

## **Medicare 2011 OPSS Final Rule Claims Accounting**

Calculating OPSS payment rates consists of calculating relative resource cost and calculating budget neutrality adjustments, which are applied to estimates of resource cost and the conversion factor to create a budget neutral prospective payment system. The purpose of the following discussion is to provide a detailed overview of CMS manipulation of the CY 2009 claims data to produce the final prospective CY 2011 OPSS payment rates. The following information supports an already detailed discussion of data manipulation in the CY 2011 OPSS/ASC final rule with comment period. This discussion is divided into two parts: the traditional accounting of claims behind median cost calculations and an accounting of claims behind the budget neutrality, outlier, and impact calculations.

### **PART 1 - MEDIAN COST CALCULATIONS**

CMS used information from 103.8 million single procedure, generated single procedure, and generated single “session” composite claim records to set the final APC rates to be paid under Medicare OPSS for CY 2011.<sup>1</sup> This number of “pseudo” and “natural” single bills is comparable to the 98.8 million single bills that we used in the CY 2010 OPSS/ASC final rule with comment period. The increase in claims data used is largely attributable to an increase in the actual number of claims, although processes such as the change to examine conditional packaging at the end of the “pseudo” single creation process contribute to that increase as well. We now estimate that we used some portion of the data from 95 percent of the CY 2009 claims containing services payable under the OPSS for CY 2011 rate setting.

For the CY 2011 OPSS, we retain all HCPCS codes on the CY 2010 bypass list and include HCPCS codes that are not on the CY 2010 bypass list that, using either CY 2010 final rule or February 2010 APC Panel data, met the previously established empirical criteria for inclusion on the bypass list. We typically include codes that violate our empirical criteria in response to public comment recommending certain codes and when our clinicians believe that the services would rarely have packaging and that any packaging associated with the services would be very limited due to the clinical nature of the service.

Attached is a narrative description of the accounting of claims used in the setting of payment rates for Medicare’s 2011 Outpatient Prospective Payment System (OPSS). Payment rates under OPSS are based on the median cost of all services (*i.e.* HCPCS codes) in an APC. As described in detail in the material that follows, median costs were calculated from claims for services paid under the Medicare OPSS and cost report data for the hospitals whose claims were used. The medians were converted to payment weights by dividing the median for each APC (a group of HCPCS codes) by the median cost for APC 606, the mid-level outpatient visit APC in CY 2011. As discussed in Part 2 below, the resulting unscaled weights were scaled for budget neutrality to ensure that the effect of the recalibration of APC weights for CY 2011 was removed. The scaled

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<sup>1</sup> Final CY 2011 rates are based on 2009 calendar year outpatient claims data, specifically final action claims processed through the common working file as of June 30, 2010. Final CY 2011 rates were based on one year (January 1- December 31) of 2009 outpatient claims data.

weights were multiplied by the CY 2011 conversion factor to determine the national unadjusted payment rate for the APCs for final rule CY 2011. Calculation of payment rates for drugs and biologicals are an exception, as their payment rates are a percentage of average sales price and are not scaled.

The purpose of this part of the claims accounting is to help the public understand the order in which CMS processed claims to produce the final CY 2011 OPPTS median costs and the reasons that not all claims could be used.

#### General Information:

In order to calculate the median APC costs that form the basis of OPPTS payment rates, CMS must isolate the specific resources associated with a single unique payable procedure (which has a HCPCS code) in each APC. Much of the following description, Pre-stage 1 through Stage 3, covers the activity by which CMS 1) extracts the direct charge (i.e. a charge on a line with a separately paid HCPCS code) and the supporting charge(s) (i.e. a charge on a line with a packaged HCPCS or packaged revenue code) for a single, major payable procedure for one unit of the procedure and 2) packages the supporting charges with the charges for the single unit of the major procedure to acquire a full charge for the single unit of the major procedure. In order to calculate the median costs for composite APCs, CMS must isolate the specific resources associated with a single “session” of the composite service. Although these single session claims have more than one payable service, the direct charge for these services would be combined with supporting packaged charges to identify a full charge for the composite session.

CMS estimates resource costs from the billed charges by applying a cost-to-charge ratio (CCR) to adjust the charges to cost. CMS uses the most recent CCRs in the CMS Hospital Cost Report Information System (HCRIS) file in the calculation of the payment weights. Wherever possible, department CCRs rather than each hospital’s overall CCR are applied to charges with related revenue codes (*e.g.* pharmacy CCR applied to charges with a pharmacy revenue code). The order of matching department CCRs to revenue codes is laid out in the OPPTS revenue code-to-cost center crosswalk

([http://www.cms.hhs.gov/HospitalOutpatientPPS/03\\_crosswalk.asp#TopOfPage](http://www.cms.hhs.gov/HospitalOutpatientPPS/03_crosswalk.asp#TopOfPage)). We note that the revenue code-to-cost center crosswalk was updated for the CY 2010 OPPTS based on our comprehensive review of NUBC revenue code use, described in section II.A. of the CY 2010 OPPTS/ASC final rule with comment period. In general, CMS carries the following data elements from the claim through the weight setting process: revenue code, date of service, HCPCS code, charges (for all lines with a HCPCS code or if there is no HCPCS code, with an allowed revenue code), and units. Some specific median calculations may require more data elements.

