would assign a lower relative resource cost to episodes with little or no therapy than was assigned when deriving the current weights. As we described earlier in this section, we believe the data strongly suggest that our current weights over-value high therapy episodes and under-value non-therapy episodes and has strongly influenced the utilization shifts to more episodes in the 14 and 20 therapy groups and fewer non-therapy episodes beginning in 2008. Therefore, we believe that using 2008 or later data in our payment regression to revise the case-mix weights would be inadvisable. The evidence strongly suggests that the utilization shifts are influenced by agencies' attempts to maximize Medicare payments. As such, we propose to use pre-2008 data in the payment regression to revise our case-mix weights. We believe this data is more reflective of costs associated with patients' actual clinical needs than the 2008 and later data. We note that using pre-2008 data to derive relative resource costs and to revise our case-mix weights does not hinder our ability to achieve budget neutrality. We will describe our approach to ensure budget neutrality later in this section.

We explored numerous methods for revising our case-mix weights which were similar to the method we previously used for the 2008 refinements. We note that when developing the case-mix weights for the 2008 refinements, we were concerned that since there was an increase in payment weight as additional therapy visits were provided, there may be incentives to provide more therapy than clinically needed. To discourage this, when developing our current weights, we incrementally decreased the marginal payment for each grouping of therapy visits as the number of therapy visits grew. When exploring ways to revise our current case-mix weights, we initially applied a more aggressive deceleration to the weights for each of the incremental therapy visit steps similar to the approach we took for the current weights. We saw that when we applied more deceleration for each incremental therapy visit step, the payment weight for episodes with high numbers of therapy visits, when taking into account the clinical and functional score, was often the same as or larger than the current weight. Also, we saw inversions in the payment weights. For example, we saw that the payment weight for an episode with a clinical severity level of 1, functional severity

level of 1, and 14 therapy visits had a smaller weight than for an episode with a clinical severity level of 1, a functional severity level of 1, and 13 therapy visits. Because of these observations, we decided against using the same type of approach we originally used when developing our current case-mix therapy weights. Instead, we developed a different approach to revise the case-mix payment weights.

Before we can describe this new approach, we must first explain the changes we made to the four-equation model to remove the hypertension diagnoses ICD-9-CM code 401.1, Benign Essential Hypertension, and ICD-9-CM code 401.9, Unspecified Essential Hypertension from our case-mix system, as we have proposed to do. As we indicated in the CY 2011 HH PPS final rule, our intention would be to revise the system in a manner that redistributes all the resources in the system after removing the two hypertension codes from our case-mix system. Our method of redistributing the resources starts with changes to the four-equation model, which is the foundation for the subsequent revised payment regression and creation of revised case-mix weights. The changes to the four-equation model are described below.

To examine the effects of removing the two hypertension codes 401.1 and 401.9 from the case-mix system and determine whether the thresholds for the clinical severity indicators need to be changed if 401.1 and 401.9 are removed from the case-mix system, we estimated the four-equation model with and without codes 401.1 and 401.9 in the hypertension group. We used 2005 data for this estimation. We note that the adjusted R-squared value for the four-equation model without codes 401.1 and 401.9 derived from 2005 data was 0.4621. We also note that we used 2005 data to develop an accurate comparison of the current four-equation model with the revised four-equation model without the two hypertension codes because our current four-equation model was built using 2005 data. In addition, we estimated the coefficients for the variables in the four-equation model using 2005 data to maintain the same variables we developed for our current four-equation model and minimize changes to our current model. We then used the coefficients from the four-equation model without codes 401.1 and 401.9 to determine the points which would be associated with all the clinical and functional variables found in our current four-equation model, as described on Table 2a of the CY 2008 HH PPS final rule (Table 14A).

When comparing the four-equation model with the two hypertension diagnoses (which is equivalent to our current model) to the four-equation model without the two hypertension diagnoses, there were some differences in the points assigned to variables. Specifically, there was a different number of points for 58 of the 224

variables in the four-equation model. However, the difference between the two models was at most 1 point. Also, of the 58 variables which had a different number of points, 33 were clinical and functional variables. (The remaining variables were therapy-visit and early/late episode indicator variables used in the four-equation model estimation

procedure.) For 13 of the 33 clinical and functional variables, there was an extra point assigned when the two hypertension codes are excluded, and for 20 of the 33 clinical and functional variables, there was one less point assigned compared to the current model (Table 14B).

**TABLE 14A—POINTS ASSOCIATED WITH THE UPDATED 4-EQUATION MODEL WITHOUT HYPERTENSION CODES 401.1 AND 401.9**

**Case-Mix Adjustment Variables and Scores**

(Note: 4—Equation Model was Estimated on Episodes from 2005 where 401.1 and 401.9 were not counted in the Hypertension Diagnosis Group)

Episode number within sequence of adjacent episodes	1 or 2	1 or 2	3+	3+
Therapy visits	0–13	14+	0–13	14+
EQUATION:	1	2	3	4
<b>CLINICAL DIMENSION</b>				
1 Primary or Other Diagnosis = Blindness/Low Vision .....	3	3	3	3
2 Primary or Other Diagnosis = Blood disorders .....	2	5	.....	.....
3 Primary or Other Diagnosis = Cancer, selected benign neoplasms .....	3	8	3	10
4 Primary Diagnosis = Diabetes .....	5	13	1	8
5 Other Diagnosis = Diabetes .....	3	5	1	5
6 Primary or Other Diagnosis = Dysphagia and Primary or Other Diagnosis = Neuro 3—Stroke .....	2	6	.....	6
7 Primary or Other Diagnosis = Dysphagia and M0250 (Therapy at home) = 3 (Enteral) .....	.....	6	.....	.....
8 Primary or Other Diagnosis = Gastrointestinal disorders .....	2	6	1	5
9 Primary or Other Diagnosis = Gastrointestinal disorders and M0550 (ostomy) = 1 or 2 .....	2	.....	.....	.....
10 Primary or Other Diagnosis = Gastrointestinal disorders and Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis, or Neuro 2—Peripheral neurological disorders, or Neuro 3—Stroke, or Neuro 4—Multiple Sclerosis .....	.....	.....	2	.....
11 Primary or Other Diagnosis = Heart Disease or Hypertension .....	3	6	1	7
12 Primary Diagnosis = Neuro 1—Brain disorders and paralysis .....	3	8	5	8
13 Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis and M0680 (Toileting) = 2 or more .....	3	10	3	10
14 Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis or Neuro 2—Peripheral neurological disorders and M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	1	4	1	2
15 Primary or Other Diagnosis = Neuro 3—Stroke .....	.....	2	.....	.....
16 Primary or Other Diagnosis = Neuro 3—Stroke and M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	1	3	2	8
17 Primary or Other Diagnosis = Neuro 3—Stroke and M0700 (Ambulation) = 3 or more .....	1	5	.....	.....
18 Primary or Other Diagnosis = Neuro 4—Multiple Sclerosis and at least one of the following: M0670 (bathing) = 2 or more or M0680 (Toileting) = 2 or more or M0690 (Transferring) = 2 or more or M0700 (Ambulation) = 3 or more .....	3	3	12	18
19 Primary or Other Diagnosis = Ortho 1—Leg Disorders or Gait Disorders and M0460 (most problematic pressure ulcer stage) = 1, 2, 3 or 4 .....	2	.....	.....	.....
20 Primary or Other Diagnosis = Ortho 1—Leg or Ortho 2—Other orthopedic disorders and M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	5	5	.....	.....
21 Primary or Other Diagnosis = Psych 1—Affective and other psychoses, depression .....	4	6	2	6
22 Primary or Other Diagnosis = Psych 2—Degenerative and other organic psychiatric disorders .....	1	3	.....	3
23 Primary or Other Diagnosis = Pulmonary disorders .....	1	5	1	5
24 Primary or Other Diagnosis = Pulmonary disorders and M0700 (Ambulation) = 1 or more .....	1	.....	.....	.....
25 Primary Diagnosis = Skin 1—Traumatic wounds, burns, and post-operative complications .....	10	20	8	20
26 Other Diagnosis = Skin 1—Traumatic wounds, burns, post-operative complications .....	6	6	4	4
27 Primary or Other Diagnosis = Skin 1—Traumatic wounds, burns, and post-operative complications or Skin 2—Ulcers and other skin conditions and M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	2	.....	2	.....
28 Primary or Other Diagnosis = Skin 2—Ulcers and other skin conditions .....	6	12	5	12
29 Primary or Other Diagnosis = Tracheostomy .....	4	4	4	.....
30 Primary or Other Diagnosis = Urostomy/Cystostomy .....	6	22	4	22
31 M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	8	15	5	11
32 M0250 (Therapy at home) = 3 (Enteral) .....	4	11	.....	11
33 M0390 (Vision) = 1 or more .....	1	.....	.....	2
34 M0420 (Pain) = 2 or 3 .....	1	.....	.....	.....
35 M0450 = Two or more pressure ulcers at stage 3 or 4 .....	3	3	5	5
36 M0460 (Most problematic pressure ulcer stage) = 1 or 2 .....	5	11	5	11
37 M0460 (Most problematic pressure ulcer stage) = 3 or 4 .....	16	26	12	22
38 M0476 (Stasis ulcer status) = 2 .....	7	7	7	7
39 M0476 (Stasis ulcer status) = 3 .....	11	11	11	11
40 M0488 (Surgical wound status) = 2 .....	.....	2	3	.....
41 M0488 (Surgical wound status) = 3 .....	4	4	4	4
42 M0490 (Dyspnea) = 2, 3, or 4 .....	2	2	.....	.....

TABLE 14A—POINTS ASSOCIATED WITH THE UPDATED 4-EQUATION MODEL WITHOUT HYPERTENSION  
CODES 401.1 AND 401.9—Continued

## Case-Mix Adjustment Variables and Scores

(Note: 4—Equation Model was Estimated on Episodes from 2005 where 401.1 and 401.9 were not counted in the Hypertension Diagnosis Group)

Episode number within sequence of adjacent episodes	1 or 2	1 or 2	3+	3+
43 M0540 (Bowel Incontinence) = 2 to 5 .....	1	2	1	.....
44 M0550 (Ostomy) = 1 or 2 .....	5	9	3	9
45 M0800 (Injectable Drug Use) = 0, 1, or 2 .....	0	1	2	3

## FUNCTIONAL DIMENSION

46 M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	2	4	2	2
47 M0670 (Bathing) = 2 or more .....	3	3	6	6
48 M0680 (Toileting) = 2 or more .....	2	3	2	.....
49 M0690 (Transferring) = 2 or more .....	.....	1	.....	.....
50 M0700 (Ambulation) = 1 or 2 .....	1	.....	1	.....
51 M0700 (Ambulation) = 3 or more .....	3	3	4	5

**Notes:** The data for the regression equations come from a 20 percent random sample of episodes from CY 2005. The sample excludes LUPA episodes, outlier episodes, and episodes with SCIC or PEP adjustments.

Points are additive, however, points may not be given for the same line item in the table more than once.

Please see Medicare Home Health Diagnosis Coding guidance at [http://www.cms.hhs.gov/HomeHealthPPS/03\\_coding&billing.asp](http://www.cms.hhs.gov/HomeHealthPPS/03_coding&billing.asp) for definitions of primary and secondary diagnoses.

TABLE 14B—THE DIFFERENCE IN POINTS BETWEEN THE CURRENT AND PROPOSED CASE-MIX ADJUSTMENT SCORES

Episode number within sequence of adjacent episodes	1 or 2	1 or 2	3+	3+
Therapy visits	0–13	14+	0–13	14+
EQUATION:	1	2	3	4

## CLINICAL DIMENSION

1 Primary or Other Diagnosis = Blindness/Low Vision .....	0	0	0	0
2 Primary or Other Diagnosis = Blood disorders .....	0	0	.....	.....
3 Primary or Other Diagnosis = Cancer, selected benign neoplasms .....	–1	1	0	0
4 Primary Diagnosis = Diabetes .....	0	1	0	0
5 Other Diagnosis = Diabetes .....	1	1	0	1
6 Primary or Other Diagnosis = Dysphagia and Primary or Other Diagnosis = Neuro 3—Stroke .....	0	0	.....	0
7 Primary or Other Diagnosis = Dysphagia and M0250 (Therapy at home) = 3 (Enteral) .....	.....	0	.....	.....
8 Primary or Other Diagnosis = Gastrointestinal disorders .....	0	0	0	1
9 Primary or Other Diagnosis = Gastrointestinal disorders and M0550 (ostomy) = 1 or 2 .....	–1	.....	.....	.....
10 Primary or Other Diagnosis = Gastrointestinal disorders and Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis, or Neuro 2—Peripheral neurological disorders, or Neuro 3—Stroke, or Neuro 4—Multiple Sclerosis .....	.....	.....	0	.....
11 Primary or Other Diagnosis = Heart Disease or Hypertension .....	0	–1	0	–1
12 Primary Diagnosis = Neuro 1—Brain disorders and paralysis .....	0	0	0	0
13 Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis and M0680 (Toileting) = 2 or more .....	0	0	0	0
14 Primary or Other Diagnosis = Neuro 1—Brain disorders and paralysis or Neuro 2—Peripheral neurological disorders and M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	–1	0	–1	0
15 Primary or Other Diagnosis = Neuro 3—Stroke .....	.....	1	.....	.....
16 Primary or Other Diagnosis = Neuro 3—Stroke and M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	0	0	0	0
17 Primary or Other Diagnosis = Neuro 3—Stroke and M0700 (Ambulation) = 3 or more .....	0	0	.....	.....
18 Primary or Other Diagnosis = Neuro 4—Multiple Sclerosis and at least one of the following: M0670 (bathing) = 2 or more or M0680 (Toileting) = 2 or more or M0690 (Transferring) = 2 or more or M0700 (Ambulation) = 3 or more .....	0	0	0	0
19 Primary or Other Diagnosis = Ortho 1—Leg Disorders or Gait Disorders and M0460 (most problematic pressure ulcer stage) = 1, 2, 3 or 4 .....	0	.....	.....	.....
20 Primary or Other Diagnosis = Ortho 1—Leg or Ortho 2—Other orthopedic disorders and M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	0	0	.....	.....
21 Primary or Other Diagnosis = Psych 1—Affective and other psychoses, depression .....	1	1	0	1
22 Primary or Other Diagnosis = Psych 2—Degenerative and other organic psychiatric disorders .....	0	1	.....	1
23 Primary or Other Diagnosis = Pulmonary disorders .....	0	0	0	0
24 Primary or Other Diagnosis = Pulmonary disorders and M0700 (Ambulation) = 1 or more .....	0	.....	.....	.....
25 Primary Diagnosis = Skin 1—Traumatic wounds, burns, and post-operative complications .....	0	0	0	0
26 Other Diagnosis = Skin 1—Traumatic wounds, burns, post-operative complications .....	0	0	0	0
27 Primary or Other Diagnosis = Skin 1—Traumatic wounds, burns, and post-operative complications or Skin 2—Ulcers and other skin conditions and M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	0	.....	0	.....
28 Primary or Other Diagnosis = Skin 2—Ulcers and other skin conditions .....	0	0	0	0
29 Primary or Other Diagnosis = Tracheostomy .....	0	0	0	.....
30 Primary or Other Diagnosis = Urostomy/Cystostomy .....	0	–1	0	–1

TABLE 14B—THE DIFFERENCE IN POINTS BETWEEN THE CURRENT AND PROPOSED CASE-MIX ADJUSTMENT SCORES—Continued

Episode number within sequence of adjacent episodes		1 or 2	1 or 2	3+	3+
31	M0250 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral) .....	0	0	0	-1
32	M0250 (Therapy at home) = 3 (Enteral) .....	0	-1	.....	-1
33	M0390 (Vision) = 1 or more .....	0	.....	.....	1
34	M0420 (Pain) = 2 or 3 .....	0	.....	.....	.....
35	M0450 = Two or more pressure ulcers at stage 3 or 4 .....	0	0	0	0
36	M0460 (Most problematic pressure ulcer stage) = 1 or 2 .....	0	0	0	0
37	M0460 (Most problematic pressure ulcer stage) = 3 or 4 .....	0	0	0	-1
38	M0476 (Stasis ulcer status) = 2 .....	-1	-1	-1	-1
39	M0476 (Stasis ulcer status) = 3 .....	0	0	0	0
40	M0488 (Surgical wound status) = 2 .....	.....	0	0	.....
41	M0488 (Surgical wound status) = 3 .....	0	0	0	0
42	M0490 (Dyspnea) = 2, 3, or 4 .....	0	0	.....	.....
43	M0540 (Bowel Incontinence) = 2 to 5 .....	0	0	0	.....
44	M0550 (Ostomy) = 1 or 2 .....	0	0	0	0
45	M0800 (Injectable Drug Use) = 0, 1, or 2 .....	-1	0	0	-1
<b>FUNCTIONAL DIMENSION</b>					
46	M0650 or M0660 (Dressing upper or lower body) = 1, 2, or 3 .....	0	0	0	0
47	M0670 (Bathing) = 2 or more .....	0	0	0	0
48	M0680 (Toileting) = 2 or more .....	0	0	0	.....
49	M0690 (Transferring) = 2 or more .....	.....	-1	.....	.....
50	M0700 (Ambulation) = 1 or 2 .....	0	.....	0	.....
51	M0700 (Ambulation) = 3 or more .....	0	-1	0	0

**Notes:** The data for the regression equations come from a 20 percent random sample of episodes from CY 2005. The sample excludes LUPA episodes, outlier episodes, and episodes with SCIC or PEP adjustments.

