Calculating OPPS payment rates consists of calculating relative resource costs for OPPS services 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 2014 claims data to produce the final prospective CY 2016 OPPS payment rates. The following information supports an already detailed discussion of data manipulation in the CY 2016 OPPS/ASC final rule. This discussion is divided into two parts: the traditional accounting of claims behind the cost calculations and an accounting of claims behind the budget neutrality, outlier, and impact calculations.

PART 1 - COST CALCULATIONS

CMS used information from 92 million single procedure (natural single), generated single procedure (pseudo single), and generated single “session” composite claim records to set the final Ambulatory Payment Classification (APC) rates to be paid under Medicare OPPS for CY 2016.¹

For the CY 2016 OPPS, we retained all HCPCS codes on the CY 2015 bypass list and included HCPCS codes that are not on the CY 2015 bypass list that, using either CY 2015 OPPS final rule or February 2015 HOP Panel data, met the established empirical criteria for inclusion on the bypass list. We note that, under the CY 2016 final packaging policy, we are proposing to remove codes from the bypass list that we conditionally or unconditionally packaged in the CY 2016 OPPS. We typically include codes on the bypass list that violate our empirical criteria in response to public comment recommending certain codes be added to the bypass list and when our clinicians believe that the service to be added would rarely have packaging and that any

¹ Final CY 2016 rates are based on 2014 calendar year outpatient claims data, specifically final action claims processed through the common working file as of June 30, 2015. Final CY 2016 rates are based on a year (January 1- December 31) of 2014 outpatient claims data.
packaging associated with the service 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 2016 Outpatient Prospective Payment System (OPPS). For the CY 2016 OPPS, we are proposing to continue to develop relative payment weights using APC geometric mean costs.

As described in detail in the material that follows, geometric mean costs were calculated from claims for services paid under the Medicare OPPS and cost report data for the hospitals whose claims were used. The geometric mean costs were converted to payment weights by dividing the geometric mean for each APC (a group of HCPCS codes) by the geometric mean cost for final APC 5012, the outpatient clinic visit APC in CY 2016. As discussed in Part 2 below, the resulting unscaled weights were scaled for budget neutrality to ensure that the recalibration of APC weights for CY 2016 does not increase total OPPS spending. The scaled weights were multiplied by the final CY 2016 OPPS conversion factor to determine the final national unadjusted payment rate for the CY 2016 APCs. 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.

We note that in section III.D. of the CY 2016 OPPS/ASC final rule, we are updating the APC structure for several clinical areas. In addition, we are updating the APC numbers to which HCPCS codes are assigned to establish a more organized structure.

This section of the claims accounting narrative is intended to help the public understand the order in which CMS processed claims to produce the final CY 2016 OPPS geometric mean costs and the reasons that not all claims could be used.

**General Information:**
To calculate the APC costs that form the basis of OPPS 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 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 (in most cases, CCRs based on cost reports beginning in CY 2013). 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 OPPS revenue code-to-cost center crosswalk (http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/). 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 cost modeling 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 the claims from the general process but put the claims on another file to be used in a different process; the claims did not remain in the main run but were not eliminated because the claims were used to model specific costs.

“Copied to another file” means that we copied information off the claims for use in another process but did not eliminate any of the copied information from the standard ratesetting process.

“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 OPPS payment and applied to the hospital CCRs.

Pulled claims for calendar year 2014 from the national claims history, n=166,971,517 records, with a total claim count of 163,427,191. 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=377,720). 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=2,055).
Excluded claims for services furnished in Maryland, Guam, US Virgin Islands, American Samoa, and the Northern Marianas (n=2,295,058).

Balance = 156,748,104

Divided claims into three groups:
1) Claims that were not bill type 12X, 13X (hospital outpatient bill types), 14X (laboratory specimen bill types), or 76X (CMHC bill types). Other outpatient bill types are not paid under OPPS and, therefore, their claims were not used to set OPPS payment (n=32,246,056).

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 OPPS (n=124,474,084).

3) Bill type 76X (CMHC). These claims are used to set the per diem partial hospitalization rate for CMHCs (n=27,964).

Balance for Bill Types 12X, 13X, and 14X = 124,474,084

Incorporated all new Category I and III CPT codes and new Level II HCPCS codes that were effective as of April 1, 2015, July 1, 2015, and October 1, 2015, or will be effective January 1, 2016.