#### Definitions of terms used:

“Excluded” means the claims were eliminated from further use.

“Removed to another file” means that we removed them from the general process but put them on another file to be used in a different process; they did not remain in the main run but were not eliminated because the claims were used to set specific medians.

“Copy to another file” means that we copied information off the claims but did not eliminate any of the copied information.

“STAGE” means a set of activities that are done in the same run or a series of related runs; the STAGE numbers follow the stages identified in a spreadsheet that accounts for the claims.

“\*” Indicates a component of the limited data set (LDS) available for purchase from CMS).

Pre-STAGE 1: Identified gross outpatient claim population used for OPPTS payment and applied the hospital CCRs.

Pulled claims for calendar year 2009 from the national claims history, n=147,073,262 records with a total claim count of 144,777,916. This is not the population of claims paid under OPPTS, but all outpatient claims processed by fiscal intermediaries.

Excluded claims with condition code 04, 20, 21, 77 (n= 431,906). These are claims that providers submitted to Medicare knowing that no payment will be made. For example, providers submit claims with a condition code 21 to elicit an official denial notice from Medicare and document that a service is not covered.

Excluded claims with more than 300 lines (n=2,006)

Excluded claims for services furnished in Maryland, Guam, US Virgin Islands, American Samoa and the Northern Marianas. (n= 2,021,439).

Balance = 142,322,565

Divided claims into three groups:

- 1) Claims that were not bill type 12X, 13X (hospital bill types), 14X (laboratory specimen bill types), or 76X (CMHC bill types). Other outpatient bill types, such as ASCs, are not paid under OPPTS and, therefore, these claims were not used to set OPPTS payment. (n=32,615,171)
- 2) Bill types 12X, 13X, or 14X. 12X and 13X claims are hospital outpatient claims. Claims with bill type 14X are laboratory specimen bill types, of which we use a subset for the limited number of services in these claims that are paid under the OPPTS. (n=109,322,733)
- 3) Bill type 76X (CMHC) (These claims are used to set the per diem partial hospitalization rate for CMHCs.) (n=384,661)

Balance for Bill Types 12X, 13X, and 14X=109,322,733

Incorporated all new Category I and III CPT codes and new Level II HCPCS codes that were effective as of April 1, 2010, July 1, 2010, and October 1, 2010 or will be effective January 1, 2011

Applied hospital CCRs to claims and flagged hospitals with CCRs that will be excluded in Stage 1 below. We used the most recent CCRs that were available in the CMS HCRIS system.

STAGE 1: Further refined the population of claims to those with a valid CCR and removed claims for those procedures with unique packaging and median calculation processes to separate files.

Began with the set of claims with bill types 12X, 13X, and 14X, without Maryland, Guam or USVI, and with flags for invalid CCRs set (n=109,322,733).

Excluded claims with CCRs that were flagged as invalid in Pre -Stage 1. These included claims for hospitals without a CCR, for hospitals paid an all inclusive rate, for critical access hospitals, for hospitals with obviously erroneous CCRs (greater than 90 or less than .0001), and for hospitals with CCRs that were identified as outliers (3 standard deviations from the geometric mean after removing error CCRs) (n=3,417,860).

\*Identified claims with condition code 41 and removed to another file, (n=58,443). These claims were used to calculate the partial hospitalization per diem rate for hospital-based partial hospitalization programs.

Excluded claims without a HCPCS code (n=19,727).

Removed to another file claims that contain nothing but flu and PPV vaccine (n=488,559).

We assessed each line on the claim to determine whether the charge was reported under a revenue code that we allow, for purposes of OP/ASC rate setting, on the OP/ASC revenue code-to-cost center crosswalk. If the revenue code is allowed, we applied the most specific available hospital specific CCR to the charge on the line. See the OP/ASC revenue code-to-cost center crosswalk for the hierarchy of cost centers for each revenue code; where none of the revenue code specific cost centers applied, we used the hospital specific overall ancillary OP/ASC CCR to reduce the charges on the line to costs. If the revenue code under which a charge is reported is not allowed for OP/ASC rate setting, that charge is not reduced to cost nor used in calculation of the statistics that determine the OP/ASC weight. Typically, the OP/ASC does not allow revenue codes for OP/ASC rate setting that also are not allowed for payment by the Integrated Outpatient Code Editor (IOCE).

