## **Medicare 2007 OPPS NPRM Claims Accounting**

CMS used information from 91.4 million single and generated single procedure claim records to set the APC rates proposed to be paid under Medicare OPPS for CY 2007. This compares favorably to the 2006 OPPS final rule in which CMS used over 87 million single and generated single procedure claims to set payment weights for procedural APCs. CMS continues to seek ways to use as many of the claims for services paid under OPPS as possible.

Attached is a narrative description of the accounting of claims used in the setting of final payment rates for Medicare's 2007 Outpatient Prospective Payment System (OPPS). Payment rates under OPPS 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 OPPS 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 proposed mid level outpatient visit APC. The resulting proposed unscaled weights were scaled for budget neutrality to ensure that the total amount of weight in the system was no greater for 2007 than it was for 2006. The proposed scaled weights were multiplied by the proposed 2007 conversion factor to determine the proposed national unadjusted payment rate for the APCs for 2007.

The purpose of this claims accounting is to help the public understand the order in which CMS processed claims to produce the proposed 2007 OPPS APC median costs, the proportion of claims that CMS used to set the proposed OPPS payment rates and the reason that not all claims could be used.

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<sup>&</sup>lt;sup>1</sup> Proposed 2007 rates are based on 2005 calendar year outpatient claims data, specifically final action claims processed through the common working file as of December 31, 2005. Proposed 2007 rates are based on one year (January 1- December 31) of 2005 outpatient claims data.

## General Information:

In order to calculate the median APC costs that form the basis of OPPS payment rates, CMS must isolate the specific resources associated with each 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 (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. CMS estimates resource costs from the billed charges by applying a cost-to-charge ratio (CCR) to adjust the charges to cost. CMS used the most recent CCRs in the CMS HCRIS file in the calculation of the proposed weights. Wherever possible, departmental 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). 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 medians for a specific purpose.

"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) and beneficiary encrypted data set (BEF) (the public use files available for purchase from CMS).

Material that is printed in **bold** discusses changes to the median calculation process or additional steps in the median calculation process in comparison with the process used to set rates for CY 2006.

Pre-STAGE 1: Identified gross outpatient claim population used for OPPS payment and applied the hospital cost-to-charge ratios.

Pulled claims for calendar year 2005 from the national claims history, n= 131,930,153 records with a total claim count of 132,691,507. This is not the population of claims paid under OPPS, but all outpatient claims processed by fiscal intermediaries.

Excluded claims with condition code 04, 20, 21, 77 (n=487,711). 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=946). In prior years, CMS truncated the number of lines at 300 and used the claims.

Excluded claims for services furnished in Maryland, Guam, US Virgin Islands, American Samoa and the Northern Marianas. The exclusion of American Samoa and the Northern Marianas is original to the start of OPPS but was not specifically identified in prior claims accountings (n= 1,665,885).

Balance = 129,775,611

Divided claims into three groups:

- 1) Claims that were not bill type 12X, 13X, 14X (hospital bill types) or 76X (CMHC bill types). Other bill types, such as ASCs, are not paid under OPPS and, therefore, these claims were not used to set OPPS payment. (n=26,670,659)
- 2) Bill types 12X, 13X, or 14X (hospital bill types). These claims are hospital outpatient claims. (n=102,958,892)
- 3) Bill type 76X (CMHC) (These claims are later combined with any claims in 2 above with a condition code 41 to set the per diem partial hospitalization rate through a separate process.) (n=146,060)

Balance for Bill Types 12X, 13X, and 14X = 102,958,892

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 cost-to-charge ratio 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, or 14X, without Maryland, Guam or USVI, and with flags for invalid CCRs set (n=102,958,892).

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=4,890,119).

Balance = 98,068,773

\*Identified claims with condition code 41 and removed to another file, (n= 35,186). These claims were combined with the 146,060 bill type 76X claims identified in Pre-Stage 1 to calculate the partial hospitalization per diem rate.

Balance = 98,033,587

Excluded claims without a HCPCS code (n=29,641).

Balance = 98,003,946

\*Removed to another file, claims for observation (n= 126,139).