Points are additive, however points may not be given for the same line item in the table more than once.

Please see Medicare Home Health Diagnosis Coding guidance at [http://www.cms.hhs.gov/HomeHealthPPS/03\\_coding&billing.asp](http://www.cms.hhs.gov/HomeHealthPPS/03_coding&billing.asp) for definitions of primary and secondary diagnoses.

We also examined how episodes in the sample changed clinical severity groups when going from a four-equation model that includes 401.1 and 401.9 to a four-equation model that does not include 401.1 and 401.9. It should be noted that a small number of episodes also changed functional groups. In our analysis, we looked at the distribution of episodes in each clinical severity level (low, medium, high) by the four-equation model indicators (early/late episodes and low/high therapy episodes). When comparing the distribution of episodes using the four-equation model without the 401.1 and 401.9 hypertension codes to the distribution of episodes using the four-equation model with the hypertension codes (our current four-equation model), there was a similar distribution of episodes between the low, medium and high clinical levels, for each of the four-equation model indicators. We also looked at the distribution of episodes in each functional severity level by the four-equation model indicator. There was also a very similar distribution of episodes for the three functional severity levels using the four-equation model without the two hypertension codes compared to the distribution of

episodes using the current four-equation model, for each of the four-equation model indicators. Since the four-equation model without the hypertension codes 401.1 and 401.9 had similar clinical and functional distributions of episodes as the current model, we decided that it was not necessary to change the thresholds for the clinical and functional severity levels.

When developing the new payment regression model, we used scores from the four-equation model without hypertension codes 401.1 and 401.9 to identify the clinical and functional severity levels to be used as payment regression variables. In addition, as we described earlier, we decided to implement a revision of the weights using a new method of decelerating therapy resources with higher numbers of therapy visits. The new method involved the removal of the therapy visit step indicators from the payment regression model. This approach has the advantage of staging the introduction of clinical and functional severity levels into the model as a separate step, to avoid influence on the clinical and functional scores from numerous therapy step variables that would

otherwise be simultaneously entered into the regression. In other words, we eliminated the therapy visit step indicators from the payment regression model to ensure that more of the resource use would be captured by clinical and functional variables, rather than therapy variables. Later, we implement a method to account for the resource use for the therapy step variables. The new payment regression model that was developed estimated the relationship between an episode's total resource (as measured in dollars corresponding to wage weighted minutes) and the clinical score indicators, functional score indicators, and four-equation indicators (early/late episodes and low/high therapy services).

It should be noted that for the payment regression model, we used data from 2007, which is the most recent data available before the implementation of the HH PPS refinements. The coefficients for the payment regression model using 2007 data can be found at Table 15. The adjusted R-squared value for the payment regression model using 2007 data is 0.3769.

TABLE 15—PROPOSED PAYMENT REGRESSION MODEL

Variable name	Variable description	New payment regression coefficients
clin_grp2_1 .....	Step 1, Clinical Score 5 to 8 .....	\$6.55
clin_grp3_1 .....	Step 1, Clinical Score 9 or More .....	37.72
func_grp2_1 .....	Step 1, Functional Score = 6 .....	88.99
func_grp3_1 .....	Step 1, Functional Score 7 or More .....	129.81
clin_grp2_21 .....	Step 2.1, Clinical Score 7 to 14 .....	87.49
clin_grp3_21 .....	Step 2.1, Clinical Score 15 or More .....	191.74
func_grp2_21 .....	Step 2.1, Functional Score = 7 .....	43.63
func_grp3_21 .....	Step 2.1, Functional Score 8 or More .....	65.49
clin_grp2_22 .....	Step 2.2, Clinical Score 9 to 16 .....	76.41
clin_grp3_22 .....	Step 2.2, Clinical Score 17+ .....	177.93
func_grp2_22 .....	Step 2.2, Functional Score = 8 .....	36.55
func_grp3_22 .....	Step 2.2, Functional Score 9 or More .....	109.94
clin_grp2_3 .....	Step 3, Clinical Score 3 to 5 .....	28.53
clin_grp3_3 .....	Step 3, Clinical Score 6 or More .....	112.15
func_grp2_3 .....	Step 3, Functional Score = 9 .....	73.68
func_grp3_3 .....	Step 3, Functional Score 10 or More .....	113.33
clin_grp2_4 .....	Step 4, Clinical Score 8 to 14 .....	84.62
clin_grp3_4 .....	Step 4, Clinical Score 15 or More .....	213.78
func_grp2_4 .....	Step 4, Functional Score = 7 .....	73.13
func_grp3_4 .....	Step 4, Functional Score 8 or More .....	133.71
step2_1 .....	Step 2.1, 1st and 2nd Episodes, 14 to 19 Therapy Visits .....	386.71
step2_2 .....	Step 2.2, 3rd+ Episodes, 14 to 19 Therapy Visits .....	413.85
step3 .....	Step 3, 3rd+ Episodes, 0–13 Therapy Visits .....	–63.66
step4 .....	Step 4, All Episodes, 20+ Therapy Visits .....	700.20
_cons .....	Intercept .....	348.74

**Note:** The data for the payment regression model come from a 20 percent random sample of episodes from CY 2007.

The raw weights for each of the 153 groups were then calculated based on the payment regression model. It should be noted that the raw weights do not change across the graduated therapy steps between the therapy thresholds. In the next step of weight revision, the weights associated with 0 to 5 therapy visits were increased by 7.5 percent. Also, the weights associated with 14–15 therapy visits were decreased by 5 percent and the weights associated with 20+ therapy visits were decreased by 10 percent. These adjustments were made to discourage inappropriate use of therapy while addressing concerns that non-therapy services are undervalued. The larger reduction factor for 20 or more therapy visits (10 percent) compared to the reduction factor for 14 to 15 therapy visits (5 percent) implements a more aggressive deceleration than we used in the current weights. Currently, there is a high payment weight associated with the 20 or more therapy visit threshold to capture the costs associated with providing 20 therapy visits, as well as numbers of therapy visits well beyond 20 therapy visits. As a result, there is a large increase in the payment weight between the 18–19 therapy visit step and the 20 or more therapy visit threshold. This large increase in the payment weight may create incentives for agencies to provide unnecessary therapy visits up to and including 20

visits, and may explain MedPAC's observation that there was a larger increase in the number of episodes in the 20 or more therapy visit group than the 14 or more therapy visit group. By implementing a larger reduction at the 20 or more therapy visits, we will provide a disincentive for agencies to pad episodes just to 20 visits or slightly more, to be able to realize a large margin from that threshold, which was designed to pay for not only episodes involving 20 or just above 20 therapy visits, but also episodes involving considerably more than 20 therapy visits.

After the adjustments were applied to the raw weights, the weights were further adjusted to create an increase in the payment weights for the therapy visit steps between the therapy thresholds. Weights with the same clinical severity level, functional severity level, and early/late episode status were grouped together. Then within those groups, the weights for each therapy step between thresholds were gradually increased. We did this by interpolating between the main thresholds on the model (from 0–5 to 14–15 therapy visits, and from 14–15 to 20+ therapy visits). We used a linear model to implement the interpolation so the payment weight increase for each step between the thresholds (such as the increase between 0–5 therapy visits and 6 therapy visits and the increase

between 6 therapy visits and 7–9 therapy visits) was constant. The interpolated weights were then adjusted so that the average case-mix for the weights was equal to 1.

When developing our model, we considered a number of different sets of adjustments. We further explored two sets of adjustments because the adjustments were in line with our goals to address therapy incentives. The two sets of adjustments are shown in Table 16. We looked at the payment to cost ratios for various subgroups, where the payment was defined as the predicted resource use and the cost was defined as the wage weighted minutes in dollars. After looking at the payment to cost ratios, we decided to propose the less aggressive set of adjustments (option 2) to address therapy incentives while maintaining our target payment to cost ratios for groups. Specifically, when examining the payment to cost ratios by number of therapy visits, it appears that currently, episodes with three to five therapy visits are underpaid and episodes with 20 or just over 20 therapy visits are overpaid. When using our proposed payment weights, the episodes with three to five therapy visits have a higher payment to cost ratio and would receive higher payments. Also, episodes with around 20 therapy visits have more reasonable payment to cost ratios when using the proposed weights compared to ratios



with the current weights. (Please see the Abt technical report located at <http://www.cms.gov/center/hha.asp> for the payment to cost ratio tables and more information.)

TABLE 16—ADJUSTMENTS TO THE RAW WEIGHTS

Therapy step group	Option 1: Most aggressive direct adjustments	Option 2: Less aggressive direct adjustments
0 to 5 Therapy Visits .....	1.15	1.075
14 to 15 Therapy Visits .....	0.9	0.95
20+ Therapy Visits .....	0.8	0.9

After applying the adjustments in Table 16 to the raw weights, applying the interpolation between the therapy thresholds, and adjusting the weights so that the average case-mix for the weights was equal to 1, we applied a budget neutrality factor (1.2847) to the weights to ensure that the final proposed weights result in aggregate expenditures in 2009 approximately equal to expenditures using the current payment weights. It is important to note that our authority allows us to reduce home health payments only as described in

section 1895(b)(3)(B)(iv) of the Act. As such, we must revise our payment weights in a budget neutral manner. Therefore, after deriving revised relative case-mix weights, we increased the weights to achieve budget neutrality to the most current, complete data available, which is 2009. We show the final set of new payment weights for the 153 groups that we are proposing in Table 17. The R-squared value when we ran a regression of the episode's total resources (dependent variable) using our proposed weights (independent

variable) is 0.5384. It should be noted that we will continue to evaluate and potentially refine the payment weights as new data and analysis becomes available.

It also should be noted that as we described in section A of this proposed rule, we also are proposing to reduce payments under our authority in section 1895(b)(3)(B)(iv) of the Act to reduce the home health base episode payment to account for nominal case-mix growth through 2009.

TABLE 17—FINAL PROPOSED PAYMENT WEIGHTS (2007)

Payment group	Step (episode and/or therapy visit ranges)	Clinical and functional levels (1 = low; 2 = medium; 3 = high)	Final weights (2007 recalibration)
10111 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C1F1	0.8468
10112 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C1F1	0.9931
10113 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C1F1	1.1394
10114 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C1F1	1.2857
10115 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C1F1	1.4320
10121 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C1F2	1.0630
10122 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C1F2	1.1847
10123 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C1F2	1.3065
10124 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C1F2	1.4283
10125 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C1F2	1.5501
10131 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C1F3	1.1621
10132 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C1F3	1.2734
10133 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C1F3	1.3847
10134 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C1F3	1.4961
10135 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C1F3	1.6074
10211 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C2F1	0.8627
10212 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C2F1	1.0434
10213 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C2F1	1.2240
10214 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C2F1	1.4047
10215 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C2F1	1.5853
10221 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C2F2	1.0788
10222 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C2F2	1.2350
10223 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C2F2	1.3912
10224 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C2F2	1.5473
10225 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C2F2	1.7035
10231 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C2F3	1.1780
10232 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C2F3	1.3237
10233 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C2F3	1.4694
10234 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C2F3	1.6151
10235 .....	1st and 2nd Episodes, 11 to 13 Therapy Visits .....	C2F3	1.7608
10311 .....	1st and 2nd Episodes, 0 to 5 Therapy Visits .....	C3F1	0.9384
10312 .....	1st and 2nd Episodes, 6 Therapy Visits .....	C3F1	1.1487
10313 .....	1st and 2nd Episodes, 7 to 9 Therapy Visits .....	C3F1	1.3589
10314 .....	1st and 2nd Episodes, 10 Therapy Visits .....	C3F1	1.5692

TABLE 17—FINAL PROPOSED PAYMENT WEIGHTS (2007)—Continued

Payment group	Step (episode and/or therapy visit ranges)	Clinical and functional levels (1 = low; 2 = medium; 3 = high)	Final weights (2007 recalibration)
10315	1st and 2nd Episodes, 11 to 13 Therapy Visits	C3F1	1.7794
10321	1st and 2nd Episodes, 0 to 5 Therapy Visits	C3F2	1.1545
10322	1st and 2nd Episodes, 6 Therapy Visits	C3F2	1.3403
10323	1st and 2nd Episodes, 7 to 9 Therapy Visits	C3F2	1.5261
10324	1st and 2nd Episodes, 10 Therapy Visits	C3F2	1.7118
10325	1st and 2nd Episodes, 11 to 13 Therapy Visits	C3F2	1.8976
10331	1st and 2nd Episodes, 0 to 5 Therapy Visits	C3F3	1.2537
10332	1st and 2nd Episodes, 6 Therapy Visits	C3F3	1.4290
10333	1st and 2nd Episodes, 7 to 9 Therapy Visits	C3F3	1.6043
10334	1st and 2nd Episodes, 10 Therapy Visits	C3F3	1.7796
10335	1st and 2nd Episodes, 11 to 13 Therapy Visits	C3F3	1.9549
21111	1st and 2nd Episodes, 14 to 15 Therapy Visits	C1F1	1.5782
21112	1st and 2nd Episodes, 16 to 17 Therapy Visits	C1F1	1.7630
21113	1st and 2nd Episodes, 18 to 19 Therapy Visits	C1F1	1.9478
21121	1st and 2nd Episodes, 14 to 15 Therapy Visits	C1F2	1.6719
21122	1st and 2nd Episodes, 16 to 17 Therapy Visits	C1F2	1.8750
21123	1st and 2nd Episodes, 18 to 19 Therapy Visits	C1F2	2.0781
21131	1st and 2nd Episodes, 14 to 15 Therapy Visits	C1F3	1.7188
21132	1st and 2nd Episodes, 16 to 17 Therapy Visits	C1F3	1.9473
21133	1st and 2nd Episodes, 18 to 19 Therapy Visits	C1F3	2.1758
21211	1st and 2nd Episodes, 14 to 15 Therapy Visits	C2F1	1.7660
21212	1st and 2nd Episodes, 16 to 17 Therapy Visits	C2F1	1.9455
21213	1st and 2nd Episodes, 18 to 19 Therapy Visits	C2F1	2.1250
21221	1st and 2nd Episodes, 14 to 15 Therapy Visits	C2F2	1.8596
21222	1st and 2nd Episodes, 16 to 17 Therapy Visits	C2F2	2.0575
21223	1st and 2nd Episodes, 18 to 19 Therapy Visits	C2F2	2.2553
21231	1st and 2nd Episodes, 14 to 15 Therapy Visits	C2F3	1.9065
21232	1st and 2nd Episodes, 16 to 17 Therapy Visits	C2F3	2.1298
21233	1st and 2nd Episodes, 18 to 19 Therapy Visits	C2F3	2.3531
21311	1st and 2nd Episodes, 14 to 15 Therapy Visits	C3F1	1.9897
21312	1st and 2nd Episodes, 16 to 17 Therapy Visits	C3F1	2.1822
21313	1st and 2nd Episodes, 18 to 19 Therapy Visits	C3F1	2.3747
21321	1st and 2nd Episodes, 14 to 15 Therapy Visits	C3F2	2.0833
21322	1st and 2nd Episodes, 16 to 17 Therapy Visits	C3F2	2.2941
21323	1st and 2nd Episodes, 18 to 19 Therapy Visits	C3F2	2.5050
21331	1st and 2nd Episodes, 14 to 15 Therapy Visits	C3F3	2.1302
21332	1st and 2nd Episodes, 16 to 17 Therapy Visits	C3F3	2.3665
21333	1st and 2nd Episodes, 18 to 19 Therapy Visits	C3F3	2.6027
22111	3rd+ Episodes, 14 to 15 Therapy Visits	C1F1	1.6365
22112	3rd+ Episodes, 16 to 17 Therapy Visits	C1F1	1.8018
22113	3rd+ Episodes, 18 to 19 Therapy Visits	C1F1	1.9672
22121	3rd+ Episodes, 14 to 15 Therapy Visits	C1F2	1.7149
22122	3rd+ Episodes, 16 to 17 Therapy Visits	C1F2	1.9037
22123	3rd+ Episodes, 18 to 19 Therapy Visits	C1F2	2.0924
22131	3rd+ Episodes, 14 to 15 Therapy Visits	C1F3	1.8724
22132	3rd+ Episodes, 16 to 17 Therapy Visits	C1F3	2.0497
22133	3rd+ Episodes, 18 to 19 Therapy Visits	C1F3	2.2270
22211	3rd+ Episodes, 14 to 15 Therapy Visits	C2F1	1.8004
22212	3rd+ Episodes, 16 to 17 Therapy Visits	C2F1	1.9685
22213	3rd+ Episodes, 18 to 19 Therapy Visits	C2F1	2.1365
22221	3rd+ Episodes, 14 to 15 Therapy Visits	C2F2	1.8789
22222	3rd+ Episodes, 16 to 17 Therapy Visits	C2F2	2.0703
22223	3rd+ Episodes, 18 to 19 Therapy Visits	C2F2	2.2618
22231	3rd+ Episodes, 14 to 15 Therapy Visits	C2F3	2.0364
22232	3rd+ Episodes, 16 to 17 Therapy Visits	C2F3	2.2164
22233	3rd+ Episodes, 18 to 19 Therapy Visits	C2F3	2.3964
22311	3rd+ Episodes, 14 to 15 Therapy Visits	C3F1	2.0183
22312	3rd+ Episodes, 16 to 17 Therapy Visits	C3F1	2.2013
22313	3rd+ Episodes, 18 to 19 Therapy Visits	C3F1	2.3842
22321	3rd+ Episodes, 14 to 15 Therapy Visits	C3F2	2.0967
22322	3rd+ Episodes, 16 to 17 Therapy Visits	C3F2	2.3031
22323	3rd+ Episodes, 18 to 19 Therapy Visits	C3F2	2.5094
22331	3rd+ Episodes, 14 to 15 Therapy Visits	C3F3	2.2542
22332	3rd+ Episodes, 16 to 17 Therapy Visits	C3F3	2.4492
22333	3rd+ Episodes, 18 to 19 Therapy Visits	C3F3	2.6441
30111	3rd+ Episodes, 0 to 5 Therapy Visits	C1F1	0.6923
30112	3rd+ Episodes, 6 Therapy Visits	C1F1	0.8811
30113	3rd+ Episodes, 7 to 9 Therapy Visits	C1F1	1.0699