Balance = 105,338,144

Copied line items for drugs, radiopharmaceuticals, blood, and brachytherapy sources (the lines stay on the claim but are copied off onto another file) to a separate file. No claims were deleted. Lines copied, (n=298,683,240). We use these line items to calculate a per unit median and mean, and a per day median and mean for drugs (including therapeutic radiopharmaceuticals) and blood. We trimmed units at +/- 3 standard deviations from the geometric mean unit, and then +/- 3 standard deviations from the geometric mean unit cost, before calculating the median and mean costs per unit and per day. For drugs and biologicals, we used the July 2010 ASP plus 5 percent and multiplied that amount by the average number of units per day for each drug or biological to arrive at its per day cost. For items that did not have an ASP, we used CY 2009 hospital claims data to determine the per day cost. We use per day cost to determine whether a drug or biological is packaged. For specified covered outpatient drugs and biologicals, we set the combined drug and overhead payment of ASP+5 percent by determining the amount by which aggregate estimated cost exceeds aggregate ASP.

For the CY 2011 OP/ASC, we finalized an adjustment to our cost estimation methodology for separately paid drugs and biologicals that would address charge compression by shifting a portion of the pharmacy overhead cost associated with coded packaged drugs and biologicals with ASP pricing information, \$150 million, to separately payable drugs and biologicals. We used the line-item cost information described above for all HCPCS with ASP pricing information to calculate the ASP+X values for all drugs, separately payable drugs, and packaged drugs. We then allocated a portion of the cost in the coded packaged drugs with ASP pricing information to separately payable drugs as pharmacy overhead and handling cost leading to a payment rate for separately payable drugs of ASP+5 percent.

We also finalized a policy for CY 2011 to redistribute an additional \$50 million of the total cost in our claims data for drugs and biological lacking an ASP, largely for estimated costs associated with uncoded charges billed under pharmacy revenue code series 025X (Pharmacy (also see 063X, an extension of 025X)), 026X (IV Therapy), and 063X (Pharmacy – Extension of 025X). We made this redistribution in addition to our allocation of \$150 million of the cost in the coded packaged drugs with ASP pricing information to separately payable drugs and biologicals as pharmacy overhead and handling cost.

To reflect our CY 2011 with comment period policy to redistribute pharmacy overhead cost from coded packaged drugs and biologicals with an ASP to separately payable drugs and biologicals, we multiplied the estimated cost of each packaged drug or biological with a HCPCS code and ASP pricing information in our CY 2009 claims data by 0.75. To reflect the final rule CY 2011 policy to redistribute a portion of claim cost from packaged drugs and biologicals lacking an ASP, including estimated costs for uncoded pharmacy revenue codes, we multiplied all other packaged drug and biological costs in our CY 2009 claims data, excluding those for diagnostic radiopharmaceuticals, by 0.92. We excluded the cost of diagnostic and therapeutic radiopharmaceuticals from this redistribution. These costs were then redistributed to the total cost of separately payable drugs and biologicals in our CY 2009 claims data leading to a payment rate of ASP+5 percent. For more information, please see sections II.A.2.c. and V.B.3. of the CY 2011 OP/ASC final rule with comment period.

The payment rates for blood and blood products were based on simulated median costs under a different methodology that is explained in the CY 2011 OPPTS/ASC final rule with comment period.

STAGE 2: Excluded claims with codes not payable under OPPTS, conducted initial split of claims into single and multiple bills, and prepared claims for generating pseudo single claims.

Removed lines from claims that had payable status indicators both in the year the claim was billed and in the prospective payment year, which received no payment. This line item based trim, described in section II.A.2.c. of the CY 2011 OPPTS/ASC final rule with comment period, was implemented to ensure that we are using valid claims that represent the cost of payable services to set payment rates for the prospective year. Having logic that requires both the status indicator on the claim and the prospective status indicator to be payable, preserves charges for services that would not have been paid in the claim year but for which some estimate of cost is needed for the prospective year (n=2,207,160). For the CY 2011 OPPTS final rule with comment period, we are excluding line item data for pass-through drugs and biologicals (status indicator "G" for CY 2009 claims data) and non-pass through drugs and biological (status indicator "K" for CY 2009 claims data) that do not receive payment (n=194,116).

Prior to splitting the claims, we identified which status indicator "Q2" codes ("T-packaged") would be paid when appearing with an S, V, or X service. If a Q2 code appeared with a separately paid procedure with a status indicator of T on the same date of service, we identified the code as packaged. If the Q2 code appeared with a separately paid procedure(s) with a status indicator of S, V, or X and no other Q2 codes were on the same date of service we forced the units to 1 and changed the major-minor designation to major, identifying the Q2 code as separately paid. Finally, if more than one Q2 code appeared on a claim with a separately paid procedure(s) with a status indicator of S, V, or X we would rank the Q2 codes using their final rule 2010 APC designations and associated scaled weight. We would change the major-minor designation of the Q2 code with the highest weight to major status and force the units to 1. We designated the other Q2s on the claim packaged, status indicator of N and left their status as minor.