Applied hospital specific and, where possible, departmental specific 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: Excluded claims without a valid CCR and removed claims for procedures with unique packaging and cost calculation processes to separate files.**
Began with the set of claims with bill types 12X, 13X, and 14X, without Maryland, Guam, or USVI, and including claims with flags for invalid CCRs set (n=124,474,084).

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 erroneous CCRs) (n=2,515,766).

*Identified claims with condition code 41 and removed to another file (n=70,139). These claims were used to calculate the partial hospitalization service per diem rate for hospital-based partial hospitalization programs.

Excluded claims without a HCPCS code (n=11,653).

Removed to another file claims that contain nothing but flu vaccine and PPV vaccine services (n=193,665).

We assessed each line on the claim to determine whether the charge was reported under a revenue code that we allow, for purposes of OPPS rate setting, on the OPPS 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 OPPS 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 OPPS CCR to reduce the charges on the line to costs. If the revenue code under which a charge is reported is not allowed for OPPS rate setting, that charge is not reduced to cost nor used in calculation of the statistics that determine the OPPS weight. Typically, the OPPS does not allow revenue codes for OPPS rate setting that are not allowed for payment by the Integrated Outpatient Code Editor (IOCE).

Balance = 121,682,861
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 (n=403,926,390).
No claims were deleted. The rest of the claims process for these services is detailed at the end of this document.

**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.**

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 2016 OPPS/ASC final rule, 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=1,383,325).

For the CY 2016 OPPS final rule, we are excluding line item data for pass-through drugs and biologicals (status indicator G for CY 2014 claims data) and non-pass through drugs and biological (status indicator K for CY 2014 claims data) that do not receive payment (n=148,773).
As part of the final CY 2016 packaging policy, we are also applying the line item trim to lab tests that did not receive payment in the claims year.

Prior to splitting the claims, we identified which status indicator Q2 codes (T-packaged) would be paid when appearing with an S or V 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 or V 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. If
more than one Q2 code appeared on a claim with a separately paid procedure(s) with a status indicator of S or V, we would rank the Q2 codes using their final rule 2015 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. Codes that are Q4s are designated status indicator A if they are on a claim with no OPPS service assigned to status indicator J1, J2, S, T, V, Q1, Q2, or Q3, or if modifier L1 is applied; otherwise, they are designated status indicator N.

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 J1, J2, S, T, or V. 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, or V, which are called “major” procedures, including codes with status indicator Q3); claims with one unit of a status indicator Q1 (STV-packaged) code and no other code with a status indicator of S, T, or V on the same claim on the same date; or claims with only one unit of a status indicator Q2 (T-packaged) code and no other code with a status indicator of S, T, or V on the same claim on the same date. All of these single major claims will be used in ratesetting (n=53,221,946).

We also include claims with services assigned to final status indicator J1 and J2 in this category. These claims receive special processing under the CY 2016 comprehensive APC policy discussed in section II.A.2.e. of the CY 2016 OPPS/ASC final rule.

**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 a status indicator Q2 code 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); or claims that contain conditional and independent
bilateral codes when the bilateral modifier is attached to the code. 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 (n=22,522,451).

3)*Single Minor File: Claims with a single unit of a single HCPCS with the status indicator of N (packaged item or service), F, G, H, K, L, R, or U (n=5,953,910). We retain this file in case we have to make last minute changes to packaging criteria.

4)*Multiple Minor File: Claims with multiple HCPCS codes, multiple services on the same date of service, and/or 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 (STV-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=31,358,762).

5) Non-OPPS claims: These claims have no services payable under OPPS on the claim and are excluded (n=8,625,792). These claims have codes paid under other fee schedules such as the DMEPOS 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 J1, J2, S, T, V, N, F, G, H, K, L, R, or U.

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

From the 20,347,210 multiple major claims without a J1 service or the J2 composite, we were able to use 11,077,901 of those claims to create 20,163,857 pseudo single claims. Of the pseudo single claims created, 864,036 were single “session” imaging composite 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 S, T or V services, making these services part of the pseudo single 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 weighting 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 codes 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 in the Addendum N promulgated with this CY 2016 OPPS/ASC final rule.

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 composite APCs, a single session claim.

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 composite APCs 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 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.