TABLE 17—FINAL PROPOSED PAYMENT WEIGHTS (2007)—Continued

Payment group	Step (episode and/or therapy visit ranges)	Clinical and functional levels (1 = low; 2 = medium; 3 = high)	Final weights (2007 recalibration)
30114 .....	3rd+ Episodes, 10 Therapy Visits .....	C1F1	1.2588
30115 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C1F1	1.4476
30121 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C1F2	0.8712
30122 .....	3rd+ Episodes, 6 Therapy Visits .....	C1F2	1.0399
30123 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C1F2	1.2087
30124 .....	3rd+ Episodes, 10 Therapy Visits .....	C1F2	1.3774
30125 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C1F2	1.5462
30131 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C1F3	0.9675
30132 .....	3rd+ Episodes, 6 Therapy Visits .....	C1F3	1.1485
30133 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C1F3	1.3294
30134 .....	3rd+ Episodes, 10 Therapy Visits .....	C1F3	1.5104
30135 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C1F3	1.6914
30211 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C2F1	0.7615
30212 .....	3rd+ Episodes, 6 Therapy Visits .....	C2F1	0.9693
30213 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C2F1	1.1771
30214 .....	3rd+ Episodes, 10 Therapy Visits .....	C2F1	1.3849
30215 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C2F1	1.5927
30221 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C2F2	0.9405
30222 .....	3rd+ Episodes, 6 Therapy Visits .....	C2F2	1.1281
30223 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C2F2	1.3158
30224 .....	3rd+ Episodes, 10 Therapy Visits .....	C2F2	1.5035
30225 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C2F2	1.6912
30231 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C2F3	1.0367
30232 .....	3rd+ Episodes, 6 Therapy Visits .....	C2F3	1.2367
30233 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C2F3	1.4366
30234 .....	3rd+ Episodes, 10 Therapy Visits .....	C2F3	1.6365
30235 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C2F3	1.8364
30311 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C3F1	0.9646
30312 .....	3rd+ Episodes, 6 Therapy Visits .....	C3F1	1.1753
30313 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C3F1	1.3861
30314 .....	3rd+ Episodes, 10 Therapy Visits .....	C3F1	1.5968
30315 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C3F1	1.8076
30321 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C3F2	1.1435
30322 .....	3rd+ Episodes, 6 Therapy Visits .....	C3F2	1.3342
30323 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C3F2	1.5248
30324 .....	3rd+ Episodes, 10 Therapy Visits .....	C3F2	1.7155
30325 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C3F2	1.9061
30331 .....	3rd+ Episodes, 0 to 5 Therapy Visits .....	C3F3	1.2398
30332 .....	3rd+ Episodes, 6 Therapy Visits .....	C3F3	1.4427
30333 .....	3rd+ Episodes, 7 to 9 Therapy Visits .....	C3F3	1.6456
30334 .....	3rd+ Episodes, 10 Therapy Visits .....	C3F3	1.8485
30335 .....	3rd+ Episodes, 11 to 13 Therapy Visits .....	C3F3	2.0514
40111 .....	All Episodes, 20+ Therapy Visits .....	C1F1	2.1325
40121 .....	All Episodes, 20+ Therapy Visits .....	C1F2	2.2812
40131 .....	All Episodes, 20+ Therapy Visits .....	C1F3	2.4043
40211 .....	All Episodes, 20+ Therapy Visits .....	C2F1	2.3046
40221 .....	All Episodes, 20+ Therapy Visits .....	C2F2	2.4532
40231 .....	All Episodes, 20+ Therapy Visits .....	C2F3	2.5764
40311 .....	All Episodes, 20+ Therapy Visits .....	C3F1	2.5671
40321 .....	All Episodes, 20+ Therapy Visits .....	C3F2	2.7158
40331 .....	All Episodes, 20+ Therapy Visits .....	C3F3	2.8390

### C. Outlier Policy

#### 1. Background

Section 1895(b)(5) of the Act allows for the provision of an addition or adjustment to the national standardized 60-day case-mix and wage-adjusted episode payment amounts in the case of episodes that incur unusually high costs due to patient home health (HH) care needs. Prior to the enactment of the Affordable Care Act in March 2010, this

section of the Act stipulated that total outlier payments could not exceed 5 percent of total projected or estimated HH payments in a given year. In the July 2000 final rule (65 FR 41188 through 41190), we described the method for determining outlier payments. Under this system, outlier payments are made for episodes whose estimated costs exceed a threshold amount for each Home Health Resource Group (HHRG). The episode's estimated cost is the sum

of the national wage-adjusted per-visit payment amounts for all visits delivered during the episode. The outlier threshold for each case-mix group or partial episode payment (PEP) adjustment is defined as the 60-day episode payment or PEP adjustment for that group plus a fixed dollar loss (FDL) amount. The outlier payment is defined to be a proportion of the wage-adjusted estimated cost beyond the wage-adjusted threshold. The threshold

amount is the sum of the wage and case-mix adjusted PPS episode amount and wage-adjusted fixed dollar loss amount. The proportion of additional costs paid as outlier payments is referred to as the loss-sharing ratio.

## 2. Regulatory Update

In the CY 2010 HH PPS final rule (74 FR 58080 through 58087), we discussed excessive growth in outlier payments, primarily the result of unusually high outlier payments in a few areas of the country. Despite program integrity efforts associated with excessive outlier payments in targeted areas of the country, we discovered that outlier expenditures exceeded the 5 percent statutory limit. Consequently, we assessed the appropriateness of taking action to curb outlier abuse. To mitigate possible billing vulnerabilities associated with excessive outlier payments and adhere to our statutory limit on outlier payments, we adopted an outlier policy that included a 10 percent agency level cap on outlier payments. This cap was done in concert with a reduced fixed dollar loss (FDL) ratio of 0.67. These policies resulted in a projected target outlier pool of approximately 2.5 percent. (The previous outlier pool was 5 percent of total HH expenditures.)

For CY 2010, we first returned 5 percent of these dollars back into the national standardized 60-day episode rates, the national per-visit rates, the low utilization payment adjustment (LUPA) add-on payment amount, and the non-routine supplies (NRS) conversion factor. Then, we reduced the CY 2010 rates by 2.5 percent to account for the new outlier pool of 2.5 percent.

This outlier policy was adopted for CY 2010 only.

## 3. Statutory Update

As outlined in the CY 2011 HH PPS final rule (75 FR 70397 through 70399), sections 3131(b)(1) and 3131(b)(2) of the Affordable Care Act amended sections 1895(b)(3)(C) and 1895(b)(5) of the Act. Specifically, section 3131(b)(2) of the Affordable Care Act amended section 1895(b)(5) of the Act by redesignating the existing language as section 1895(b)(5)(A) of the Act, and revising it to state that the Secretary, “may provide for an addition or adjustment to the payment amount otherwise made in the case of outliers because of unusual variations in the type or amount of medically necessary care. The total amount of the additional payments or payment adjustments made under this paragraph with respect to a fiscal year or year may not exceed 2.5 percent of the total payments projected or estimated to be made based on the prospective payment system under this subsection in that year.”

The result of these revisions was that, beginning in CY 2011, we reduced payment rates by 5 percent, targeted up to 2.5 percent of estimated total payments to be paid as outlier payments, and applied a 10 percent agency-level outlier cap.

## 4. Loss-Sharing Ratio and Fixed Dollar Loss (FDL) Ratio

For a given level of outlier payments, there is a trade-off between the values selected for the FDL ratio and the loss-sharing ratio. A high FDL ratio reduces the number of episodes that can receive outlier payments, but makes it possible to select a higher loss-sharing ratio and,

therefore, increase outlier payments for outlier episodes. Alternatively, a lower FDL ratio means that more episodes can qualify for outlier payments, but outlier payments per episode must then be lower.

The FDL ratio and the loss-sharing ratio must be selected so that the estimated total outlier payments do not exceed the 2.5 percent aggregate level (as required by section 1895(b)(5)(A) of the Act). In the past, we have used a value of 0.80 for the loss-sharing ratio, which is relatively high, but preserves incentives for agencies to attempt to provide care efficiently for outlier cases. With a loss-sharing ratio of 0.80, Medicare pays 80 percent of the additional costs above the wage-adjusted outlier threshold amount. In the CY 2011 HH PPS final rule (75 FR 70398), in targeting total outlier payments as 2.5 percent of total HH PPS payments, we implemented an FDL ratio of 0.67.

A preliminary look at partial CY 2010 Health Care Information System (HCIS) data indicates that, because the total outlier payments comprise approximately 2 percent of total payments, we would maintain the current FDL ratio of 0.67. However, in the final rule, we will update our estimate of the FDL ratio using the most current and complete year of HH PPS data available.

Table 18 shows outlier payment history as a percentage of total HH PPS payments between calendar years 2004 and 2009. Preliminary data for CY 2010 is also provided; however, this data represents only a portion of the data available and is current only through part of the third quarter.

TABLE 18—OUTLIER PAYMENT HISTORY—CY 2004 THROUGH CY 2010

Year	Outlier payment	Total HH PPS payment	Outlier payment percentage
2004 .....	\$309,198,604	\$11,500,462,624	2.69
2005 .....	527,096,653	12,885,434,951	4.09
2006 .....	701,945,386	14,041,853,560	5.00
2007 .....	996,316,407	15,677,329,001	6.36
2008 .....	1,127,162,152	17,114,906,875	6.59
2009 .....	1,204,246,569	18,895,476,901	6.37
2010 .....	233,274,303	13,878,411,396	* 1.68

\* This CY 2010 outlier payment projection is based only on claims reported through part of the third quarter.

## 5. Outlier Relationship to the HH Payment Study

As we discuss later in this proposed rule, section 3131(d) of the Affordable Care Act requires CMS to conduct a study and report on developing HH payment revisions that will ensure access to care and payment for HH

patients with high severity of illness. Our Report to Congress containing this study's recommendations is due no later than March 1, 2014. Section 3131(d)(1)(A)(iii) of the Affordable Care Act, in particular, states that this study may include analysis of potential revisions to outlier payments to better

reflect costs of treating Medicare beneficiaries with high levels of severity of illness.

## D. CY 2012 Rate Update

### 1. Home Health Market Basket Update

Section 1895(b)(3)(B) of the Act requires that the standard prospective

payment amounts for CY 2012 be increased by a factor equal to the applicable home health market basket update for those HHAs that submit quality data as required by the Secretary. Section 3401(e) of the Affordable Care Act amended section 1895(b)(3)(B) of the Act by adding a new clause (vi) which states, "After determining the home health market basket percentage increase \* \* \* the Secretary shall reduce such percentage \* \* \* for each of 2011, 2012, and 2013, by 1 percentage point. The application of this clause may result in the home health market basket percentage increase under clause (iii) being less than 0.0 for a year, and may result in payment rates under the system under this subsection for a year being less than such payment rates for the preceding year."

The proposed HH PPS market basket update for CY 2012 is 2.5 percent. This is based on Global Insight Inc.'s first quarter 2011 forecast, utilizing historical data through the fourth quarter of 2010. A detailed description of how we derive the HHA market basket is available in the CY 2008 HH PPS proposed rule (72 FR 25356, 25435). Due to the requirement in section 1895(b)(3)(B)(vi) of the Act, the proposed CY 2012 market basket update of 2.5 percent must be reduced by 1 percentage point to 1.5 percent. In effect, the proposed CY 2012 market basket update becomes 1.5 percent.

## 2. Home Health Care Quality Reporting Program

### a. Background and Quality Reporting Requirements

Section 1895(b)(3)(B)(v)(II) of the Act states that "each home health agency shall submit to the Secretary such data that the Secretary determines are appropriate for the measurement of health care quality. Such data shall be submitted in a form and manner, and at a time, specified by the Secretary for purposes of this clause." In addition, section 1895(b)(3)(B)(v)(I) of the Act dictates that "for 2007 and each subsequent year, in the case of a HHA that does not submit data to the Secretary in accordance with subclause (II) with respect to such a year, the HH market basket percentage increase applicable under such clause for such year shall be reduced by 2 percentage points." This requirement has been codified in regulations at § 484.225(i). HHAs that meet the quality data reporting requirements would be eligible for the full home health market basket percentage increase. HHAs that do not meet the reporting requirements

would be subject to a 2 percent reduction to the home health market basket increase.

### b. OASIS Data

Accordingly, for CY 2012, we propose to continue to use a HHA's submission of OASIS data as one form of quality data to meet the requirement that the HHA submit data appropriate for the measurement of health care quality. We are proposing for CY 2012 to consider OASIS assessments submitted by HHAs to CMS in compliance with HHA Conditions of Participation and Conditions for Payment for episodes beginning on or after July 1, 2010 and before July 1, 2011 as fulfilling one portion of the quality reporting requirement for CY 2012. This time period would allow 12 full months of data collection and would provide us the time necessary to analyze and make any necessary payment adjustments to the payment rates for CY 2012. We propose to reconcile the OASIS submissions with claims data to verify full compliance with the OASIS portion of the quality reporting requirements in CY 2012 and each year thereafter on an annual cycle July 1 through June 30 as described above.

As set forth in the CY 2008 final rule, agencies do not need to submit OASIS data for those patients who are excluded from the OASIS submission requirements under the Home Health Conditions of Participation (CoPs) § 484.1–§ 484.265, as well as those excluded, as described at 70 FR 76202:

- Those patients receiving only nonskilled services;
- Those patients for whom neither Medicare nor Medicaid is paying for home health care (patients receiving care under a Medicare or Medicaid Managed Care Plan are not excluded from the OASIS reporting requirement);
- Those patients receiving pre- or post-partum services; or
- Those patients under the age of 18 years.

As set forth in the CY 2008 HH PPS final rule (72 FR 49863), agencies that become Medicare-certified on or after May 31 of the preceding year (2011 for payments in 2012) are excluded from any payment penalty for quality reporting purposes for the following CY. Therefore, HHAs that are certified on or after May 1, 2011 are excluded from the quality reporting requirement for CY 2012 payments. These exclusions only affect quality reporting requirements and do not affect the HHA's reporting responsibilities under the Conditions of Participation and Conditions of Payment.

### (1) OASIS Data and Annual Payment Update

HHAs that submit OASIS data as specified above are considered to have met one portion of the quality data reporting requirements. Additional portions of the quality data reporting requirements are discussed below under sections D.2.c and D.2.d of this preamble.

### (2) OASIS Data and Public Reporting

Section 1895(b)(3)(B)(v)(III) of the Act further states that "[t]he Secretary shall establish procedures for making data submitted under sub clause (II) available to the public. Such procedures shall ensure that a home health agency has the opportunity to review the data that is to be made public with respect to the agency prior to such data being made public."

To meet the requirement for making such data public, we propose to continue using a subset of OASIS data that is utilized for quality measure development and reported on the Home Health Compare Web site. Currently, the Home Health Compare web site lists 23 quality measures from the OASIS data set as described below. The Home Health Compare web site, which was redesigned in October 2010, is located at <http://www.medicare.gov/HHCompare/Home.asp>. Each HHA currently has pre-publication access, through the CMS contractor, to its own quality data that the contractor updates periodically. We propose to continue this process, to enable each agency to view its quality measures before public posting of data on Home Health Compare.

The following 13 OASIS-C process measures have been publicly reported on Home Health Compare since October 2010:

- Timely initiation of care.
- Influenza immunization received for current flu season.
- Pneumococcal polysaccharide vaccine ever received.
- Heart failure symptoms addressed during short-term episodes.
- Diabetic foot care and patient education implemented during short-term episodes of care.
- Pain assessment conducted.
- Pain interventions implemented during short-term episodes.
- Depression assessment conducted.
- Drug education on all medications provided to patient/caregiver during short-term episodes.
- Falls risk assessment for patients 65 and older.
- Pressure ulcer prevention plans implemented.
- Pressure ulcer risk assessment conducted.