Divided claims into 5 groups using the indicators (major, minor, or bypass) that are assigned to each HCPCS code. Major procedures are defined as procedure codes with status indicator S, T, V, or X. Minor procedures are defined as procedures that have status indicator F, G, H, K, L, N, R, or U.

1)\*Single Major File: Claims with a single unit of one separately payable procedure (SI= S, T, V or X, which are called "major" procedures, including codes with status indicator "Q3"), all of which will be used in median setting; claims with only one unit of a status indicator "Q1" code that was an "STVX-packaged" code where there was no other code on the claim with status indicator "S," "T," "V," or "X," on the same claim on the same date; or claims where there was a status indicator "Q2" ("T-packaged") code with one unit where there was no code with a status indicator "S," "T," "V," or "X" on the same claim on the same date , (n=33,710,258).

2)\*Multiple Major File: Claims with more than one separately payable procedure and/or multiple units of “major” procedures, including codes with status indicator “Q3”; claims with code that has a status indicator “Q2” that has been designated as major and separately paid (no procedure with a status indicator “T” on the same date of service and no higher weighted Q2 code on the same date of service); claims that contain conditional and independent bilateral codes when the bilateral modifier is attached to the code, (n=26,744,876). Multiple major claims are examined carefully in stage 3 for dates of service and content to see if they can be divided into simulated or “pseudo” single claims.

3)\*Single Minor File: Claims with a single unit of a single HCPCS to which we assigned the status indicator of N (packaged item or service), F, G, H, K, L, R, or U (n=152,485). We retain this file as insurance against last minute changes in packaging decisions.

4)\*Multiple Minor File: Claims with multiple HCPCS, multiple services on the same date of service, and/or that have multiple units of one or more procedure codes with status indicator of “F”, “G”, “H”, “K”, “L”, “N”, “R”, or “U”; claims containing status indicator “Q1” (“STVX-packaged”) or status indicator “Q2” (“T-packaged”) codes with more than one unit of the code or more than one line of these codes on the same date of service and no other separately paid procedures. (n =166,849)

5) Non-OPPS claims: These claims have no services payable under OPPTS on the claim and are excluded, (n=, 44,563,676). These claims have codes paid under other fee schedules such as the DMEPOS fee schedule, clinical laboratory fee schedule, and physician fee schedule. These claims have no major or minor procedures on them. The only procedure codes on these claims have a status indicator other than S, T, X, V, N, F, G, H, K, L, R, or U.

In previous years, we have made both an LDS (Limited Data Set) and IDS (Identifiable Data Set) available. However, for CY 2010 and later we make only an LDS available that now includes the additional variables previously available only in the IDS, including ICD-9-CM diagnosis codes and revenue code payment amounts. To create the LDS (Limited Data Set) we compiled claims in files 1, 2, 3 and 4 above into a single file. The total frequencies we show in the files by HCPCS codes and by APC are taken from the claims used to create the LDS.

STAGE 3: Generated additional single claims or “pseudo singles” from multiple claims files

From the 26,744,876 multiple major claims, we were able to use some portion of 24,098,099 claims to create 69,052,376 pseudo single claims. As noted above, the multiple major claims already contained the final payment disposition of codes with status indicator Q2 (T-packaged codes) when they appeared with a S,T,V, or X services, making these services part of the pseudo single process. We also created 1,862,057 single “session” imaging composite claims through this process. In this preliminary rule data set, pseudo single bills were created in several different ways.

We begin by removing all line items for separately payable procedures that are thought to contain limited packaging (bypass codes) from the multiple major claims as pseudo single claims. Because bypass codes are thought to have limited packaging, we also used the line item for the bypass code as a pseudo single by estimating a unit cost and weighted any descriptive statistics.

Because some of the services on the bypass list also are included in the multiple imaging composites, we suppressed these “overlap bypass codes,” in order to retain all pertinent imaging HCPCS to identify a single session composite claim. Overlap codes are HCPCS codes that are both on the bypass list and are members of the multiple imaging composite APCs. The specific “overlap bypass codes” are presented in Table 1 of our CY 2011 OPPS/ASC final rule with comment period.

We then broke claims by dates of service and reassessed each new claim for its eligibility as a single major claim, or in the case of the multiple imaging composites, a single session claim. To improve the quality of the extended assessment and management composites, we include logic to ensure that any pseudo singles for visits with G0378, observation services, billed on the same date of service, did not have a T status procedure on the day before that would preclude eligibility for the composite payment.

We created one set of pseudo singles by taking dates of service that now had only one separately paid service.