Balance = 97,877,807

Removed to another file claims that contain nothing but flu and PPV vaccine (n=365,317).

Balance = 97,512,490

Copied line items for drugs, blood, and devices (the lines stay on the claim but are copied off onto another file) to a separate file. No claims were deleted. Lines copied, (n=22,567,877). We use these line-items to calculate a per unit median and a per unit mean and a per day median and mean for drugs (including radiopharmaceuticals) and blood. We trimmed units at +/- 3 standard deviations from the geometric mean before calculating the median and mean costs per unit and per day. For drugs and biologicals, instead of using median cost as done in previous years, we used the April 1, 2006 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 their mean unit cost derived from the CY 2005 hospital claims data to determine their per day cost.

The payment rates for blood and blood products were based on simulated median costs under a different methodology that is explained in the proposed rule.

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

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 N.

- 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**), all of which will be used in median setting, (n=29,684,668).
- 2)\*Multiple Major File: Claims with more than one separately payable procedure and/or multiple units of "major" procedures, (n=24,713,294). (These 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) (n=40,111). 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 N, (n = 44,858).
- 5)Non-OPPS claims: These claims have no services payable under OPPS on the claim and are excluded, (n=43,029,559). These claims have codes paid under other fee schedules such as the DMEPOS fee schedule, clinical laboratory fee schedule, 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 or N.

Balance of claims in the LDS and BEF = 54,482,931 (This is the sum of claims in files 1, 2, 3 and 4 above).

STAGE 3 Generated additional single claims or "pseudo singles" from multiple claims files

From the 24,713,294 multiple major .claims, we were able to use some portion of 21,016,118 claims to create 62,817,700 pseudo single claims. In this NPRM data set pseudo single bills were created in two different ways.

One set of pseudo singles is the result of grouping procedures on a claim by date of service and by using the list of bypass codes to remove separately payable procedures that are thought to contain limited packaging from a multiple bill. Because bypass codes are thought to have limited packaging, we also used the line-item for the bypass code as a pseudo single. This is the process we have used for several years to create pseudo singles.

Where there were multiple units of a bypass code, we divided the cost of the multiple units by the number of units billed and treat each unit as a single procedure bill for the code. This is a change to our pseudo single claim creation process; in prior years we used the bypass code's data only if there was one unit of the bypass code on the multiple procedure claim.

We were not able to use 3,648,389 claims because these claims continued to contain multiple separately payable procedures with significant packaging and could not be split.

We also were not able to use claims with the following characteristics: major procedure with a zero cost (n=66,723), major procedure with charges less than \$1.01 (n=24,878); payment flag of 3 (n=2,044). Claims with a payment flag of 3 were submitted with a charge of less than \$1.01 for a major separately paid procedure but the charge other than the token charge was apportioned to the other separately paid procedures in claims processing; therefore the charge on the claims record is not used to set relative weights. These claims were excluded.

We were not able to use any of the 44,858 multiple minors or any of the 40,111 single minor claims because minor claims, by definition, contain only packaged HCPCS procedures (i.e. SI=N).

Balance =92,502,368 (the sum of single majors =29,684,668, and pseudo singles from multiple majors = 62,817,700)

STAGE 4 Packaged costs into the payable HCPCS code

Began with, n=92,502,368 single procedure claim records that still had costs at the line-item level.

We added 2676 pseudo singles from multiple major claims that would not be usable if CPT codes 93640 and 93641 were not packaged. These additional pseudo singles are included in the 24,713,294 multiple majors identified in stage 2. When we created pseudo singles from the multiple major claims using our usual methodology as described above (i.e. date of service stratification and the bypass list), CPT codes 93640 and 93641 were shown in the code specific file as separately paid services that had status indicator "S". Based on a subsequent study that assessed the impact of packaging these codes on the median costs for APCs 107 and 108, we decided to change the