• Pressure ulcer prevention included in the plan of care.

We published information about these new process measures in the **Federal Register** in the CY 2010 HH PPS proposed and final rules (74 FR 40960 and 74 FR 58096, respectively), and in the CY 2011 HH PPS proposed and final rules (75 FR 43250 and 75 FR 70401, respectively). We proposed and finalized the decision to update Home Health Compare in October 2010 to reflect the addition of the process measures.

We propose to continue publicly reporting these 13 process measures and consider them as measures of home health quality.

The following 10 OASIS-C outcome measures are currently listed on Home Health Compare:

- Improvement in ambulation/locomotion.
- Improvement in bathing.
- Improvement in bed transferring.
- Improvement in management of oral medications.
- Improvement in pain interfering with activity.
- Acute care hospitalization.
- Emergency Department Use Without Hospitalization.
- Improvement in dyspnea.
- Improvement in status of surgical wounds.
- Increase in number of pressure ulcers.

As proposed and finalized in the CY 2011 HH PPS final rule (75 FR 70401), these OASIS-C outcome measure calculations will be publicly reported for the first time in July 2011. (3) Transition from OASIS-B1 to OASIS-C

The implementation of OASIS-C on January 1, 2010 impacted the schedule of quality measure reporting for CY 2010 and CY 2011. Although sufficient OASIS-C data were collected during CY 2010 and early CY 2011 and risk models were in development, the outcome reports (found on Home Health Compare and the contractor outcome reports used for HHA's performance improvement activities) remained static with OASIS-B1 data. The last available OASIS-B1 reports remained in the system and on the Home Health Compare site until they could be replaced with OASIS-C reports. Sufficient numbers of patient episodes were needed to report measures based on new OASIS-C data. This is important because measures based on patient sample sizes taken over short periods of time can be inaccurate and misleading due to issues like seasonal variation and under-representation of long-stay home health patients. Once sufficient OASIS-C data were collected

and submitted to CMS's national repository, we could begin producing new reports based on OASIS-C.

December 2009 was the last month for which outcome data were calculated for OASIS-B1 data and OASIS-B1 CASPER outcome reports continued to be available after March 2010. OASIS-C process measures were made available to preview in September 2010 and were publicly reported in October 2010. OASIS-C outcome measures will be available to preview in June 2011 and will be publicly reported in July 2011.

#### c. Claims Data, Proposed Requirements and Outcome Measure Change

We propose to continue to use the aforementioned specified measures derived from the OASIS-C data for purposes of measuring home health care quality. We propose to also use measures derived from Medicare claims data to measure home health quality. This would also ensure that providers would not have an additional burden of reporting quality of care measures through a separate mechanism, and that the costs associated with the development and testing of a new reporting mechanism would be avoided.

The change to OASIS-C brought about modifications to the OASIS-B1 measure "Emergency Care," and resulted in the following change to that measure:

- *Emergency Department Use without Hospitalization*: This measure replaces the previously reported measure: Emergent care. It excludes emergency department visits that result in a hospital admission because those visits are already captured in the acute care hospitalization measure.

Upon review of actual claims data for emergency department visits and responses to OASIS-C data item M2300, we determined that the claims data are a more robust source of data for this measure, therefore the OASIS-based measure "Emergency Department Use Without Hospitalization" will not be publicly reported in July 2011. The ED Use Without Hospitalization measure will be recalculated from claims data and we propose that public reporting of the claims-based measure would begin January 2012. We invite comment on the proposed use of claims data in the calculation of home health quality measures and as an additional measurement of home health quality.

To summarize, we propose that the following 13 process and 9 outcome measures, which comprise measurement of home health care quality, would continue to be publicly reported in July 2011 and quarterly thereafter:

- Timely initiation of care.

• Influenza immunization received for current flu season.

- Pneumococcal polysaccharide vaccine ever received.
- Heart failure symptoms addressed during short-term episodes.
- Diabetic foot care and patient education implemented during short-term episodes of care.
- Pain assessment conducted.
- Pain interventions implemented during short-term episodes.
- Depression assessment conducted.
- Drug education on all medications provided to patient/caregiver during short-term episodes.
- Falls risk assessment for patients 65 and older.
- Pressure ulcer prevention plans implemented.
- Pressure ulcer risk assessment conducted.
- Pressure ulcer prevention included in the plan of care.
- Improvement in ambulation/locomotion.
- Improvement in bathing.
- Improvement in bed transferring.
- Improvement in management of oral medications.
- Improvement in pain interfering with activity.
- Acute care hospitalization.
- Improvement in dyspnea.
- Improvement in status of surgical wounds.
- Increase in number of pressure ulcers.

We propose that the claims-based measure "Emergency Department Use without Hospitalization" would be publicly reported in January 2012.

#### d. Home Health Care CAHPS Survey (HHCAHPS)

In the HH PPS Rate Update for CY 2011 final rule (75 FR 70404 *et seq.*), we stated that the expansion of the HH quality measures reporting requirements for Medicare-certified agencies will include the CAHPS® Home Health Care (HHCAHPS) Survey for the CY 2012 annual payment update (APU). We are maintaining our existing policy as issued in the CY 2011 HH PPS Rate Update, and are moving forward with our plans for HHCAHPS linkage to the pay-for-reporting (P4R) requirements affecting the HH PPS rate update for CY 2012.

#### (1) Background and Description of HHCAHPS

As part of the U.S. Department of Health and Human Services' (DHHS) Transparency Initiative, we have implemented a process to measure and publicly report patient experiences with home health care using a survey

developed by the Agency for Healthcare Research and Quality's (AHRQ's) Consumer Assessment of Healthcare Providers and Systems (CAHPS®) program, and endorsed by the National Quality Forum (NQF). The HHCAHPS survey is part of a family of CAHPS® surveys that asks patients to report on and rate their experiences with health care. The Home Health Care CAHPS (HHCAHPS) survey presents home health patients with a set of standardized questions about their home health care providers and about the quality of their home health care. Prior to this survey, there was no national standard for collecting information about patient experiences that would enable valid comparisons across all HHAs. The history of the HHCAHPS has been given in previous rules, but it is also available on our Web site at <https://homehealthcahps.org> and also, in the *HHCAHPS Protocols and Guidelines Manual*, which is downloadable from our Web site.

For public reporting purposes, we will present five measures—three composite measures and two global ratings of care from the questions on the HHCAHPS survey. The publicly reported data will be adjusted for differences in patient mix across home health agencies. Each composite measure consists of four or more questions regarding one of the following related topics:

- Patient care (Q9, Q16, Q19, and Q24);
- Communications between providers and patients (Q2, Q15, Q17, Q18, Q22, and Q23);
- Specific care issues on medications, home safety, and pain (Q3, Q4, Q5, Q10, Q12, Q13, and Q14);

The two global ratings are the overall rating of care given by the HHA's care providers, and the patient's willingness to recommend the HHA to family and friends.

The HHCAHPS survey is currently available in six languages. At the time of the CY 2010 HH PPS final rule, HHCAHPS was only available in English and Spanish translations. In the proposed rule for CY 2010, we stated that we would provide additional translations of the survey over time in response to suggestions for any additional language translations. We now offer HHCAHPS in English, Spanish, Mandarin (Simplified) Chinese, Cantonese (Classical) Chinese, Russian, and Vietnamese languages. We will continue to consider additional translations of the HHCAHPS in response to the needs of the home health patient population.

All of the requirements about eligibility for HHCAHPS and conversely, which home health patients are ineligible for HHCAHPS are delineated and detailed in the *HHCAHPS Protocols and Guidelines Manual* which is downloadable from the official Home Health Care CAHPS Web site <https://homehealthcahps.org>. To be eligible, home health patients must have received at least two skilled home health visits in the past 2 months, paid for by Medicare or Medicaid. HHCAHPS surveys will not be taken from patients who are:

- Under the age of 18;
- Deceased;
- Receiving hospice care;
- Receiving routine maternity care only;
- Living in a State that restricts the release of patient information for a specific condition or illness that the patient has; or are
- Requesting that their names not be released to anyone.

We stated in previous rules that Medicare-certified agencies are required to contract with an approved HHCAHPS survey vendor. Beginning in summer 2009, interested vendors applied to become approved HHCAHPS survey vendors. HHCAHPS survey vendors are required to attend introductory and all update trainings conducted by CMS and the HHCAHPS Survey Coordination Team, as well as to pass a post-training certification test. We now have approximately 40 approved HHCAHPS survey vendors. The list of approved vendors is available at <https://homehealthcahps.org>.

#### (2) HHCAHPS Requirements for CY 2012

In the CY 2010 HH PPS final rule (74 FR 58078 *et seq.*), we stated that HHCAHPS would not be required for the APU for CY 2011. We did this so that HHAs would have more time to prepare for the implementation of HHCAHPS. Therefore, in the CY 2010 HH PPS final rule, we stated that data collection should take place beginning in the third quarter of CY 2010 to meet the HHCAHPS reporting requirements for the CY 2012 APU. In the CY 2010 HH PPS final rule, and in the CY 2011 HH PPS final rule, we stated that Medicare-certified agencies would be required to participate in a dry run for at least 1 month in third quarter of 2010 (July, August, and/or September), and to begin continuous monthly data collection in October 2010 through March 2011, for the CY 2012 APU. The dry run data were due to the Home Health CAHPS® Data Center by 11:59 p.m., eastern standard time (e.s.t.) on

January 21, 2011. The dry run data will not be publicly reported on the CMS Home Health Compare web site. The purpose of the dry run was to provide an opportunity for vendors and HHAs to acquire first-hand experience with data collection, including sampling and data submission to the Home Health Care CAHPS® Data Center.

In the CY 2011 HH PPS final rule, it was stated that the mandatory period of data collection for the CY 2012 APU would include the dry run data in the third quarter 2010, data from each month in the fourth quarter of 2010 (October, November and December 2010), and data from each month in the first quarter 2011 (January, February and March 2011). We previously stated that all Medicare-certified HHAs should continuously collect HHCAHPS survey data for every month in every quarter beginning October 2010, and submit these data for the fourth quarter of 2010 to the Home Health CAHPS® Data Center by 11:59 p.m., eastern daylight time (e.d.t.) on April 21, 2011. In the CY 2011 HH PPS final rule, we stated that the data collected for the 3 months of the first quarter 2011 would have to be submitted to the Home Health CAHPS® Data Center by 11:59 p.m., e.d.t. on July 21, 2011. We also stated that these data submission deadlines would be firm (that is, no late submissions would be accepted).

These periods (a dry run in third quarter 2010, and 6 months of data from October 2010 through March 2011) were deliberately chosen to comprise the HHCAHPS reporting requirements for the CY 2012 APU because they coincided with the OASIS-C reporting requirements that would already have been due on June 30, 2011 for the CY 2012 APU. We would also exempt Medicare-certified agencies from the HHCAHPS reporting requirements if they had fewer than 60 HHCAHPS-eligible unique patients from April 1, 2009 through March 31, 2010. In the CY 2011 HH PPS final rule, we stated that by January 21, 2011 HHAs would need to provide CMS with patient counts for the period of April 1, 2009 through March 31, 2010. We have posted a form on <https://homehealthcahps.org> that the HHAs would need to use to submit their patient counts. This patient counts reporting requirement would pertain only to Medicare-certified HHAs with fewer than 60 HHCAHPS eligible, unduplicated or unique patients for that time period. The aforementioned agencies would be exempt from conducting the HHCAHPS survey for the APU in CY 2012.

We stated in the CY 2010 HH PPS final rule (74 FR 58078) and in the CY



2011 HH PPS final rule that we would exempt newly Medicare-certified HHAs. We realize that if an HHA became Medicare-certified April 1, 2010 and after, then they would be exempt from participating in HHCAHPS.

For CY 2012, we propose to maintain our policy that all HHAs, unless covered by specific exclusions, must meet the quality reporting requirements or be subject to a two (2) percentage point reduction in the HH market basket percentage increase, in accordance with section 1895(b)(3)(B)(v)(I) of the Act.

### (3) HHCAHPS Reconsiderations and Appeals Process

We stated in the CY 2011 HH PPS final rule that we would propose a reconsiderations and appeals process for HHAs not meeting the HHCAHPS reporting requirements for CY 2012. We are therefore now proposing a reconsiderations and appeals process for HHAs that fail to meet the HHCAHPS data collection requirements. We are proposing that HHAs that are not compliant with OASIS-C and/or HHCAHPS requirements for the CY 2012 APU requirements will be notified after a process is followed to confirm that they were noncompliant with CY 2012 quality reporting requirements. We are proposing to issue a Joint Signature Memorandum to RHHIs/MACs with a list of HHAs not compliant with OASIS and/or HHCAHPS. We are proposing that the September Memorandum include language regarding evidence required for the reconsideration process. We are proposing that the language in the transmittal include information to the HHAs about how to prepare a request for reconsideration of the CMS decision, and these HHAs will have 30 days to file their requests for reconsiderations to CMS. We are proposing that we examine each request and make a determination about whether we plan to uphold our original decision. We are proposing that HHAs receive CMS' reconsideration decision by December 31, 2011. We are proposing that HHAs have a right to appeal under 42 CFR 405, subpart R, to the Provider Reimbursement Review Board (PRRB) if they were not satisfied with the CMS reconsideration determination.

We are proposing that this Memorandum be a CMS transmittal that would be sent out the first week of September 2011 from the CMS Manual System, Medicare Claims Processing. We are proposing that this CMS transmittal be sent to Fiscal Intermediaries (FIs), Regional Home Health Intermediaries (RHHIs) and/or Carriers. We propose that the RHHIs/

MACs verify the claims submissions for the identified timeframe for the 2012 APU period, to confirm that the claims match the HHAs we identified as noncompliant with OASIS and HHCAHPS. In late September/early October, the appropriate staff within CMS would review your submission. If necessary, the RHHIs/MACs would identify and notify the HHAs that they could lose 2 percent of their 2012 APU, and provide them with instructions on how to request reconsideration. In early November 2011, the RHHIs/MACs would forward the HHAs reconsiderations to CMS on a flow basis so that we could review and prepare recommendations for cross component review within CMS throughout the month of November. We propose to have CMS finish this process in December, and about mid-December to circulate the recommendations for clearance and final determinations by CMS senior leadership. We propose that the HHAs would be informed about CMS' final decisions by December 31, 2011.

### (4) HHCAHPS Oversight Activities

We stated in the CY 2011 HH PPS final rule that vendors and HHAs would be required to participate in HHCAHPS oversight activities to ensure compliance with HHCAHPS protocols, guidelines, and survey requirements. The purpose of the oversight activities is to ensure that HHAs and approved survey vendors follow the *HHCAHPS Protocols and Guidelines Manual*. As stated, all approved survey vendors must develop a Quality Assurance Plan (QAP) for survey administration in accordance with the *HHCAHPS Protocols and Guidelines Manual*. The first QAP must be submitted within 6 weeks of the data submission deadline after the vendor's first quarterly data submission. The QAP must be updated and submitted annually thereafter and at any time that changes occur in staff or vendor capabilities or systems. A model QAP is included in the *HHCAHPS Protocols and Guidelines Manual*. The QAP should include the following:

- Organizational Background and Staff Experience.
- Work Plan.
- Sampling Plan.
- Survey Implementation Plan.
- Data Security, Confidentiality and Privacy Plan.
- Questionnaire Attachments.

As part of the oversight activities, the HHCAHPS Survey Coordination Team conducts on-site visits to the HHCAHPS vendors. The purpose of the site visits is to allow the HHCAHPS Coordination

Team to observe the entire Home Health Care CAHPS Survey implementation process, from the sampling stage through file preparation and submission, as well as to assess how the HHCAHPS data are stored. The HHCAHPS Survey Coordination Team reviews the survey vendor's survey systems, and assesses administration protocols based on the *HHCAHPS Protocols and Guidelines Manual* posted at <https://homehealthcahps.org>. The HHCAHPS Survey Coordination Team includes the CMS staff assigned to work on HHCAHPS, and the Federal contractor for the HHCAHPS implementation. HHCAHPS survey vendors are not part of the HHCAHPS Survey Coordination Team. The systems and program review include, but are not limited, to the following:

- Survey management and data systems;
- Printing and mailing materials facilities;
- Telephone call center facilities;
- Data receipt, entry and storage facilities; and
- Written documentation of survey processes.

After the site visits, vendors are given a defined time period in which to correct any identified issues and provide follow-up documentation of corrections for review. In general, we propose that the defined time periods will be between 2 weeks to 1 month after these issues are stated in the HHCAHPS Coordination Team's site visit report to the survey vendor. It is proposed that survey vendors will be subject to follow-up site visits as needed.

### (5) HHCAHPS Requirements for CY 2013

For the CY 2013 APU, we propose to require HHCAHPS data collection and reporting for four quarters. The data collection period will include second quarter 2011 through first quarter 2012. We propose that HHAs will be required to submit their HHCAHPS data files to the Home Health CAHPS Data Center the third Thursday of the month (in the months of October, January, April and July). HHAs will be required to submit their HHCAHPS data files to the Home Health CAHPS Data Center for CY 2013 as follows: the data for the second quarter 2011 by 11:59 p.m., e.d.t. on October 20, 2011; the data for the third quarter 2011 by 11:59 p.m., e.s.t. on January 19, 2012; the data for the fourth quarter 2011 by 11:59 p.m., e.d.t. on April 19, 2012; and the data for the first quarter 2012 by 11:59 p.m., e.d.t. on July 19, 2012.