We created another set of pseudo single bills taking line-items within dates of service that contain multiple major procedures with unit=1 and no additional packaging on the date of service.

We created single session claims for estimating the multiple imaging composites by identifying dates of service that contain more than one unit of a code in the same imaging family and no other separately payable codes. We later classified the dates of service for CT and CTA family and MRI and MRA family into those with and without contrast to create single session claims for the APC median cost calculation.

Having identified all pseudo singles and single session claims, we reassessed the claims without suppression of the “overlap bypass codes” under our longstanding “pseudo” single process to determine whether we could convert additional claims to “pseudo” single claims.

In prior years, we did not reassess any remaining claims or portion of claims after execution of this pseudo single procedure logic to ascertain whether packaged Q1 and Q2 codes could be elevated to major status and used as a single procedure claim for rate-setting. For the CY 2011 OPPS, we propose to include an additional step to create pseudo single claims by treating conditionally packaged codes (identified by status indicators “Q1” and “Q2”) that do not meet the criteria for packaging as if they were separately payable major codes. We then apply the pseudo single process to these claims to create single procedure claims from them if they meet the criteria for single procedure claims.



We were not able to use 2,793,372 claims because these claims continued to contain multiple separately payable procedures with significant packaging and could not be split (n= 2,638,305) or because the claims contained services with SI=N and no separately payable procedures on the claim (n= 155,067). We also were not able to use claims with the following characteristics: major procedure with a zero cost (n= 67,064), major procedure with charges less than \$1.01 (n=29,301); packaging flag of 3 (n=373,014), suggesting token charges.

We also created additional single bills from the multiple minor file. We broke status indicator "Q1" ("STVX-packaged") and status indicator "Q2" ("T-packaged") codes by date, packaged all packaged costs, including other Q1 and Q2 costs, into the code with the highest CY 2010 payment weight based on CY 2010 APC assignment, forced the units to one to match our policy of paying only one unit of a code with SI="Q1" or "Q2", and treated these claims as pseudo single claims. We created 23,206 pseudo singles from the multiple minor claims. We were not able to use 155,067 multiple minor claims because these claims contained minor codes that could not be elevated to major status when billed alone: largely drugs or packaged HCPCS procedures.

We were not able to use any of the 152,485 single minor claims because minor claims, by definition, contain only minor codes: drugs or packaged HCPCS procedures (i.e. SI=N). Claims with a single Q1 or Q2 code with a single unit would have been classified as a single major in initial split logic.

Balance = 104,647,897 (the sum of single majors =33,710,258, and pseudo singles from multiple majors, multiple minors, and the single "session" composites = 70,937,639).

#### STAGE 4: Packaged costs into the payable HCPCS code

We package the costs 1) on lines with packaged HCPCS codes and allowed revenue codes as shown in the revenue code-to-cost center crosswalk and 2) on lines without HCPCS but with revenue codes on the packaged revenue code file in Table 3 of the CY 2011 OPPTS/ASC final rule with comment period. This included the reduced cost for coded packaged drugs and biologicals with an ASP and reduced cost for other packaged drugs and biologicals, especially estimated costs associated with uncoded pharmacy revenue codes.

We began with, n=104,647,897 single procedure claim records that still had costs at the line item level. We summed the costs on the claim to complete packaging and we standardized the total cost using 60 percent of each hospital's IPPS pre-reclassification wage index. Specifically, standardized cost for the single bill or single session bill = sum of estimated line costs for the single bill or single session bill/((.6 \* pre-reclassification wage index) + .4).

We left stage 4 with n= 104,647,897 single procedure claim records containing summarized costs for the payable HCPCS and all packaged codes and revenue centers on the claim.

Balance=104,647,897

#### STAGE 5: Calculated HCPCS and APC medians

Began with n=104,647,897 single procedure claim records with summarized costs.

We excluded 1,679 claim records that had zero costs after summing all costs on the claim in Stage 4.

We excluded no claim records because CMS lacked an appropriate wage index.

We excluded 800,794 claim records that were outside +/- 3 standard deviations from the geometric mean cost for each HCPCS code.

We excluded 343 claims records that contained more than 50 units of the code on the claim.

Balance = 103,845,081

We used the balance of 103,845,081 single procedure claims records to calculate HCPCS median costs for the “2 times” examination and APC medians. (Section 1833(t)(2)) of the Act provides that, subject to certain exceptions, the items and services within an APC group cannot be considered comparable with respect to the use of resources if the highest median (or mean cost, if elected by the Secretary) for an item or service in the group is more than 2 times greater than the lowest median cost for an item or service within the same group (referred to as the “2 times rule”).