For the CY 2016 OPPS, we are continuing our CY 2012 OPPS policy of including 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 34,348,898 claims because these claims continued to contain multiple separately payable procedures with significant packaging and could not be split (n=4,820,811) or because the claims contained services with SI=N and no separately payable procedures on the claim (n=29,528,087). We also were not able to use claims with the following characteristics: major procedure with a zero cost (n= 9,953), major procedure with charges less than $1.01 (n=15,570); or packaging flag of 3 (n=156,625), suggesting token charges.

We also created additional single bills from the multiple minor file. We separated status indicator Q1 (STV-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 2015 payment weight based on CY 2015APC 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 2,439,423 pseudo singles from the multiple minor claims. We were not able to use 29,528,087 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 coded procedures.

We were not able to use any of the 5,953,910 single minor claims because minor claims, by definition, contain only minor codes: drugs or packaged HCPCS coded procedures. Claims with a single Q1 or Q2 code with a single unit would have been classified as a single major in the initial split logic.
Balance = 95,369,133 (the sum of single majors without a J1 service or the J2 composite = 52,708,339, and pseudo singles from multiple majors, multiple minors, and the single “session” composite claims = 42,660,794).

**STAGE 4: Packaged costs into the payable HCPCS codes**

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 4 of the CY 2016 OPPS/ASC final rule. This included the cost for coded packaged drugs and biologicals with an ASP and cost for other packaged drugs and biologicals, especially estimated costs associated with uncoded pharmacy revenue codes.

We began with 95,369,133 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 95,369,133 single procedure claim records containing summarized costs for the payable HCPCS and all packaged codes and revenue centers on the claim.

Balance = 95,369,133

**STAGE 5: Calculated HCPCS and APC costs**

We began with 95,369,133 single procedure claim records with summarized costs.

We excluded 8,101 claim records that had zero costs after summing all costs on the claim in STAGE 4.
We excluded 14 records because CMS lacked an appropriate wage index.

We excluded 730,490 claim records that were outside +/- 3 standard deviations from the geometric mean cost for each HCPCS code.

We excluded 44 claim records that contained more than 50 units of the code on the claim.

We excluded 2,564,396 claim records from providers that used a cost allocation method of “square feet” to calculate CCRs used to estimate costs associated with the CT and MRI APCs.

Balance = 92,066,088

We used the balance of 92,066,088 single procedure claims records to calculate HCPCS code geometric mean costs for the “2 times” examination and APC payment weight development. 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 geometric mean costs calculated outside this process. We added a geometric mean per diem cost for APC 5852 (Level II Partial Hospitalization (4 or more services) for CMHCs) and APC 5851 (Level I Partial Hospitalization (3 services) for CMHCs), calculated from the bill type 76x claims from Pre-STAGE 1. We also added a geometric mean per diem cost for APC 5862 (Level II Partial Hospitalization (4 or more services) for Hospital-based PHPs) and APC 5861 (Level I Partial Hospitalization (3 services) for Hospital-based PHPs), calculated from the bill type 12X or 13X claims with condition code 41 written off in STAGE 1.

We added blood geometric mean costs that were calculated with the use of a simulated departmental CCR for blood for hospitals that do not have cost centers for blood. We added
APC geometric mean costs for composite APCs, as well as other customized or “offline” geometric mean costs discussed in the final rule, such as those discussed in section II.A.f. of the CY 2016 OPPS/ASC final rule. The unique assumptions behind each composite or alternative geometric mean calculation methodology are discussed in greater detail in the CY 2016 OPPS/ASC final rule.
PART 2 – BUDGET NEUTRALITY, OUTLIER THRESHOLD, AND IMPACT CALCULATIONS

After converting geometric mean costs into unscaled weights by dividing the geometric mean cost for each APC by the geometric mean cost for APC 5012, the final outpatient clinic visit APC in CY 2016, we began the process of calculating budget neutrality adjustments and the outlier threshold to determine final payment rates. The result of all final payment policies are presented in the impact table in Section XXI.A. Regulatory Impact Analysis of the CY 2016 OPPS/ASC final rule. 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 OPPS Year by Provider

We began the budget neutrality calculations by making the services, utilization, and APC assignment on the CY 2014 claims look like they would if they were paid in the current OPPS year, CY 2015, and the prospective OPPS year, CY 2016. We created a summary utilization file for services in the CY 2014 claims database that would be paid under the 2015 OPPS and a summary utilization file for services that would be paid under the 2016 OPPS. In essence, this step runs the claims with payable OPPS 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 2015 IOCE specifications (v16.3) are available at:

We constructed a summary utilization file for the CY 2016 OPPS final rule using single and multiple bills from STAGE 2 of this document (n=113,057,069), the partial hospitalization claims (n=70,139) from STAGE 1, and those from CMHCs (27,964) from Pre-STAGE 1. In this summary process, we identified line-items that were not payable under OPPS, including units on drugs and biologicals greater than the upper trim level identified in the units trim discussed in STAGE 1, units greater than 100 for procedure codes, a status indicator that is not payable under OPPS (SI=A, B, E, C, D, F, L, M), and 0 units on a claim line without an associated charge. We specifically included the 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. After changes in utilization and the addition of final CY 2016 payment policies, we summarized these files to a single CY 2016 summary file of 4,017,386 observations from 3,896 hospitals (including cancer and children’s hospitals) and 57 CMHCs, which only provide one service, partial hospitalization. We used this summary file as the basis for modeling the final rule CY 2016 weight in the weight scaler calculation and estimated payment in CY 2016 in the impact table.

We also constructed a baseline summary utilization file to reflect the existing CY 2015 OPPS. For the CY 2015 OPPS 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 hospitalization and CMHC claims listed above. We summarized this second set of files to a single file of 4,050,278 services by hospitals and CMHCs. We used this summary file as the basis for modeling the current CY 2015 weight in the weight scaler calculation and estimated payment in CY 2015 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 2016, we used unscaled weights, the APC geometric mean cost divided by the geometric mean cost for APC 5012, to order services on each claim for application of multiple procedure discounting because scaled weights are not yet available.
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 2014 and 2016. The final summary utilization file for the prospective CY 2016 OPPS contains 4,028,669 (including CMHCs) observations for 3,953 providers, and the final summary utilization file for the current 2015 OPPS contains 4,053,413 (including CMHCs) observations for 3,953 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 2016 = 4,028,669 HCPCS, by SI, by APC, by Provider
Balance baseline CY 2015 = 4,053,413 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 2016 OPPS/ASC final rule. The weight scaler compares total scaled weight under the current OPPS for 3,953 providers to total unscaled weight under the prospective OPPS 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 2016 OPPS/ASC final rule 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:

\[(\text{UNSCALED\_2016\_WEIGHT} \times 0.4 + \text{UNSCALED\_2016\_WEIGHT} \times 0.6) \times \text{CY2015\_WAGE\_INDEX} \times \text{TOTAL\_DISCOUNTED\_UNITS}\]

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

\[
\text{UNSCALED\_2016\_WEIGHT}\times\text{TOTAL\_DISCOUNTED\_UNITS}
\]

Scaling does not apply to OPPS services that have a predetermined payment amount, especially separately paid drugs and biologicals 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 2016 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.

Balance prospective CY 2016 = 3,953 providers
Balance baseline CY 2015 = 3,953 providers

CY 2016 weight scaler = 1.3852
STAGE 8: Calculated the Wage and Provider Adjustments

We used the same providers to estimate the budget neutrality adjustment for adopting the final IPPS FY 2016 post reclassification wage index for the CY 2016 OPPS, discussed in section II.C. of the CY 2016 OPPS/ASC final rule. Using the same wage-adjusted weight formulas presented above, the wage adjustment compares differences in total scaled, final CY 2016 weight providers varying only the wage index between CY 2015 and CY 2016, and using the 2015 rural adjustment. The budget neutrality adjustment for changes in the wage index is 0.9992. We did not make changes to our rural adjustment policy this year. Therefore, the budget neutrality adjustment for the rural adjustment is 1.0000.

We used the same providers to estimate the budget neutrality adjustment for the final dedicated cancer hospital adjustment for the CY 2016 OPPS, discussed in section II.F. of the CY 2016 OPPS/ASC final rule. We calculated a CY 2016 budget neutrality adjustment factor by comparing the estimated total CY 2016 payments under section 1833(t) of the Act, including the CY 2016 cancer hospital adjustment relative to the CY 2015 cancer hospital adjustment under section 1833(t)(18)(B) and 1833(t)(2)(E) of the Act, to hospitals described in section 1886(d)(1)(B)(v) of the Act, excluding the TOPs adjustment. The final budget neutrality adjustment for the final CY 2016 cancer hospital adjustment is 0.9994.