We propose to require that all HHAs that have fewer than 60 HHCAHPS-eligible unduplicated or unique patients in the period of April 1, 2010 through March 31, 2011 will be exempt from the HHCAHPS data collection and submission requirements for the CY 2013 APU. For the CY 2013 APU, agencies with fewer than 60 HHCAHPS-eligible, unduplicated or unique patients would be required to submit their counts on the Participation Exemption Request form posted at <https://homehealthcahps.org> by 11:59 p.m., e.d.t. on April 19, 2012. This deadline is firm, as are all of the quarterly data submission deadlines.

We propose to exempt HHAs receiving Medicare certification on or after April 1, 2011 from the full HHCAHPS reporting requirement for the CY 2013 APU, because these HHAs were not Medicare-certified in the period of April 1, 2010 and March 31, 2011.

#### (6) HHCAHPS Codified Criteria

The following codified criteria stay the same as issued in the CY 2011 HH PPS final rule (75 FR 70465). We stated in § 484.250(b) that “An HHA that has less than 60 eligible unique HHCAHPS patients annually must submit to CMS their total HHCAHPS patient count to CMS to be exempt from the HHCAHPS reporting requirements.” In § 484.250(c), we stated that “An HHA must contract with an approved, independent HHCAHPS survey vendor to administer the HHCAHPS on its behalf.”

In § 484.250(c)(1), we stated that “CMS approves an HHCAHPS survey vendor if such applicant has been in business for a minimum of 3 years and has conducted surveys of individuals and samples for at least 2 years. For HHCAHPS, a “survey of individuals” is defined as the collection of data from at least 600 individuals selected by statistical sampling methods and the data collected are used for statistical purposes. All applicants that meet these requirements will be approved by CMS.”

In § 484.250(c)(2) we stated that “No organization, firm, or business that owns, operates, or provides staffing for a HHA is permitted to administer its own Home Health Care CAHPS (HHCAHPS) Survey or administer the survey on behalf of any other HHA in the capacity as an HHCAHPS survey vendor. Such organizations will not be approved by CMS as HHCAHPS survey vendors.”

The following criteria from the CY 2011 HH PPS final rule are proposed to be revised so that the requirements for OASIS and Home Health CAHPS are

clearly delineated in the regulations. In the CY 2011 HH PPS final rule (75 FR 70465), we stated for § 484.250, Patient Assessment Data, that “An HHA must submit to CMS the OASIS–C data described at § 484.55(b)(1) and Home Health Care CAHPS data for CMS to administer the payment rate methodologies described in § 484.215, § 484.230, and § 484.235 of this subpart, and meet the quality reporting requirements of section 1895(b)(3)(B)(v) of the Act.”

We propose to revise this section to clarify that HHCAHPS is associated with the APU described at § 484.225(i) and the quality reporting requirements, and not with other payment requirements.

#### (7) HHCAHPS Requirements for CY 2014

For the CY 2014 APU, we propose to require HHCAHPS data collection and reporting for four quarters. The data collection period would include second quarter 2012 through first quarter 2013. It is proposed that HHAs will be required to submit their HHCAHPS data files to the Home Health CAHPS Data Center the third Thursday of the month for the months of October, January, April and July. It is proposed that HHAs will be required to submit their HHCAHPS data files to the Home Health CAHPS Data Center for CY 2014 as follows: for the second quarter 2012 by 11:59 p.m., e.d.t. on October 18, 2012; for the third quarter 2012 by 11:59 p.m., e.s.t. on January 17, 2013; for the fourth quarter 2012 by 11:59 p.m., e.d.t. on April 18, 2013; and for the first quarter 2013 by 11:59 p.m., e.d.t. on July 18, 2013.

As noted, we exempt HHAs receiving Medicare certification on or after April 1, 2012 from the full HHCAHPS reporting requirement for the CY 2014 APU, as data submission and analysis will not be possible for an agency that late in the reporting period for the CY 2014 APU requirements.

As noted, we require that all HHAs that have fewer than 60 HHCAHPS-eligible unduplicated or unique patients in the period of April 1, 2011 through March 31, 2012 will be exempt from the HHCAHPS data collection and submission requirements for the CY 2014 APU. For the CY 2014 APU, agencies with fewer than 60 HHCAHPS-eligible, unduplicated or unique patients would be required to submit their counts on the Participation Exemption Request form posted on <https://homehealthcahps.org> by 11:59 p.m., e.d.t. on April 18, 2013. This deadline is firm, as are all of the quarterly data submission deadlines.

#### (8) For Further Information on the HHCAHPS Survey

We encourage HHAs interested in learning about the survey to view the HHCAHPS Survey Web site at the official Web site for the HHCAHPS at <https://homehealthcahps.org>. Home health agencies can also send an e-mail to the HHCAHPS Survey Coordination Team at [HHCAHPS@rti.org](mailto:HHCAHPS@rti.org), or telephone toll-free (1–866–354–0985) for more information about HHCAHPS.

#### 3. Home Health Wage Index

Sections 1895(b)(4)(A)(ii) and (b)(4)(C) of the Act require the Secretary to provide appropriate adjustments to the proportion of the payment amount under the HH PPS to account for area wage differences, using adjustment factors that reflect the relative level of wages and wage-related costs applicable to the furnishing of home health services. We apply the appropriate wage index value to the labor portion of the HH PPS rates based on the site of service for the beneficiary (defined by section 1861(m) of the Act as the beneficiary's place of residence). Previously, we determined each HHA's labor market area based on definitions of Metropolitan Statistical Areas (MSAs) issued by the Office of Management and Budget (OMB). We have consistently used the pre-floor, pre-reclassified hospital wage index data to adjust the labor portion of the HH PPS rates. We believe the use of the pre-floor, pre-reclassified hospital wage index data results in an appropriate adjustment to the labor portion of the costs, as required by statute.

In the CY 2006 HH PPS final rule for (70 FR 68132), we began adopting revised labor market area definitions as discussed in the Office of Management and Budget (OMB) Bulletin No. 03–04 (June 6, 2003). This bulletin announced revised definitions for Metropolitan Statistical Areas (MSAs) and the creation of Micropolitan Statistical Areas and Core-Based Statistical Areas (CBSAs). The bulletin is available online at <http://www.whitehouse.gov/omb/bulletins/b03-04.html>. In addition, OMB published subsequent bulletins regarding CBSA changes, including changes in CBSA numbers and titles. This rule incorporates the CBSA changes published in the most recent OMB bulletin. The OMB bulletins are available at <http://www.whitehouse.gov/omb/bulletins/index.html>.

Finally, we continue to use the methodology discussed in the CY 2007 HH PPS final rule for (71 FR 65884) to address those geographic areas in which there are no IPPS hospitals and, thus, no

hospital wage data on which to base the calculation of the HH PPS wage index. For rural areas that do not have IPPS hospitals and, therefore, lack hospital wage data on which to base a wage index, we use the average wage index from all contiguous CBSAs as a reasonable proxy. Since CY 2007, this methodology was used to calculate the wage index for rural Massachusetts. However, we now have wage data from an IPPS hospital in rural Massachusetts. The hospital was formerly a critical access hospital (CAH), but converted to an IPPS hospital in 2008, the base year for the 2012 wage index. Therefore, it is no longer necessary to apply this methodology to rural Massachusetts for CY 2012.

For rural Puerto Rico, we do not apply this methodology due to the distinct economic circumstances that exist there, but instead continue using the most recent wage index previously available for that area (from CY 2005).

For urban areas without IPPS hospitals, we use the average wage index of all urban areas within the State as a reasonable proxy for the wage index for that CBSA. For CY 2012, there is an additional urban area (Yuba City, CA) without hospital wage data. Therefore, for CY 2012, the two urban areas without hospital wage data are Hinesville-Fort Stewart, Georgia (CBSA 25980) and Yuba City, CA (CBSA 49700).

The wage index values for rural areas and the CBSAs and their associated wage index values are available via the Internet at: <http://www.cms.gov/HomeHealthPPS/HHPPSRN/list.asp>.

#### 4. Proposed CY 2012 Payment Update

##### a. National Standardized 60-Day Episode Rate

The Medicare HH PPS has been in effect since October 1, 2000. As set forth in the July 3, 2000 final rule (65 FR 41128), the base unit of payment under the Medicare HH PPS is a national standardized 60-day episode rate. As set forth in § 484.220, we adjust the national standardized 60-day episode rate by a case-mix relative weight and a wage index value based on the site of service for the beneficiary.

In the CY 2008 HH PPS final rule with comment period, we refined the case-mix methodology and also rebased and revised the home health market basket. To provide appropriate adjustments to the proportion of the payment amount under the HH PPS to account for area wage difference, we apply the appropriate wage index value to the labor portion of the HH PPS rates. The labor-related share of the case-mix

adjusted 60-day episode rate is 77.082 percent and the non-labor-related share is 22.918 percent. The proposed CY 2012 HH PPS rates use the same case-mix methodology and application of the wage index adjustment to the labor portion of the HH PPS rates as set forth in the CY 2008 HH PPS final rule with comment period. Following are the steps we take to compute the case-mix and wage adjusted 60-day episode rate:

- (1) Multiply the national 60-day episode rate by the patient's applicable case-mix weight.

- (2) Divide the case-mix adjusted amount into a labor (77.082 percent) and a non-labor portion (22.918 percent).

- (3) Multiply the labor portion by the applicable wage index based on the site of service of the beneficiary.

- (4) Add the wage-adjusted portion to the non-labor portion, yielding the case-mix and wage adjusted 60-day episode rate, subject to any additional applicable adjustments.

In accordance with section 1895(b)(3)(B) of the Act, this document constitutes the annual update of the HH PPS rates. The HH PPS regulations at § 484.225 set forth the specific annual percentage update methodology. In accordance with § 484.225(i), for a HHA that does not submit home health quality data, as specified by the Secretary, the unadjusted national prospective 60-day episode rate is equal to the rate for the previous calendar year increased by the applicable home health market basket index amount minus two percentage points. Any reduction of the percentage change will apply only to the calendar year involved and will not be considered in computing the prospective payment amount for a subsequent calendar year.

For CY 2012, we are proposing to base the wage index adjustment to the labor portion of the HH PPS rates on the most recent pre-floor and pre-reclassified hospital wage index. As discussed in the July 3, 2000 HH PPS final rule, for episodes with four or fewer visits, Medicare pays the national per-visit amount by discipline, referred to as a LUPA. We propose to update the national per-visit rates by discipline annually by the applicable home health market basket percentage. We propose to adjust the national per-visit rate by the appropriate wage index based on the site of service for the beneficiary, as set forth in § 484.230. We propose to adjust the labor portion of the updated national per-visit rates used to calculate LUPAs by the most recent pre-floor and pre-reclassified hospital wage index. We are also proposing to update the LUPA add-on payment amount and the NRS

conversion factor by the applicable home health market basket update of 1.5 percent for CY 2012.

Medicare pays the 60-day case-mix and wage-adjusted episode payment on a split percentage payment approach. The split percentage payment approach includes an initial percentage payment and a final percentage payment as set forth in § 484.205(b)(1) and § 484.205(b)(2). We may base the initial percentage payment on the submission of a request for anticipated payment (RAP) and the final percentage payment on the submission of the claim for the episode, as discussed in § 409.43. The claim for the episode that the HHA submits for the final percentage payment determines the total payment amount for the episode and whether we make an applicable adjustment to the 60-day case-mix and wage-adjusted episode payment. The end date of the 60-day episode as reported on the claim determines which calendar year rates Medicare would use to pay the claim.

We may also adjust the 60-day case-mix and wage-adjusted episode payment based on the information submitted on the claim to reflect the following:

- A low utilization payment provided on a per-visit basis as set forth in § 484.205(c) and § 484.230.
- A partial episode payment adjustment as set forth in § 484.205(d) and § 484.235.
- An outlier payment as set forth in § 484.205(e) and § 484.240.

##### b. Proposed Updated CY 2012 National Standardized 60-Day Episode Payment Rate

In calculating the annual update for the CY 2012 national standardized 60-day episode payment rates, we first look at the CY 2011 rates as a starting point. The CY 2011 national standardized 60-day episode payment rate is \$2,192.07.

Next, we update the payment amount by the proposed CY 2012 home health market basket update of 1.5 percent.

As previously discussed in section II.A. ("Case-Mix Measurement") of this proposed rule, our updated analysis of the change in case-mix that is not due to an underlying change in patient health status reveals an additional increase in nominal change in case-mix. Therefore, we propose to reduce rates by 5.06 percent in CY 2012, resulting in a proposed CY 2012 national standardized 60-day episode payment rate of \$2,112.37. The proposed CY 2012 national standardized 60-day episode payment rate for an HHA that submits the required quality data is shown in Table 19. The proposed CY 2012 national standardized 60-day episode

payment rate for an HHA that does not submit the required quality data is updated by the proposed CY 2012 home health market basket update (1.5 percent) minus 2 percentage points and is shown in Table 20.

**TABLE 19—PROPOSED CY 2012 NATIONAL 60-DAY EPISODE PAYMENT AMOUNT UPDATED BY THE PROPOSED HOME HEALTH MARKET BASKET UPDATE, BEFORE CASE-MIX ADJUSTMENT AND WAGE ADJUSTMENT BASED ON THE SITE OF SERVICE FOR THE BENEFICIARY**

CY 2011 National standardized 60-day episode payment rate	Multiply by the proposed CY 2012 home health market basket update of 1.5 percent	Reduce by 5.06 percent for nominal change in case-mix	Proposed CY 2012 national standardized 6-day episode payment rate
\$2,192.07 .....	× 1.015	× 0.9494	\$2,112.37

**TABLE 20—FOR HHAS THAT DO NOT SUBMIT THE QUALITY DATA—PROPOSED CY 2012 NATIONAL 60-DAY EPISODE PAYMENT AMOUNT UPDATED BY THE PROPOSED HOME HEALTH MARKET BASKET UPDATE BEFORE CASE-MIX ADJUSTMENT AND WAGE ADJUSTMENT BASED ON THE SITE OF SERVICE FOR THE BENEFICIARY**

CY 2011 National standardized 60-day episode payment rate	Multiply by the proposed CY 2012 home health market basket update of 1.5 percent minus 2 percentage points (-0.5 percent)	Reduce by 5.06 percent for nominal change in case-mix	Proposed CY 2012 National standardized 60-day episode payment rate
\$2,192.07 .....	× 0.995	× 0.9494	\$2070.75

**c. National Per-Visit Rates Used To Pay LUPAs and Compute Imputed Costs Used in Outlier Calculations**

In calculating the CY 2012 national per-visit rates used to calculate payments for LUPA episodes and to compute the imputed costs in outlier calculations, the CY 2011 national per-

visit rates for each discipline are updated by the proposed CY 2012 home health market basket update of 1.5 percent. National per-visit rates are not subject to the 5.06 percent reduction related to the nominal increase in case-mix. The CY 2012 national per-visit rates per discipline are shown in Table

21. The six home health disciplines are as follows:

- Home Health Aide (HH aide);
- Medical Social Services (MSS);
- Occupational Therapy (OT);
- Physical Therapy (PT);
- Skilled Nursing (SN); and
- Speech Language Pathology Therapy (SLP).

**TABLE 21—PROPOSED CY 2012 NATIONAL PER-VISIT AMOUNTS FOR LUPAS (NOT INCLUDING THE LUPA ADD-ON AMOUNT FOR A BENEFICIARY'S ONLY EPISODE OR THE INITIAL EPISODE IN A SEQUENCE OF ADJACENT EPISODES) AND OUTLIER CALCULATIONS UPDATED BY THE PROPOSED HEALTH MARKET BASKET UPDATE, BEFORE WAGE INDEX ADJUSTMENT**

Home health discipline type	CY 2011 per-visit amounts per 60-day episode	For HHAs that DO submit the required quality data		For HHAs that DO NOT submit the required quality data	
		Multiply by the proposed CY 2012 market basket update of 1.5 percent	Proposed CY 2012 per-visit payment	Multiply by the proposed CY 2012 market basket update of 1.5 percent minus 2 percentage points (-0.5 percent)	Proposed CY 2012 per-visit payment
HH Aide .....	\$50.42	× 1.015	\$51.18	× 0.995	\$50.17
MSS .....	178.46	× 1.015	181.14	× 0.995	177.57
OT .....	122.54	× 1.015	124.38	× 0.995	121.93
PT .....	121.73	× 1.015	123.56	× 0.995	121.12
SN .....	111.32	× 1.015	112.99	× 0.995	110.76
SLP .....	132.27	× 1.015	134.25	× 0.995	131.61

## d. LUPA Add-on Payment Amount Update

Beginning in CY 2008, LUPA episodes that occur as the only episode or initial episode in a sequence of adjacent episodes are adjusted by adding an additional amount to the LUPA payment before adjusting for area wage differences. We update the LUPA

payment amount by the proposed CY 2012 home health market basket update percentage of 1.5 percent. The LUPA add-on payment amount is not subject to the 5.06 percent reduction related to the nominal increase in case-mix. For CY 2012, we propose that the add-on to the LUPA payment to HHAs that submit the required quality data be updated by the proposed CY 2012 home health

market basket update of 1.5 percent. The proposed CY 2012 LUPA add-on payment amount is shown in Table 22. We propose that the add-on to the LUPA payment to HHAs that do not submit the required quality data would be updated by the proposed CY 2012 home health market basket update (1.5 percent) minus two percentage points.