We added additional medians calculated outside this process. We added a median per diem cost for APC 0173 (Level II Partial Hospitalization payment (4 or more services) for CMHCs) and APC 0172 (Level I Partial Hospitalization payment rate (3 services) for CMHCs), calculated from the bill type 76x claims from Pre-Stage 1. We also added a median per diem cost for APC 0176 (Level II Partial Hospitalization payment (4 or more services) for Hospital-based PHPs) and APC 0175 (Level I Partial Hospitalization payment rate (3 services) for Hospital-based PHPs), calculated from the bill type 13X claims with condition code 41 written off in Stage 1.

For CY 2011, CPT created new codes for many endovascular revascularization and cardiac catheterization services. As we discuss in section II.A.2.d.(7) and (8) of the CY 2011 OPPTS/ASC final rule with public comment period, we used CY 2011 OPPTS final rule data to simulate median costs for these new codes. These codes are shown in Addenda B with comment indicator “NI” (new interim) for CY 2011. The APCs to which they are assigned are APCs 80, 83, 229 and (new for CY 2011) APC 319.

We added blood medians that were calculated with the use of a simulated departmental CCR for blood for hospitals that do not have cost centers for blood and for blood

processing. We added APC medians for composite APCs, as well as other customized or “offline” medians discussed in the final rule, such as the extended assessment and management composites and device dependent APCs. The unique assumptions behind each composite or alternative median calculation methodology are discussed in greater detail in the CY 2011 OPPTS/ASC final rule with comment period.

## **PART 2 – BUDGET NEUTRALITY, OUTLIER THRESHOLD, AND IMPACT CALCULATIONS**

After converting medians into unscaled weights by dividing the median for each APC by the median cost for APC 606, the mid-level outpatient visit APC in CY 2011, we began the process of calculating budget neutrality adjustments and the outlier threshold to determine final payment rates. The result of all prospective payment policies are presented in the impact table in Section XXII Regulatory Impact Analysis of the CY 2011 OPPTS/ASC final rule with comment period. The following discussion provides greater detail about our manipulation of the claims to calculate budget neutrality adjustments, to estimate outlier thresholds, and to create the impact table and overall beneficiary copayment percentage. The discussion below supplements discussion already provided in the final rule about calculation of the weight scaler, the conversion factor, the hospital and CMHC outlier thresholds, and the impact table columns.

### **STAGE 6: Created Summary Service Utilization Files for Current and Prospective OPPTS Year by Provider**

We began the budget neutrality calculations by making the services, utilization, and APC assignment on the 2009 claims look like they would if they were paid under the current OPPTS, CY 2010, and the prospective OPPTS year, CY 2011. We create a summary utilization file of services for each provider in the 2009 claims database that would be paid under the prospective payment system and a summary utilization file of services that would be paid under the current system for the same set of providers. In essence, this step runs the claims with payable OPPTS services through a mock Integrated Outpatient Code Editor (IOCE) and Pricer for the current and prospective year and then summarizes utilization by provider, APC, HCPCS, and status indicator. Updated October 2010 IOCE specifications (v11.3) are available at:

[http://www.cms.gov/OutpatientCodeEdit/Downloads/Attachment\\_A\\_IOCE\\_Specifications\\_Document\\_V113.pdf](http://www.cms.gov/OutpatientCodeEdit/Downloads/Attachment_A_IOCE_Specifications_Document_V113.pdf).

We constructed a summary utilization file for the final rule CY 2011 OPPTS using single and multiple bills from STAGE 2 of this document (n=60,455,134), the partial hospitalization claims (n=58,443) from STAGE 1, and those from CMHCs (n=384,661) from Pre-STAGE 1. In this summary process, we identified line-items that were not payable under OPPTS, including units on drugs and biologicals greater than the upper trim level identified during the units trim discussed in STAGE 1, units greater than 100 for procedure codes, a status indicator that is not payable under OPPTS (SI=A, B, E, C, D, F, L, M), and 0 units on a claim line without an associated charge. We specifically included the 23,206 pseudo singles for claims with a separately paid Q2 or Q1 code created from the multiple minor claims in Stage 3 of the claims process. We trimmed 6,670 claims with no line items relevant to OPPTS after edits. After changes in utilization and the addition of CY 2011 payment policies, we summarized these files to a single CY 2011 summary file of 2,893,532 observations from 3,977 hospitals (including cancer and children's hospitals) and 217 CMHCs, which only provide one service, partial hospitalization. We used this summary file as the basis for modeling the final rule CY 2011 weight in the weight scaler calculation and estimated payment in CY 2011 of the impact table.

We also constructed a baseline summary utilization file to reflect the existing CY 2010 OPPTS. For the CY 2010 OPPTS baseline file, we began with the single and multiple bills from STAGE 2, the pseudo single claims for codes with status indicator Q1 and Q2 created from the multiple minor claims, and the same partial and CMHC claims listed above. We removed 6,670 claims with no line items relevant to 2010 OPPTS. We summarized this second set of files to a single file of 2,880,222 services by hospitals and CMHCs. We used this summary file as the basis for modeling the current CY 2010 weight in the weight scaler calculation and estimated payment in CY 2010 of the impact table.