As discussed in section II.B. of the CY 2016 OPPS/ASC final rule, we are proposing to make an adjustment to the OPPS conversion factor to redress the inflation in OPPS payment rates resulting from excess packaged payment under the OPPS for laboratory tests we now understand continue to be paid at CLFS rates outside the OPPS.

Balance CY 2016 providers = 3,953

Total wage index adjustment to the conversion factor = 0.9992
Total rural adjustment to the conversion factor = 1.0000
Total cancer hospital adjustment to the conversion factor = 0.9994
Total laboratory services adjustment to the conversion factor = 0.9800
Total budget neutrality adjustment to the conversion factor = 0.9786
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. We used 100,814,211 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 3,830 hospitals using the April 2015 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 CY 2014. 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 1.6 upper limit. We did not estimate the CMHC threshold this year, continuing our policy of 3.4 times payment for APC 5852 (Level II Partial Hospitalization (4 or more services) for CMHCs) regardless of the level of partial hospitalization provided. We are continuing to apply the standard OPPS outlier policy for all other hospitals to the hospital-based PHP APCs.

As discussed in section II.G. of the CY 2016 OPPS/ASC final rule, we simulated CY 2016 costs by applying a charge inflation factor of 1.0766 to charges on the CY 2014 claims and by applying the CCR adjustment of 0.9701 to the July 2015 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 matched our estimate of 1.0 percent of total payment on all included claims. Using the resulting $3,250 fixed dollar threshold, we estimated outlier payments for 3,034 hospitals for column 5 of the impact table.

We repeated this exercise for the current year CY 2015 OPPS. We used 103,366,489 claims to estimate the percentage of total payment attributable to outlier payments in 2015. We inflated charges on the CY 2014 claims by an inflation factor for one year, 1.0376, and using the CCRs from the July 2015 update to the Outpatient Provider Specific File, we estimated CY 2015 costs and compared them to wage-adjusted CY 2015 payment for each service. Ultimately, we
estimated outlier payments for 2,999 hospitals for column 5 of the impact table. We also estimated total outlier payments to be 0.9% of total CY 2015 OPPS payments.

Balance CY 2016 = 3,830 hospitals  
Balance baseline CY 2015 = 3,830 hospitals

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

The impact table in section XXI.A. Regulatory Impact Analysis of the CY 2016 OPPS/ASC final rule compares OPPS payment for 3,956 providers in the baseline CY 2015 file to the final CY 2016 OPPS 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 2016 final rule to the baseline CY 2015 payment and we show this result in column 2. The detailed calculations behind the table columns are discussed in section XXI.A. of the CY 2016 OPPS/ASC final rule. Final rule payment presented in column 5 of the impact table compares total estimated payment, including outlier payments, but excludes pass-through payment for the current and prospective years.

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 3,896 hospitals with any claim used to model the prospective OPPS. We do not have complete descriptive information for the 57 CMHCs because their cost reports are not included in HCRIS and because they are not hospitals paid under IPPS. We make available an impact file that contains all descriptive information for the providers that we used in our calculations, as well as estimated CY 2016 payments, including outlier payments, by provider for
the subset of 3,830 hospitals excluding children’s and cancer hospitals, which are permanently held harmless, and 57 CMHCs for which we present detailed information in the impact table that accompanies the CY 2016 OPPS/ASC final rule.

Finally, we estimated the overall beneficiary copayment percentage for the current and prospective OPPS years. We applied the calculated, adjusted (wage, rural, and cancer) copayment to all separately paid HCPCS, and we capped copayment at the inpatient deductible for 2016. We summed total copayments for each year and divided by respective total payment. We estimate that total beneficiary liability for copayments would be 19.3% percent in CY 2016.
**Blood, Brachytherapy, Drugs, and Radiopharmaceutical Payment Rates**

As mentioned in STAGE 1, we 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 (n=403,926,390). No claims were deleted. We use these line items to calculate per unit per day cost information 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 costs per unit and per day. For drugs and biologicals, we used the July 2015 ASP plus 6 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 2014 hospital claims data to determine the per day cost. We use per day cost to determine whether a drug or biological is packaged.