TABLE 22—PROPOSED CY 2012 LUPA ADD-ON AMOUNTS

CY 2011 LUPA add-on amount	For HHAs that DO submit the required quality data		For HHAs that DO NOT submit the required quality data	
	Multiply by the proposed CY 2012 market basket update of 1.5 percent	Proposed CY 2012 LUPA add-on amount	Multiply by the proposed CY 2012 market basket update of 1.5 percent minus 2 percentage points (– 0.5 percent)	Proposed CY 2012 LUPA add-on amount
\$93.31 .....	× 1.015	\$94.71	× 0.995	\$92.84

## e. Nonroutine Medical Supply Conversion Factor Update

Payments for nonroutine medical supplies (NRS) are computed by multiplying the relative weight for a

particular severity level by the NRS conversion factor. We first increase CY 2010 NRS conversion factor (\$52.54) by the proposed market basket of 1.5 percent. Then we reduce that amount by

5.06 percent to account for the increase in nominal case-mix. The final updated CY 2012 NRS conversion factor for 2012 appears in Table 23. For CY 2012, the NRS conversion factor is \$53.33.

TABLE 23—PROPOSED CY 2012 NRS CONVERSION FACTOR FOR HHAS THAT DO SUBMIT THE REQUIRED QUALITY DATA

CY 2011 NRS conversion factor	Multiply by the proposed CY 2012 market basket update of 1.5 percent	Proposed CY 2011 NRS conversion factor
\$52.54 .....	× 1.015	\$53.33

Using the NRS conversion factor (\$53.33) for CY 2012, the payment

amounts for the various severity levels are shown in Table 24.

TABLE 24—PROPOSED CY 2012 NRS PAYMENT AMOUNTS FOR HHAS THAT DO SUBMIT THE REQUIRED QUALITY DATA

Severity level	Points (scoring)	Relative weight	Proposed CY 2012 NRS payment amount
1 .....	0 .....	0.2698	\$14.39
2 .....	1 to 14 .....	0.9742	51.95
3 .....	15 to 27 .....	2.6712	142.46
4 .....	28 to 48 .....	3.9686	211.65
5 .....	49 to 98 .....	6.1198	326.37
6 .....	99+ .....	10.5254	561.32

For HHAs that do not submit the required quality data, we again begin with the CY 2011 NRS conversion factor. We first increase the CY 2011

NRS conversion factor (\$52.54) by the proposed CY 2012 home health market basket update percentage of 1.5 percent minus 2 percentage points. The CY 2011

NRS conversion factor for HHAs that do not submit quality data is shown in Table 25.

TABLE 25—PROPOSED CY 2012 NRS CONVERSION FACTOR FOR HHAS THAT DO NOT SUBMIT THE REQUIRED QUALITY DATA

CY 2011 NRS conversion factor	Multiply by the proposed CY 2012 market basket update of 1.5 percent minus 2 percentage points (– 0.5 percent)	Proposed CY 2012 NRS conversion factor
\$52.54 .....	× 0.995	\$52.28

The payment amounts for the various severity levels based on the updated conversion factor for HHAs that do not submit quality data are calculated in Table 26.

TABLE 26—PROPOSED CY 2012 NRS PAYMENT AMOUNTS FOR HHAS THAT DO NOT SUBMIT THE REQUIRED QUALITY DATA

Severity level	Points (scoring)	Relative weight	Proposed NRS payment amount
1 .....	0 .....	0.2698	\$14.11
2 .....	1 to 14 .....	0.9742	50.93
3 .....	15 to 27 .....	2.6712	139.65
4 .....	28 to 48 .....	3.9686	207.48
5 .....	49 to 98 .....	6.1198	319.94
6 .....	99+ .....	10.5254	550.27

#### 5. Rural Add-On

Section 421(a) of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 (Pub. L. 108–173, enacted on December 8, 2003 and as amended by section 3131(c) of the Affordable Care Act) provides an increase of 3 percent of the payment amount otherwise made under section 1895 of the Act for home health services

furnished in a rural area (as defined in section 1886(d)(2)(D) of the Act), for episodes and visits ending on or after April 1, 2010 and before January 1, 2016. The statute waives budget neutrality related to this provision, as the statute specifically states that the Secretary shall not reduce the standard prospective payment amount (or amounts) under section 1895 of the Act applicable to home health services

furnished during a period to offset the increase in payments resulting in the application of this section of the statute.

The 3 percent rural add-on is applied to the national standardized 60-day episode rate, national per-visit rates, LUPA add-on payment, and NRS conversion factor when home health services are provided in rural (non-CBSA) areas. Refer to Tables 27 thru 31 for these payment rates.

TABLE 27—PROPOSED CY 2012 PAYMENT AMOUNTS FOR 60-DAY EPISODES FOR SERVICES PROVIDED IN A RURAL AREA BEFORE CASE-MIX AND WAGE INDEX ADJUSTMENT

For HHAs that do submit quality data			For HHAs that do not submit quality data		
Proposed CY 2012 national standardized 60-day episode payment rate	Multiply by the 3 percent rural add-on	Proposed Rural CY 2012 national standardized 60-day episode payment rate	Proposed CY 2012 national standardized 60-day episode payment rate	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 national standardized 60-day episode payment rate
\$2,112.37 .....	× 1.03	\$2,175.74	\$2,070.75	× 1.03	\$2,132.87

TABLE 28—PROPOSED CY 2012 PER-VISIT AMOUNTS FOR SERVICES PROVIDED IN A RURAL AREA, BEFORE WAGE INDEX ADJUSTMENT

Home health discipline type	For HHAs that do submit quality data			For HHAs that do not submit quality data		
	Proposed CY 2012 per-visit rate	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 per-visit rate	Proposed CY 2012 per-visit rate	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 per-visit rate
HH Aide .....	\$51.18	× 1.03	\$52.72	\$50.17	× 1.03	\$51.68
MSS .....	181.14	× 1.03	186.57	177.57	× 1.03	182.90
OT .....	124.38	× 1.03	128.11	121.93	× 1.03	125.59
PT .....	123.56	× 1.03	127.27	121.12	× 1.03	124.75
SN .....	112.99	× 1.03	116.38	110.76	× 1.03	114.08

TABLE 28—PROPOSED CY 2012 PER-VISIT AMOUNTS FOR SERVICES PROVIDED IN A RURAL AREA, BEFORE WAGE INDEX ADJUSTMENT—Continued

Home health discipline type	For HHAs that do submit quality data			For HHAs that do not submit quality data		
	Proposed CY 2012 per-visit rate	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 per-visit rate	Proposed CY 2012 per-visit rate	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 per-visit rate
SLP .....	134.25	× 1.03	138.28	131.61	× 1.03	135.56

TABLE 29—PROPOSED CY 2012 LUPA ADD-ON AMOUNTS FOR SERVICES PROVIDED IN RURAL AREAS

For HHAs that do submit quality data			For HHAs that do not submit quality data		
Proposed CY 2012 LUPA add-on amount	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 LUPA add-on amount	Proposed CY 2012 LUPA add-on amount	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 LUPA add-on amount
\$94.71 .....	× 1.03	\$97.55	\$92.84	× 1.03	\$95.63

TABLE 30—PROPOSED CY 2012 NRS CONVERSION FACTOR FOR SERVICES PROVIDED IN RURAL AREAS

For HHAs that do submit quality data			For HHAs that do not submit quality data		
Proposed CY 2011 conversion factor	Multiply by the 3 percent rural add-on	Proposed rural CY 2012 conversion factor	Proposed CY 2012 conversion factor	Multiply by the 3 percent rural add-on	Proposed CY rural 2012 conversion factor
\$53.33 .....	× 1.03	\$54.93	\$52.28	× 1.03	\$53.85

TABLE 31—PROPOSED CY 2012 NRS PAYMENT AMOUNTS FOR SERVICES PROVIDED IN RURAL AREAS

Severity level	Points (scoring)	For HHAs that do submit quality data (NRS conversion factor = \$54.93)		For HHAs that do not submit quality data (NRS conversion factor = \$53.85)	
		Relative weight	Total NRS payment amount for rural areas	Relative weight	Total NRS payment amount for rural areas
1 .....	0 .....	0.2698	\$14.82	0.2698	\$14.53
2 .....	1 to 14 .....	0.9742	53.51	0.9742	52.46
3 .....	15 to 27 .....	2.6712	146.73	2.6712	143.84
4 .....	28 to 48 .....	3.9686	218.00	3.9686	213.71
5 .....	49 to 98 .....	6.1198	336.16	6.1198	329.55
6 .....	99+ .....	10.5254	578.16	10.5254	566.79

### E. Therapy Corrections and Clarifications

#### 1. Therapy Technical Correction to Regulation Text

As part of our “Home Health Prospective Payment System Rate Update for Calendar Year 2011,” (75 FR 70389 through 70461), we clarified policies related to how therapy services are to be provided and documented.

Specifically, the clarifications included that: (1) Measurable treatment goals be described in the plan of care and that the patient’s clinical record demonstrate that the method used to assess a patient’s function include objective measurement and successive comparison of measurements, thus

enabling objective measurement of progress toward goals and/or therapy effectiveness; (2) a qualified therapist (instead of an assistant) perform the needed therapy service, assess the patient, measure progress, and document progress toward goals at least once every 30 days during a therapy patient’s course of treatment; and (3) for those patients needing 13 or 19 therapy visits, we require that a qualified therapist (instead of an assistant) perform the therapy service required at the 13th and 19th visits, assess the patient, and measure and document the effectiveness of the therapy.

As a result of comments received on the CY 2011 proposed rule, we finalized flexibility for the 13th and 19th visit

requirements in cases when: (1) The patient resides in a rural area; (2) documented exceptional circumstances prevent the therapist from making the required visit; and (3) patients receive more than one type of therapy. The CY 2011 HH PPS final rule preamble discussions clearly described that even with the flexibility which we finalized, for those patients who require 13 and 19 therapy visits, the qualified therapist’s visit, assessment, and documentation must occur no later than the 13th and 19th visits.

However, regulation text associated with these changes at § 409.44(c)(2)(i)(D)(2) reads, “Where more than one discipline of therapy is being provided, the qualified therapist

from each discipline must provide the therapy service and functionally reassess the patient in accordance with § 409.44(c)(2)(i)(A) during the visit which would occur close to but before the 19th visit per the plan of care.” Therefore, to better align our regulations with our described final policies, we propose to correct the regulation text at § 409.44(c)(2)(i)(D)(2) to read “Where more than one discipline of therapy is being provided, the qualified therapist from each discipline must provide the therapy service and functionally reassess the patient in accordance with § 409.44(c)(2)(i)(A) during the visit which would occur close to but no later than the 19th visit per the plan of care.”

## 2. Occupational Therapy Policy Clarifications

We are proposing to clarify when occupational therapy is considered a dependent service versus when it is considered a qualifying service under the Medicare home health benefit. Section 1861(m)(2) of the Act established occupational therapy as a home health service. Section 1814(2)(C) of the Act provided that to qualify for the benefit, a physician must certify that such services are or were required because the individual needs or needed skilled nursing care (other than solely venipuncture for the purpose of obtaining a blood sample) on an intermittent basis or physical or speech therapy or, in the case of an individual who has been furnished home health services based on such a need and who no longer has such a need for such care or therapy, continues or continued to need occupational therapy. We codified the requirement for skilled services in the Medicare home health benefit at § 409.42(c). This section further delineates beneficiary qualifications for home health, including what is meant by, “in need of skilled services.” Following this detailed explanation, skilled services, in § 409.42(c)(2) through (c)(4) include physical therapy services and speech-language pathology services that meet the requirements of § 409.44(c), and continuing occupational therapy services that meet the requirements of § 409.44(c) if the beneficiary’s eligibility for home health services has been established by virtue of a prior need for intermittent skilled nursing care, speech-language pathology services, or physical therapy in the current or prior certification period.

In addition to the above-mentioned designation and treatment of occupational therapy as a qualifying home health service, occupational therapy is also described as a dependent service, as currently specified in

§ 409.45(d) where we state occupational therapy services that are not qualifying services under § 409.44(c) are nevertheless covered as dependent services if the requirements of § 409.44(c)(2)(i) through (iv), as to reasonableness and necessity, are met.

To clarify the status of when occupational therapy becomes a qualifying service, we propose to change the above-mentioned regulation text at § 409.42(c)(4) to establish exactly when occupational therapy becomes a qualifying service. That is, we propose to amend this regulatory text to demonstrate when a continuing need for occupational therapy allows for its continued eligibility even though it becomes the sole skilled service being provided. Specifically, we propose to amend § 409.42(c)(4) to state occupational therapy services that meet the requirements of § 409.44(c) initially qualify for home health coverage as a dependent service as defined in § 409.45(d) if the beneficiary’s eligibility for home health services has been established by virtue of a prior need for intermittent skilled nursing care, speech-language pathology services, or physical therapy in the current or prior certification period. Subsequent to an initial covered occupational therapy service, continuing occupational therapy services which meet the requirements of § 409.44(c) are considered to be qualifying services.

We also propose a change to § 409.44(c) to include a technical correction to this regulation text. Specifically, the current regulation text states “(c) *Physical therapy, speech-language pathology services, and occupational therapy.* To be covered, physical therapy, speech-language pathology services, and occupational therapy must satisfy the criteria in paragraphs (c)(1) through (4) of this section.” We propose to correct “(c)(1) through (4)” to, “(c)(1) and (2),” which is the correct reference.

## F. Home Health Face-to-Face Encounter

As described in the CY 2011 HH PPS final rule (70 FR 70427), section 6407(a) of the Patient Protection and Affordable Care Act, as amended by section 10605 of the Health Care and Education Reconciliation Act of 2010 (Pub. L. 111–152), amended the requirements for physician certification of home health services contained in sections 1814(a)(2)(C) and 1835(a)(2)(A) of the Act by requiring that, as a condition for payment, prior to certifying a patient’s eligibility for the home health benefit, the physician must document that the physician himself or herself or a permitted nonphysician practitioner

(NPP) has had a face-to-face encounter with the patient.

The statute describes NPPs who may perform this face-to-face patient encounter as a nurse practitioner or clinical nurse specialist, as those terms are defined in section 1861(aa)(5) of the Act, who is working in collaboration with the physician in accordance with State law, or a certified nurse-midwife (as defined in section 1861(gg) of the Act, as authorized by State law), or a physician assistant (as defined in section 1861(aa)(5) of the Act), under the supervision of the physician.

The statutory provision allows the permitted NPPs to perform the face-to-face encounter and inform the certifying physician, who documents the encounter as part of the certification of eligibility.

Stakeholder feedback received during the CY 2011 rulemaking comment period urged CMS to also allow, in addition to an NPP, the physician who attended to the patient during a recent hospital or post-acute stay to inform the certifying physician regarding their encounters with the patient, as an NPP is allowed to do presently to satisfy the face-to-face encounter requirement. Typically, it is the patient’s primary care physician who certifies a patient’s eligibility for the home health benefit and oversees the patient’s home health care plan. As finalized in the CY 2011 HH PPS final rule, a hospital or post-acute attending physician’s encounter with the home health patient satisfies the face-to-face encounter requirement only when the attending physician certifies the patient’s home health eligibility.

Stakeholders stated to CMS that many hospital attending physicians may order home health services upon discharge, but do not want the burden associated with certifying home health eligibility and establishing a patient’s plan of care. Stakeholders further stated that because NPPs can perform the encounter and inform the certifying physician, it makes no sense to preclude the physician who attended to the patient in the hospital from informing the certifying physician about the patient for the purpose of satisfying the face-to-face encounter. Further, they argued that for patients admitted to home health following a hospital or post-acute discharge, such a policy would be consistent with the goal of the provision, which is increased physician involvement in a patient’s home health certification of eligibility.

Fifty percent of home health patients are admitted to home health immediately following a hospital discharge. As such, the physician who attended to these patients in the



hospital has the sort of involvement with the patient and knowledge about the patient's need for home care which was the intent of the provision. Similarly, for patients admitted to home health from a post-acute setting, the physician who attended to the patient during the post-acute stay would also have the involvement with and knowledge of the patient as was the intent of the provision.

We believe that the statute does not preclude a patient's acute or post-acute attending physician from informing the certifying physician regarding their experience with the patient for the purpose of the face-to-face encounter requirement, as an NPP can. Instead, we believe that for patients admitted to home health following discharge from an acute or post-acute stay, the statutory language contains an unintentional gap in that it does not explicitly include language which allows the acute or post-acute attending physician to inform the certifying physician regarding his or her face-to-face encounters with the patient.

Therefore, for patients admitted to home health upon discharge from a hospital or post-acute setting, we propose to allow the physician who attended to the patient in the hospital or post-acute setting to inform the certifying physician regarding their encounters with the patient to satisfy the face-to-face encounter requirement, much like an NPP currently can.