Utilization in both of these files includes changes for "discounting," which is any change in payment, applied to the line-item units for a specific service on a claim, resulting from application of the multiple procedure discounting to services with status indicator "T" or the presence of a modifier indicating that the procedure was terminated. For 2011, we used unscaled weights, the APC median cost divided by the median for APC 606, to order services on each claim for application of multiple procedure discounting because scaled weights are not yet available. For 2010, we relied on final rule 2010 scaled weights. During the discounting process, one provider was removed from the dataset due to a lack of current cost report data.

We took a few additional steps to prepare both files for budget neutrality calculations. We adjusted units to accommodate changes in HCPCS descriptions and new HCPCS between 2009 and 2011. The final summary utilization file for the prospective 2011 OPPTS contains 3,030,869 (including CMHCs) observations for 4,194 providers, and the

final summary utilization file for the current 2010 OPPTS contains 2,963,956(including CMHCs) observations for 4,194 providers.

Each observation in these summary files includes one provider OSCAR, one HCPCS code, the SI for the HCPCS code, the APC to which the HCPCS is assigned and the sum of discounted units of that HCPCS code furnished by that hospital.

Balance prospective CY 2011=3,030,869 HCPCS, by SI, by APC, by Provider

Balance baseline CY 2010=2,963,956 HCPCS, by SI, by APC, by Provider

#### STAGE 7: Calculated the Weight Scaler

The weight scaler is the budget neutrality adjustment for annual APC recalibration and its calculation is discussed in section II.A. of the CY 2011 OPPTS/ASC final rule with comment period. The weight scaler compares total scaled weight under the current OPPTS for 4,145 providers to total unscaled weight under the prospective OPPTS for the same providers, holding wage adjustment and rural adjustment constant to the current year's adjustments. We estimated wage adjusted weight for each provider using the formula provided in section II.H. of the CY 2011 OPPTS/ASC final rule with comment period without multiplying by the conversion factor, which is held constant. For example, for a procedure with SI=S provided by an urban hospital, the total weight for a service would be calculated:

$$\text{(UNSCALED\_2011\_WEIGHT* .4+UNSCALED\_2011\_WEIGHT* .6} \\ \text{*CY2010\_WAGE\_INDEX) *TOTAL\_DISCOUNTED\_UNITS}$$

For a procedure with SI=S provided by a rural sole community hospital, the total weight for a service would be calculated:

$$\text{(UNSCALED\_2011\_WEIGHT* .4+UNSCALED\_2011\_WEIGHT* .6} \\ \text{*CY2010\_WAGE\_INDEX) *TOTAL\_DISCOUNTED\_UNITS *1.071}$$

For a specified covered outpatient drug with SI=K provided by any hospital, the total weight for a service would be calculated:

$$\text{UNSCALED\_2011\_WEIGHT*TOTAL\_DISCOUNTED\_UNITS}$$

Scaling does not apply to OPPTS services that have a predetermined payment amount, especially separately paid specified covered outpatient drugs and new technology APCs. Items with a predetermined payment amount were included in the budget neutrality comparison of total weight across years by using a weight equal to the payment rate divided by the CY 2010 final rule conversion factor. However, scaling of the relative payment weights only applies to those items that do not have a predetermined payment amount. Specifically, we remove the total amount of weight for items with predetermined payment amount in the prospective year from both the prospective and current year and calculate the weight scaler from the remaining difference. In doing this, those services without a predetermined payment amount would be scaled by the proportional amount not applied to the services with a predetermined payment amount. We do not make any behavioral predictions about changes in utilization, case mix, or

beneficiary enrollment when calculating the weight scaler. After application of separately paid weights, there are eight providers: two short-term hospitals, four long-term hospitals and two psychiatric hospitals billing only services that lost all modeled payment. We excluded these providers from additional calculations.

Balance CY 2011= 4,185 providers  
Balance baseline CY 2010= 4,185 providers

CY 2011 weight scaler = 1.4477

#### STAGE 8: Calculated the Wage Adjustment

We used the same providers to estimate the budget neutrality adjustment for adopting the final IPPS FY 2011 post reclassification wage index for the CY 2011 OP/ASC, discussed in section II.C. of the CY 2011 OP/ASC final rule with comment period. Using the same wage-adjusted weight formulas presented above, the wage adjustment compares differences in total scaled, prospective CY 2011 weight providers varying only the wage index, CY 2010 and CY 2011, and using the 2010 rural adjustment. The budget neutrality adjustment for changes in the wage index is 1.0009. We did not propose changes to our rural adjustment policy this year.