status indicator for CPT codes 96340 and 93641 from "S" to "N". We then selected all claims that contained CPT codes 93640 and 93641 from the 3,603,531 multiple major procedure claims that we were not previously able to use for median setting. We treated CPT codes 93640 and 93641 as if they had status indicator "N" and also applied the standard pseudo single creation methodology to them (i.e. date of service stratification and bypass codes). This enabled us to identify those claims that would have been single procedure claims or pseudo single procedure claims if we had changed the status indicator for CPT codes 93640 and 93641 from "S" to "N" before we split claims into single and multiple procedure claims and before we applied date of service stratification and the bypass list. We added these new pseudo singles to the set of natural single procedure claims and pseudo single procedure claims for median calculation. If, after we review the comments on the NPRM, we decide to package CPT codes 93640 and 93641, we will assign status indicator "N" at the beginning of the data process and this separate study will not be needed.

We also identified and excluded 299,022 claim records for codes that are treated by OCE as either conditionally bilateral (i.e. the multiple procedure reduction applies) or independently bilateral (i.e. the multiple procedure reduction does not apply). These claims are included in the set of single procedure claims in stage 2 and were previously treated as single procedure claims. The determination of bilateralism under OPPS is identical to that in the Medicare physician fee schedule. The excluded claims show one unit of one HCPCS code and carry the CPT modifier 50 to signify that the procedure was done bilaterally. In these cases, two procedures were performed and the costs on the claim record represent the cost of two procedures, although the hospital correctly reported one unit with the bilateral modifier. Therefore, they are not single procedure claim records and we excluded them. We did not exclude claims records for services that are inherently bilateral because it is appropriate to accept the entire cost on the claim as applying to a single unit of an inherently bilateral code.

Completed packaging and left stage 4 with n= 92,206,022 single procedure claim records containing summarized costs for the payable HCPCS and all packaged codes and revenue centers on the claim.

Balance=92,206,022

## STAGE 5 Calculated HCPCS and APC medians

Began with n=92,206,022 single procedure claim records with summarized costs.

We standardized the costs for the effects of the wage index by dividing 60 percent of the summarized cost on the claim by the pre-reclassification wage index (used in the IPPS proposed rule) for the hospital that submitted the claim.

We excluded 1434 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 845,549 claim records that were outside +/- 3 standard deviations from the geometric mean cost for each HCPCS code.

We excluded 559 claims that contained more than 100 units of the code on the claim. This exclusion is necessary because we used claims with multiple units of the bypass codes, some of which had units greater than 100. Our clinicians believed that it is likely that these units of procedures were in error since they would not expect units of procedures to exceed 100 for an outpatient claim.

Balance=91,358,490

We used the balance of 91,358,490 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 a median for APC 339, Observation, which was calculated from the claims written off in Stage 1 through a separate process. To calculate this median cost, we selected claims that contained at least 8 units of G0244, an office or ED visit, an allowed diagnosis, and did not contain a service with a status indicator of "T". We removed the line item costs for all payable services on the claim and packaged all remaining allowed costs (packaged revenue code costs and packaged HCPCS costs) into the line item cost for G0244. We used these claims records to calculate the median cost for APC 339, Observation.

We added a median per diem cost for APC 33, Partial Hospitalization. The per diem cost was calculated from the bill type12X, 13X, and 14X claims with condition code 41 written off in Stage 1 and the 105,798 bill type 76X claims written off in Pre-Stage 1.

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. Where a hospital has cost centers for blood and blood processing, we apply the departmental CCRs from those cost centers to the charges on the claim to calculate the cost of blood and blood

products (revenue code 38X) and the costs of processing blood and blood products (revenue code 39X). We calculate the ratio of the blood specific cost center to the overall CCR for these hospitals that have blood cost centers. We then calculate the geometric mean of these ratios. This yields two ratios: one for revenue code 38X (blood and blood products) and one for revenue code 39X (blood processing) We then apply these ratios to the overall CCR for hospitals that do not have blood and blood processing cost centers to derive hospital specific simulated CCRs for blood and for blood processing. We apply these hospital specific CCRs to the charges on claims from these hospitals that are reported under revenue codes 38X and 39X. The claims to which the simulations are applied are available in the LDS and the BEF. The hospital specific simulated CCRs, file layout and further explanation are available as supporting documentation to this proposed rule.