In addition to meeting the goals of the face-to-face encounter provision, we believe this proposed policy change will result in enhanced communication between the attending and certifying physicians. We believe this enhanced communication will result in an improved transition of care from the hospital or post-acute setting to the home health setting. Improving a patient's transition from one healthcare setting to another is widely regarded to be directly related to improved patient care and improved patient outcomes. We believe that this policy change encourages the attending acute or post-acute physician who is best informed of the patient's most current clinical condition to collaboratively communicate the patient's need for home health services to the certifying physician. Because a standard protocol of communication or documentation is not mandated between the acute or post-acute physician and a patient's community physician, we believe the additional flexibility with the face-to-face encounter will encourage increased communication between the physicians and better care coordination for the patient. Increased physician

communication regarding the patient's clinical condition fits within the framework of Congress' goals associated with the face-to-face encounter requirement.

We propose to revise § 424.22(a)(1)(v) so that the certifying physician's documentation of the face-to-face encounter clearly states that either the certifying physician himself or herself, the permitted NPP, or, for patients admitted to home health immediately after an acute or post-acute stay, the attending acute or post-acute physician, has had a face-to-face encounter with the patient. We propose that the attending acute or post-acute physician must communicate the clinical findings of the face-to-face encounters with the patient to the certifying physician, so that the certifying physician could document the face-to-face encounter accordingly, as part of the signed certification. Further, we are proposing to simplify the regulation text at § 424.22(a)(1)(v)(A) as some found the current regulation text confusing as it relates to the need for NPPs to document their encounters with the patient. Some confused this documentation, which is required of all practitioners who see Medicare patients, with the face-to-face encounter documentation which is part of the certification. Therefore, we propose to revise in § 424.22(a)(1)(v)(A) that the nonphysician practitioner or the attending acute or post-acute physician performing the face-to-face encounter must communicate the clinical findings of that face-to-face patient encounter to the certifying physician.

We propose implementing the above face-to-face encounter provision for starts of care beginning January 1, 2012 and later.

#### *G. Payment Reform: Home Health Study and Report*

Section 3131(d) of the Affordable Care Act requires the Secretary to conduct a study on home health agency costs of providing access to care to low-income Medicare beneficiaries or beneficiaries in medically underserved areas, and in treating beneficiaries with varying levels of severity of illness (specifically, patients with "high levels of severity of illness"). As part of the study, we may analyze methods to revise the current Home Health Prospective Payment System (HH PPS) to ensure access to care and better account for costs for these patients.

The study may analyze the need for payment adjustments for services that involve either more or fewer resources than are reflected in the current HH PPS; changes to reflect resources

involved with providing home health services to low-income Medicare beneficiaries or Medicare beneficiaries residing in medically underserved areas, and ways outlier payments could be revised to reflect costs of treating Medicare beneficiaries with high levels of severity of illness. Section 3131(d) of the Affordable Care Act also allows for the study to investigate other issues with the payment system as the Secretary determines appropriate. We plan for the study to evaluate the current HH PPS and develop payment reform options which might minimize vulnerabilities and more accurately align payment with patient resource costs. No later than March 1, 2014, we must deliver a Report to Congress regarding the study, which may include potential recommendations for revisions to the HH PPS, recommendations for legislation and administrative action and recommendations for whether additional research is needed.

The Affordable Care Act study provision was enacted to address concerns that some beneficiaries are at risk of not having access to Medicare home health services and that the current HH PPS encourages providers to adopt selective admission patterns to achieve higher margins.

Congress also provided CMS with the authority to conduct a separate demonstration project to test recommended payment system changes resulting from this study.

To accomplish these goals, in the fall of 2010 we awarded a contract to set the foundation for the study and develop a study analytic approach. Progress to date includes: (1) Reviewing research relevant to the goals of the study; (2) establishing and convening a technical expert panel comprised of home health industry stakeholders, subject matter experts, and researchers to obtain input regarding the study analytic plan (specifically, we solicited input from the panel regarding approaches to define and study these vulnerable populations which may experience difficulties accessing home health care); (3) hosting Open Door Forums to solicit additional input on the study analytic design from HHAs, providers, and trade associations; and (4) currently performing investigatory data analysis and finishing the analytic design. Materials related to the contractor's findings are available at [http://www.cms.gov/HomeHealthPPS/Downloads/HHPPS\\_LiteratureReview.pdf](http://www.cms.gov/HomeHealthPPS/Downloads/HHPPS_LiteratureReview.pdf).

This summer, we plan to award another contract that will build upon the foundation established. Specifically, this contract will refine the analytic

plan, perform the detailed analysis and ultimately recommend payment model options. We will provide updates regarding our progress in future rulemaking and open door forums.

#### *H. International Classification of Diseases 10th Edition (ICD-10) Coding*

Effective March 17, 2009, CMS finalized its policies for the HIPAA Administrative Simplification: Modifications to the Medical Data Code Set Standards to Adopt ICD-10-CM and ICD-10-PCS (74 FR 3328). The March 17, 2009 final rule modifies the standard medical data code sets for coding diagnoses by adopting the International Classification of Disease, 10th Revision, Clinical Modification (ICD-10-CM) for diagnosis coding, including the Official ICD-10-CM Guidelines for Coding and Reporting. These new codes replace the International Classification of Diseases, 9th Revision, Clinical Modification, Volumes 1 and 2, including the Official ICD-9-CM Guidelines for Coding and Reporting. Entities are required to have implemented the adopted policies by October 1, 2013. On October 1, 2013, the ICD-9 code sets used to report medical diagnoses will be replaced by the ICD-10 code sets. In preparation for the transition to the use of ICD-10-CM codes, CMS is currently undergoing extensive efforts to update the Medicare payment systems.

One of the key activities identified under this transition to ICD-10-CM codes is the need for CMS to review and update the payment systems which currently use ICD-9-CM codes. Home Health Agencies report ICD-9-CM codes for their patients through OASIS-C. HHAs enter data (including the ICD-9-CM codes) collected from their patients' OASIS assessments into a data collection software tool. For Medicare patients, the data collection software invokes HH PPS Grouper software to assign a Health Insurance Prospective Payment System (HIPPS) code on the Medicare HH PPS bill, ultimately enabling CMS' claims processing system to reimburse the HHA for services provided to patients receiving Medicare's home health benefit. The HH PPS Grouper currently utilizes ICD-9-CM codes to calculate the HIPPS code. Effective October 1, 2013, the HH PPS Grouper will utilize the ICD-10-CM codes to calculate the HIPPS code.

We have been working with the HHRG maintenance contractor to revise the HHRG to accommodate ICD-10-CM codes, as well as identify the appropriate ICD-10-CM codes to be included in each diagnosis group within the HHRG. In addition, we have also contracted with Abt Associates to assist

with resolving the transition of certain codes that may be mapped to more than one diagnosis code under ICD-10-CM.

To assist home health agencies and their vendors in preparing for this transition, the Agency is committed to providing information for transitioning the HHRG to accommodate ICD-10-CM codes effective October 1, 2013. The Agency will update providers and vendors through the ICD-10-CM National Provider outreach calls on our conversion plans. Additional detail concerning teleconference registration is available at <http://www.cms.gov/ICD10/Tel10/list.asp?intNumPerPage=20&submit=Go>. Further details pertaining to our plans will be announced through the National Provider outreach calls.

We will provide a proposed list of ICD-10-CM codes for the HHRG through the ICD-10 section of the Web site. Specific dates will be announced through the National Provider outreach calls. The preliminary plans include publishing the proposed list of ICD-10-CM codes for the HHRG by October 1, 2011, for industry review, as well as describing our testing approach for the HHRG to accommodate and process ICD-10-CM codes through the ICD-10 section of the CMS Web site. The objective of the ICD-10-CM HHRG testing is to verify that all properly formatted input data containing ICD-10-CM diagnosis codes will produce the expected output. The HHRG maintenance contractor will convert current OASIS-C records to their translated ICD-10-CM codes to determine that appropriate outputs are achieved. CMS and the HHRG maintenance contractor will review the results of the testing to determine if additional testing is required.

In addition, in April 2013, we plan to share the ICD-10-CM HHRG software with those vendors and home health agencies that have agreed to serve as Beta Testers and get their feedback regarding the software's functionality. Issues and concerns noted by the Beta Testers will be reviewed and addressed by the HHRG Maintenance Contractor in consultation with CMS.

CMS plans to release the final version of the ICD-10-CM HHRG in July 2013 to permit HHAs and their vendors sufficient time to install the software.

#### *I. Clarification To Benefit Policy Manual Language on "Confined to the Home" Definition*

To address the recommended changes of the Office of Inspector General (OIG) to the home health benefit policy manual, CMS is proposing to clarify its "confined to the home" definition to

more accurately reflect the definition as articulated in the Act. Further clarification of the "confined to the home" definition will not only ensure statutory compatibility, but will also strengthen the position of the Government in applicable court cases. We propose to realign the existing manual criteria with the statute to create a clearer and more accurate "confined to the home" definition. We believe that such changes will strengthen our manual's definition of "confined to the home", providing more definitive guidance to home health agencies for compliance with this requirement.

We propose to move the requirement that the patient need supportive devices, transportation, etc., to the beginning of section 30.1.1 of the Chapter 7 Home Health Benefit Policy Manual as a necessary requirement to be considered "confined to the home." Further, we propose to remove vague terms from section 30.1.1, such as "generally speaking," to ensure clear and specific requirements for the definition. These changes more closely align our policy manual with the Act to prevent confusion or distortion of requirements and promote a clearer enforcement of the statute. As such, we propose that section 30.1.1 begin with the following, revised language: "30.1.1—Patient Confined to the Home."

For a patient to be eligible to receive covered home health services under both Part A and Part B, the statute requires that a physician certify in all cases that the patient is confined to his/her home. For purposes of the statute, an individual shall be considered "confined to the home" (that is, homebound) if the following exist:

(1) The individual has a condition due to an illness or injury that restricts his or her ability to leave their place of residence except with: the aid of supportive devices such as crutches, canes, wheelchairs, and walkers; the use of special transportation; or the assistance of another person; or if leaving home is medically contraindicated.

(2) The individual does not have to be bedridden to be considered "confined to the home". However, the condition of the patient should be such that there exists a normal inability to leave home and, consequently, leaving home would require a considerable and taxing effort.

If the patient does in fact leave the home, the patient may nevertheless be considered homebound if the absences from the home are infrequent or for periods of relatively short duration, or are attributable to the need to receive health care treatment. Absences

attributable to the need to receive health care treatment include, but are not limited to:

- Attendance at adult day centers, licensed or certified by a State or accredited to furnish adult day-care services in the State, to receive therapeutic, psychological, or medical treatment;
- Ongoing receipt of outpatient kidney dialysis; or
- The receipt of outpatient chemotherapy or radiation therapy.

Any absence of an individual from the home attributable to the need to receive health care treatment, including regular absences for the purpose of participating in therapeutic, psychosocial, or medical treatment in an adult day-care program that is licensed or certified by a State, or accredited to furnish adult day-care services in a State, shall not disqualify an individual from being considered to be confined to his home. Any other absence of an individual from the home shall not so disqualify an individual if the absence is of an infrequent or of relatively short duration. For purposes of the preceding sentence, any absence for the purpose of attending a religious service shall be deemed to be an absence of infrequent or short duration. It is expected that in most instances, absences from the home that occur will be for the purpose of receiving health care treatment. However, occasional absences from the home for nonmedical purposes, for example, an occasional trip to the barber, a walk around the block or a drive, attendance at a family reunion, funeral, graduation, or other infrequent or unique event would not necessitate a finding that the patient is not homebound if the absences are undertaken on an infrequent basis or are of relatively short duration and do not indicate that the patient has the capacity to obtain the health care provided outside rather than in the home.

Some examples of homebound patients that illustrate the factors used to determine whether a homebound condition exists would be: \* \* \*

### III. Collection of Information Requirements

This document does not impose any new information collection and recordkeeping requirements. The information collection requirements discussed in proposed § 424.22 are currently approved under OMB control number 0938–1083. The information collection requirements discussed in proposed § 484.250, the OASIS–C and Home Health Care CAHPS, are currently approved under OMB control numbers 0938–0760 and 0938–1066, respectively. Consequently, it need not be reviewed

by the Office of Management and Budget under the authority of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35).

### IV. Response to Comments

Because of the large number of public comments we normally receive on **Federal Register** documents, we are not able to acknowledge or respond to them individually. We will consider all comments we receive by the date and time specified in the **DATES** section of this preamble, and, when we proceed with a subsequent document, we will respond to the comments in the preamble to that document.

### V. Regulatory Impact Analysis

#### A. Introduction

We have examined the impact of this rule as required by Executive Order 12866 on Regulatory Planning and Review (September 30, 1993), Executive Order 13563 on Improving Regulation and Regulatory Review (January 18, 2011), the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96–354), section 1102(b) of the Act, section 202 of the Unfunded Mandates Reform Act of 1995 (March 22, 1995; Pub. L. 104–4), and the Congressional Review Act (5 U.S.C. 804(2)).

Executive Orders 12866 and 13563 direct 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). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. A regulatory impact analysis (RIA) must be prepared for major rules with economically significant effects (\$100 million or more in any 1 year). This proposed rule has been designated an “economically significant” rule under section 3(f)(1) of Executive Order 12866. Accordingly, the rule has been reviewed by the Office of Management and Budget.

#### B. Statement of Need

This proposed rule adheres to the following statutory requirements. Section 4603(a) of the BBA mandated the development of a HH PPS for all Medicare-covered HH services provided under a plan of care (POC) that were paid on a reasonable cost basis by adding section 1895 of the Act, entitled “Prospective Payment For Home Health

Services”. Section 1895(b)(1) of the Act requires the Secretary to establish a HH PPS for all costs of HH services paid under Medicare. In addition, section 1895(b)(3)(A) of the Act requires (1) the computation of a standard prospective payment amount include all costs for HH services covered and paid for on a reasonable cost basis and that such amounts be initially based on the most recent audited cost report data available to the Secretary, and (2) the standardized prospective payment amount be adjusted to account for the effects of case-mix and wage levels among HHAs. Section 1895(b)(3)(B) of the Act addresses the annual update to the standard prospective payment amounts by the HH applicable percentage increase. Section 1895(b)(4) of the Act governs the payment computation. Sections 1895(b)(4)(A)(i) and (b)(4)(A)(ii) of the Act require the standard prospective payment amount to be adjusted for case-mix and geographic differences in wage levels. Section 1895(b)(4)(B) of the Act requires the establishment of appropriate case-mix adjustment factors for significant variation in costs among different units of services. Lastly, section 1895(b)(4)(C) of the Act requires the establishment of wage adjustment factors that reflect the relative level of wages, and wage-related costs applicable to HH services furnished in a geographic area compared to the applicable national average level.

Section 1895(b)(5) of the Act, as amended by section 3131 of the Affordable Care Act, gives the Secretary the option to make changes to the payment amount otherwise paid in the case of outliers because of unusual variations in the type or amount of medically necessary care. Section 1895(b)(3)(B)(v) of the Act requires HHAs to submit data for purposes of measuring health care quality, and links the quality data submission to the annual applicable percentage increase. Also, section 3131 of the Affordable Care Act requires that HH services furnished in a rural area (as defined in section 1886(d)(2)(D) of the Act) with respect to episodes and visits ending on or after April 1, 2010, and before January 1, 2016, receive an increase of 3 percent the payment amount otherwise made under section 1895 of the Act.

#### C. Overall Impact

The update set forth in this proposed rule applies to Medicare payments under HH PPS in CY 2012. Accordingly, the following analysis describes the impact in CY 2012 only. We estimate that the net impact of the proposals in

this rule is approximately \$640 million in CY 2012 savings. The \$640 million impact due to the proposed CY 2012 HH PPS rule reflects the distributional effects of an updated wage index (\$20 million increase) plus the 1.5 percent HH market basket update (\$290 million increase), for a total increase of \$310 million. The 5.06 percent case-mix adjustment applicable to the national standardized 60-day episode rates (\$950 million decrease) plus the combined wage index and market basket (\$310 million increase) results in a total savings of \$640 million in CY 2012. The \$640 million in savings is reflected in the first row of column 3 of Table 32 as a 3.35 percent decrease in expenditures when comparing the current CY 2011 HH PPS to the proposed CY 2012 HH PPS.

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 entities. For purposes of the RFA, small entities include small businesses, nonprofit organizations, and small governmental jurisdictions. Most hospitals and most other providers and suppliers are small entities, either by nonprofit status or by having revenues of less than \$7.0 million to \$34.5 million in any 1 year. For the purposes of the RFA, our updated data show that approximately 98 percent of HHAs are considered to be small businesses according to the Small Business Administration's size standards with total revenues of \$13.5 million or less in any 1 year. Individuals and States are not included in the definition of a small entity. The Secretary has determined that this proposed rule would have a significant economic impact on a substantial number of small entities. We define small HHAs as those with total revenues of \$13.5 million or less in any 1 year. Analysis of Medicare cost report data reveals a 3.63 percent decrease in estimated payments to small HHAs in CY 2012.