Balance CY 2011 providers = 4,185  
Balance baseline CY 2011 providers = 4,185  
Total wage index adjustment to the conversion factor = 1.0009  
Total rural adjustment to the conversion factor = 1.0000

Total budget neutrality adjustment to the conversion factor = 1.0009

#### STAGE 9: Calculated Hospital Outlier Threshold

We started with aggregated claims from the single and multiple bills, pseudo singles from the multiple minor file, and partial hospitalization files to model the hospital fixed dollar hospital outlier threshold. After removing 6,670 claims with no line items relevant to OP/ASC, we used 61,164,899 claims to estimate the outlier threshold as well as anticipated outlier payment by provider. We created a CCR for every hospital in our hospital base file of 3,968 hospitals using the July 2010 update to the Outpatient Provider Specific File, which contains the actual overall CCRs the fiscal intermediaries or MACs are using to make outlier payments in 2010. We used internally calculated CCRs to substitute for any missing CCRs on the July OPSF update, and we substituted the statewide CCR for providers with CCRs greater than the 1.5 upper limit. We did not estimate the CMHC threshold this year, continuing our policy of 3.4 times payment for APC 0173 Level II Partial Hospitalization payment (4 or more services) regardless of the level of partial hospitalization provided. We are continuing to apply the standard OP/ASC outlier policy for all other hospitals, to the hospital-based PHP APCs.

As discussed in section II.G. of the CY 2011 OP/ASC final rule with comment period, we simulated 2011 costs by applying a charge inflation factor of 1.0988 to charges on the 2009 claims and by applying the CCR adjustment of 0.9910 to the July 2010 OPSF CCRs. We compared estimated cost to wage adjusted payment for each separately paid service on each claim. Holding the multiple threshold constant at 1.75 times the APC payment amount, we iterated total outlier payment calculations, changing the size of the fixed dollar threshold each time, until total outlier payments amount matched our estimate of 1.0 percent of total payment on all included claims. Using the resulting \$2,025 fixed dollar threshold, we estimated outlier payments for 3,129 hospitals for column 6 of the impact table.

We repeated this exercise for the current year CY 2010 OP/ASC. After removing claims with no line items relevant to OP/ASC, we used 61,164,899 claims to estimate the percentage of total payment attributable to outlier payments in 2010. We inflated charges on the CY 2009 claims by an inflation factor for one year, 1.0483, and using the CCRs from the July 2010 update to the Outpatient Provider Specific File, we estimated CY 2010 costs and compared them to wage-adjusted CY 2010 payment for each service. Ultimately, we estimated outlier payments for 3,046 hospitals for column 6 of the impact table. We also estimated total outlier payments to be 0.85% of total CY 2010 payments.

Balance CY 2011= 4,186 hospitals

Balance baseline CY 2010=4,186 hospitals

#### STAGE 10: Created the Impact Table and Calculated the Beneficiary Impact Percentage

The impact table in section XXII Regulatory Impact Analysis of the CY 2011 OP/ASC final rule with comment period compares OP/ASC payment for 4,185 providers in the baseline CY 2010 file to the final CY 2011 OP/ASC payment for the same set of hospitals, in aggregate and across classes of hospitals. We began with the summary utilization files created in Stage 6 and recreated each of the above total weight calculations (weight scaler, wage adjustment, rural adjustment as payments by adding in the conversion factor. We compared the difference in payments between those under the CY 2011 rule to the baseline CY 2010 payment and we show this result in column 2. The detailed calculations behind the table columns are discussed in section XXII of the CY 2011 OP/ASC final rule with comment period. Final rule payment presented in Column 6 of the impact table compares total estimated payment, including outlier payments, but excludes pass-through payment for current and prospective year.

In order to group types of hospitals, we constructed a file of descriptive information from the cost report and IPPS provider files identifying different classes of hospitals. This file contains the variables we use to model adjustments including the wage index, geographic location, and provider type, as well as other descriptive information, such as bed size. We have complete information for the 3,968 hospitals with any claim used to model the prospective OP/ASC. We do not have complete descriptive information for 217 CMHC's because their cost report is not included in HCRIS and because they are not hospitals paid

under IPPS. We make available an impact file available that contains all descriptive information for the providers that we used in our calculations, as well as estimated CY 2011 payments, including outlier payments, by provider for the subset of 3,906 hospitals excluding children's hospitals, which are permanently held harmless, and 217 CMHCs for which we present detailed information in the impact table that accompanies the CY 2011 OPPTS/ASC final rule with comment period.

Finally, we estimated the overall beneficiary copayment percentage for the current and prospective OPPTS years. We applied the calculated, adjusted (wage and rural) copayment to all separately paid HCPCS, and we capped copayment at the inpatient deductible for each year. We summed total copayments for each year and divided by respective total payment. We estimate that total beneficiary liability for copayments would decline as an overall percentage of total payments, from 22.3 percent in CY 2010 to 21.9 percent in CY 2011.