A discussion on the alternatives considered is presented in section V.E. below. The following analysis, with the rest of the preamble, constitutes our initial RFA analysis. We solicit comment on the RFA analysis provided.

In this proposed rule, we have stated that our analysis reveals that nominal case-mix continues to grow under the HH PPS. Specifically, nominal case-mix has grown from the 17.45 percent growth identified in our analysis for CY

2011 rulemaking to 19.03 percent for this year's rulemaking (see further discussion in sections II.A. and II.B.). Because we have not yet accounted for all of the increase in nominal case-mix, that is case-mix that is not real (real being related to treatment of more resource intense patients), case-mix reductions are necessary. As such, we believe it is appropriate to reduce the HH PPS rates now, so as to move towards more accurate payment for the delivery of home health services. Our analysis shows that smaller HHAs are impacted slightly more than are larger HHAs by the proposed provisions of this 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 603 of 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 proposed rule applies to HHAs. Therefore, the Secretary has determined that this proposed rule would not have a significant economic impact on the operations of small rural hospitals.

Section 202 of the Unfunded Mandates Reform Act of 1995 (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 2011, that threshold is approximately \$136 million. This proposed rule is not anticipated to have an effect on State, local, or tribal governments in the aggregate, or by the private sector, of \$136 million or more.

#### *D. Detailed Economic Analysis*

This proposed rule sets forth updates to the HH PPS rates contained in the CY 2011 HH PPS final rule. The impact analysis of this proposed rule presents the estimated expenditure effects of policy changes proposed in this rule. We use the latest data and best analysis available, but we do not make adjustments for future changes in such variables as number of visits or case-mix.

This analysis incorporates the latest estimates of growth in service use and payments under the Medicare home

health benefit, based on Medicare claims from 2009. We note that certain events may combine to limit the scope or accuracy of our impact analysis, because such an analysis is future-oriented and, thus, susceptible to errors resulting from other changes in the impact time period assessed. Some examples of such possible events are newly-legislated general Medicare program funding changes made by the Congress, or changes specifically related to HHAs. In addition, changes to the Medicare program may continue to be made as a result of the Affordable Care Act, or new statutory provisions. Although these changes may not be specific to the HH PPS, the nature of the Medicare program is such that the changes may interact, and the complexity of the interaction of these changes could make it difficult to predict accurately the full scope of the impact upon HHAs.

Table 32 represents how HHA revenues are likely to be affected by the policy changes proposed in this rule. For this analysis, we used linked home health claims and OASIS assessments; the claims represented a 20-percent sample of 60-day episodes occurring in CY 2009. The first column of Table 32 classifies HHAs according to a number of characteristics including provider type, geographic region, and urban and rural locations. The second column shows the payment effects of the wage index only. The third column shows the payment effects of all the proposed policies outlined earlier in this rule. For CY 2012, the average impact for all HHAs due to the effects of the wage index is a 0.10 percent increase in payments. The overall impact for all HHAs, in estimated total payments from CY 2011 to CY 2012, is a decrease of approximately 3.35 percent.

As shown in Table 32, the combined effects of all of the changes vary by specific types of providers and by location. Rural and voluntary non-profit agencies fare considerably better than urban and proprietary agencies as a result of the proposed provisions of this rule. We believe this is due mainly to the distributional effects of the recalibration of the case-mix weights as described in section II.A of the proposed rule. Essentially, these impacts suggest that under the current case-mix system, rural and voluntary non-profit agencies bill less for high therapy episodes than do urban and proprietary agencies.

TABLE 32—PROPOSED HOME HEALTH AGENCY POLICY IMPACTS FOR CY 2012, BY FACILITY TYPE AND AREA OF THE COUNTRY

Group	Comparisons	Impact of all CY 2012 policies <sup>1</sup> (percent)
	Percent change due to the effects of the updated wage index (percent)	
All Agencies .....	0.10	-3.35
Type of Facility		
Free-Standing/Other Vol/NP .....	0.29	-0.49
Free-Standing/Other Proprietary .....	0.08	-4.68
Free-Standing/Other Government .....	-0.13	-2.13
Facility-Based Vol/NP .....	-0.03	0.17
Facility-Based Proprietary .....	0.03	-3.02
Facility-Based Government .....	-0.06	-0.59
Subtotal: Freestanding .....	0.12	-3.82
Subtotal: Facility-based .....	-0.03	-0.21
Subtotal: Vol/NP .....	0.17	-0.24
Subtotal: Proprietary .....	0.08	-4.65
Subtotal: Government .....	-0.10	-1.38
Type of Facility (Rural * Only)		
Free-Standing/Other Vol/NP .....	1.88	0.94
Free-Standing/Other Proprietary .....	0.25	-3.74
Free-Standing/Other Government .....	-0.21	-1.39
Facility-Based Vol/NP .....	-0.20	0.20
Facility-Based Proprietary .....	-0.30	-2.12
Facility-Based Government .....	-0.05	-0.27
Type of Facility (Urban * Only)		
Free-Standing/Other Vol/NP .....	0.05	-0.70
Free-Standing/Other Proprietary .....	0.06	-4.83
Free-Standing/Other Government .....	-0.02	-3.13
Facility-Based Vol/NP .....	0.02	0.16
Facility-Based Proprietary .....	0.25	-3.65
Facility-Based Government .....	-0.09	-0.99
Type of Facility (Urban* or Rural*)		
Rural .....	0.35	-2.15
Urban .....	0.05	-3.57
Facility Location: Region*		
North .....	0.68	0.71
South .....	-0.08	-4.97
Midwest .....	-0.09	-3.91
West .....	0.36	-0.82
Outlying .....	0.43	-3.05
Facility Location: Area of the Country		
New England .....	1.35	0.69
Mid Atlantic .....	0.30	0.71
South Atlantic .....	-0.49	-5.77
East South Central .....	-0.66	-6.28
West South Central .....	0.51	-3.76
East North Central .....	-0.22	-4.41
West North Central .....	0.49	-1.63
Mountain .....	0.32	-4.22
Pacific .....	0.37	0.68
Outlying .....	0.43	-3.05
Facility Size: (Number of First Episodes)		
< 19 .....	0.32	-3.05
20 to 49 .....	0.32	-3.41
50 to 99 .....	0.33	-3.57
100 to 199 .....	0.16	-3.81
200 or More .....	-0.02	-3.15
Facility Size: (estimated total revenue)		
Small (estimated total revenue <= \$13.5 million) .....	0.13	-3.63
Large (estimated total revenue > \$13.5 million) .....	-0.02	-2.10

**Note:** Based on a 20 percent sample of CY 2009 claims linked to OASIS assessments.

\* Urban/rural status, for the purposes of these simulations, is based on the wage index on which episode payment is based. The wage index is based on the site of service of the beneficiary.

**REGION KEY:**

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Middle Atlantic: Pennsylvania, New Jersey, New York; South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin; East South Central: Alabama, Kentucky, Mississippi, Tennessee; West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; West South Central: Arkansas, Louisiana, Oklahoma, Texas; Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming; Pacific: Alaska, California, Hawaii, Oregon, Washington; Outlying: Guam, Puerto Rico, Virgin Islands.

<sup>1</sup> Percent change due to the effects of the updated wage index, the 1.5 percent proposed market basket update, the 5.06 percent case-mix adjustment, and the 3 percent rural add-on.

E. Alternatives Considered

As described in section V.C. above, if we implement the case-mix adjustment for CY 2012 along with the market basket update and the updated wage index, the aggregate impact would be a net decrease of \$640 million in payments to HHAs, resulting from a \$310 million increase due to the updated wage index and the market basket update and a \$950 million reduction from the 5.06 percent case-mix adjustment. If we were to not implement the case-mix adjustment for CY 2012, Medicare would pay an estimated \$950 million more to HHAs in CY 2012, for a net increase in payments to HHAs in CY 2012 of \$310 million (market basket update and updated wage index). We believe that not implementing a case-mix adjustment, and paying out an additional \$950 million to HHAs when those additional payments are not reflective of HHAs treating sicker patients, would not be in line with the intent of the HH PPS, which is to pay accurately and appropriately for the delivery of home health services to Medicare beneficiaries.

Section 1895(b)(3)(B)(iv) of the Act gives CMS the authority to implement payment reductions for nominal case-mix growth, changes in case-mix that are unrelated to actual changes in patient health status. We are committed to monitoring the accuracy of payments to HHAs, which includes the measurement of the increase in nominal case-mix, which is an increase in case-mix that is not due to patient acuity. As discussed in section II.A. of this rule, we have determined that there is a 19.03 percent nominal case-mix change from 2000 to 2009. To account for the remainder of the 19.03 percent residual increase in nominal case-mix beyond that which has been accounted for in previous payment reductions (2.75 percent in CY 2008 through CY 2010 and 3.79 percent in CY 2011), we have estimated that the percentage reduction to the national standardized 60-day episode rates for nominal case-mix change for CY 2012 would be 5.06 percent.

We believe that the alternative of not implementing a case-mix adjustment to the payment system in CY 2012 to account for the increase in case-mix that is not real would be detrimental to the integrity of the PPS. As discussed in section II.A. of this rule, because nominal case-mix continues to grow (about 1 percent each year in 2006 and

2007, 4 percent in 2008, and 2 percent in 2009), and thus to date we have not accounted for all the increase in nominal case-mix growth, we believe it is appropriate to reduce HH PPS rates now, thereby paying more accurately for the delivery of home health services under the Medicare home health benefit. The other reduction to HH PPS payments, a 1.0 percentage point reduction to the proposed CY 2012 home health market basket update, is discussed in this rule and is not discretionary as it is a requirement in section 1895(b)(3)(B)(vi) of the Act (as amended by the Affordable Care Act).

We solicit comment on the alternatives considered in this analysis.

F. Accounting Statement and Table

As required by OMB Circular A-4 (available at [http://www.whitehouse.gov/omb/circulars\\_a004\\_a-4](http://www.whitehouse.gov/omb/circulars_a004_a-4)), in Table 16 below, we have prepared an accounting statement showing the classification of the transfers associated with the provisions of this proposed rule. This table provides our best estimate of the decrease in Medicare payments under the HH PPS as a result of the changes presented in this proposed rule.

TABLE 33—ACCOUNTING STATEMENT: CLASSIFICATION OF ESTIMATED TRANSFERS, FROM THE CY 2011 HH PPS TO THE CY 2012 HH PPS

Category	Transfers
Annualized Monetized Transfers.	— \$640 million.
From Whom to Whom?	Federal Government to HH providers.

G. Conclusion

In conclusion, we estimate that the net impact of the proposals in this rule is approximately \$640 million in CY 2012 savings. The \$640 million impact to the proposed CY 2012 HH PPS reflects the distributional effects of an updated wage index (\$20 million increase), the 1.5 percent home health market basket update (\$290 million increase), and the 5.06 percent case-mix adjustment applicable to the national standardized 60-day episode rates (\$950 million decrease). This analysis, together with the remainder of this preamble, provides a Regulatory Impact Analysis.

VI. Federalism Analysis

Executive Order 13132 on Federalism (August 4, 1999) establishes certain requirements that an agency must meet when it promulgates a proposed rule (and subsequent final rule) that imposes substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications. We have reviewed this proposed rule under the threshold criteria of Executive Order 13132, Federalism, and have determined that it would not have substantial direct effects on the rights, roles, and responsibilities of States, local or tribal governments.

List of Subjects

42 CFR Part 409

Health facilities, Medicare.

42 CFR Part 424

Emergency medical services, Health facilities, Health professions, Medicare, Reporting and recordkeeping requirements.

42 CFR Part 484

Health facilities, Health professions, Medicare, Reporting and recordkeeping requirements.

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

PART 409—HOSPITAL INSURANCE BENEFITS

1. The authority citation for part 409 continues to read as follows:

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

Subpart C—Posthospital SNF Care

2. Section 409.42 is amended by revising paragraph (c)(4) to read as follows:

§ 409.42 Beneficiary qualifications for coverage of services.

\* \* \* \* \*

(c) \* \* \*

(4) Occupational therapy services that meet the requirements of § 409.44(c) of this subpart initially qualify for home health coverage as a dependent service as defined in § 409.45(d) of this subpart if the beneficiary's eligibility for home health services has been established by virtue of a prior need for intermittent skilled nursing care, speech-language pathology services, or physical therapy in the current or prior certification

period. Subsequent to an initial covered occupational therapy service, continuing occupational therapy services which meet the requirements of § 409.44(c) of this subpart are considered to be qualifying services.

\* \* \* \* \*

3. Section 409.44 is amended by—

A. Revising the introductory text of paragraph (c).

B. Revising paragraph (c)(2)(i)(D)(2).  
The revisions read as follows:

**§ 409.44 Skilled services requirements.**

\* \* \* \* \*

(c) *Physical therapy, speech-language pathology services, and occupational therapy.* To be covered, physical therapy, speech-language pathology services, and occupational therapy must satisfy the criteria in paragraphs (c)(1) and (2) of this section.

\* \* \* \* \*

(2) \* \* \*

(i) \* \* \*

(D) \* \* \*

(2) Where more than one discipline of therapy is being provided, the qualified therapist from each discipline must provide the therapy service and functionally reassess the patient in accordance with § 409.44(c)(2)(i)(A) of this section during the visit which would occur close to but no later than the 19th visit per the plan of care.

\* \* \* \* \*

**PART 424—CONDITIONS FOR MEDICARE PAYMENT**

4. The authority citation for part 424 continues to read as follows:

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

**Subpart B—Certification and Plan Requirements**

5. Section 424.22 is amended by—

A. Revising the introductory text of paragraph (a)(1)(v).

B. Revising paragraph (a)(1)(v)(A).  
The revisions read as follows:

**§ 424.22 Requirements for home health services.**

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*

(v) The physician responsible for performing the initial certification must document that the face-to-face patient encounter, which is related to the primary reason the patient requires home health services, has occurred no more than 90 days prior to the home health start of care date or within 30 days of the start of the home health care by including the date of the encounter,

and including an explanation of why the clinical findings of such encounter support that the patient is homebound and in need of either intermittent skilled nursing services or therapy services as defined in § 409.42(a) and (c) of this subpart, respectively. Under sections 1814(a)(2)(C) and 1835(a)(2)(A) of the Act, the face-to-face encounter must be performed by the certifying physician himself or herself, by the nurse practitioner, a clinical nurse specialist (as those terms are defined in section 1861(aa)(5) of the Act) who is working in collaboration with the physician in accordance with State law, a certified nurse midwife (as defined in section 1861(gg) of the Act) as authorized by State law, a physician assistant (as defined in section 1861(aa)(5) of the Act) under the supervision of the physician, or, for patients admitted to home health immediately after an acute or post-acute stay, the attending acute or post-acute physician. The documentation of the face-to-face patient encounter must be a separate and distinct section of, or an addendum to, the certification, and must be clearly titled, dated and signed by the certifying physician.

(A) The nonphysician practitioner or the attending acute or post-acute physician performing the face-to-face encounter must communicate the clinical findings of that face-to-face patient encounter to the certifying physician.

\* \* \* \* \*

**PART 484—HOME HEALTH SERVICES**

6. The authority citation for part 484 continues to read as follows:

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

**Subpart E—Prospective Payment System for Home Health Agencies**

7. Section 484.250 is revised to read as follows:

**§ 484.250 Patient assessment data.**

(a) *Data submission.* The following data must be submitted to CMS:

(1) An HHA must submit the OASIS—C data described at § 484.55(b)(1) of this part for CMS to administer the payment rate methodologies described in § 484.215, § 484.230, and § 484.235 of this subpart, and meet the quality reporting requirements of section 1895(b)(3)(B)(v) of the Act.

(2) An HHA must submit the Home Health Care CAHPS survey data for CMS to administer the payment rate methodologies described in § 484.225(i) of this subpart, and meet the quality

reporting requirements of section 1895(b)(3)(B)(v) of the Act.

(b) *Patient count.* An HHA that has less than 60 eligible unique HHCAHPS patients annually must annually submit to CMS their total HHCAHPS patient count to CMS to be exempt from the HHCAHPS reporting requirements for a calendar year period.

(c) *Survey requirements.* An HHA must contract with an approved, independent HHCAHPS survey vendor to administer the HHCAHPS Survey on its behalf.

(1) CMS approves an HHCAHPS survey vendor if such applicant has been in business for a minimum of 3 years and has conducted surveys of individuals and samples for at least 2 years.

(i) For HHCAHPS, a “survey of individuals” is defined as the collection of data from at least 600 individuals selected by statistical sampling methods and the data collected are used for statistical purposes.

(ii) All applicants that meet these requirements will be approved by CMS.

(2) No organization, firm, or business that owns, operates, or provides staffing for a HHA is permitted to administer its own Home Health Care CAHPS (HHCAHPS) Survey or administer the survey on behalf of any other HHA in the capacity as an HHCAHPS survey vendor. Such organizations will not be approved by CMS as HHCAHPS survey vendors.

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

Dated: June 10, 2011.

**Donald M. Berwick,**

*Administrator, Centers for Medicare & Medicaid Services.*

Approved: June 24, 2011.

**Kathleen Sebelius,**

*Secretary, Department of Health and Human Services.*

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