For CY 2016, we are continuing to pay for separately payable drugs and biologicals under the OPPS at ASP plus 6 percent, based upon the statutory default described in section 1833(t)(14)(A)(iii)(II) of the Act. We refer readers to section V.B.3. of the CY 2016 OPPS/ASC final rule for a complete discussion of our final policy to pay for separately paid drugs and biologicals in CY 2016.

The payment rates for blood and blood products were based on simulated geometric mean costs under a different methodology that is explained in the CY 2016 OPPS/ASC final rule.
Comprehensive APC Payment Rates

The comprehensive APC (C-APC) payment model is being developed to simplify reporting and payment provision for high cost, complex outpatient procedures by accounting for all costs and component services typically involved in the provision of the complete primary procedure.

Claims that contain at least one J1 procedure code are separated from the usual OPPS modeling to undergo comprehensive specific modeling. The comprehensive cost modeling incorporates the costs of a wider range of procedures into a claim’s primary service than the usual OPPS modeling. Like OPPS modeling, costs of packaged procedure codes (status indicators N, Q1, Q2) and packaged un-coded revenue centers are included in the claim modeled cost. Unlike OPPS modeling, costs on the claim from major OPPS procedure codes (status indicators P, S, T, and V), lower ranked comprehensive procedure codes (status indicator J1), non-pass-through drugs and biologicals (status indicator K), and blood products (status indicator R) are also packaged into the primary comprehensive procedure. Ambulance services; mammography services; pass-through drugs and devices (status indicator G and H); brachytherapy services (status indicator U); preventive services; corneal tissue, CRNA services, hepatitis B vaccine (status indicator F); and influenza and pneumococcal pneumonia vaccines (status indicator L) are excluded from comprehensive packaging.

When assigning claims reporting J1 primary services to comprehensive APCs, as configured in the current payment year, a ranking of the primary (J1) HCPCS codes is first generated using the comprehensive modeled geometric mean costs from claims reporting only one J1 service. The ranking can be found in the Addendum J “Rank for Primary Assignment” table and includes the frequency of service lines in the full OPPS claims population for reference, the frequency of single J1 unit claims used for ranking development, the modeled comprehensive APC geometric mean cost which determines the relative rank of C-APCs, and the modeled comprehensive HCPCS geometric mean cost which determines the relative rank of J1 services within each C-APC. This is a universal ranking of all J1 services that is used to initially assign all claims reporting J1 services within the C-APCs as configured in the current payment year from highest to lowest cost except for J1 services that map to different C-APCs as configured in the current...
payment year. Comprehensive claims that report a single J1 service assign the J1 HCPCS code as their primary. When comprehensive claims report more than 1 J1 code, the J1 service assigned to the highest cost C-APC (or, if multiple J1 services are assigned to the same APC, then the highest cost J1 code at the HCPCS level), as indicated by the ranking, is identified as primary for the multiple J1 procedure claim, and the claim is mapped to the J1 identified as primary. The “Total Frequency” parameter for J1 services indicated in the CPT and APC Cost Statistics files indicates the number of comprehensive claims whose primary is assigned to the indicated service after application of complexity adjustments.

C-APC claims that contain two or more J1 service units or that contain certain add-on procedure codes may be eligible for a complexity adjustment that promotes the claim to the next higher cost APC within the primary procedure’s clinical family. The complexity adjustments are developed for frequently occurring combinations that significantly increase the cost of the primary procedure claim. Eligibility of combinations for complexity adjustment is assessed using C-APC claims that contain two or more J1 service units or that contain one J1 service unit and one unique add-on code (from the limited list of add-on codes for primes with status indicator J1). The combinations assigned to these claims correspond to the two highest rank J1 services reported on the claim for J1 combinations or the claim’s only reported J1 service and add-on service for add-on combinations. The frequency of combinations is then calculated from this claim subset and the comprehensive geometric mean costs are modeled for each combination using this claim subset. Combinations eligible for complexity adjustment must 1) have a frequency of 25 or more from this claim subset and 2) have a modeled geometric mean cost that is a factor of 2 or greater than the comprehensive geometric mean cost of the lowest significant HCPCS in the primary procedure’s APC when modeled without the application of complexity adjustments. Claims with primary or secondary J1 services reported with modifier -73 or -74 were excluded from the complexity adjustment evaluation. The “Complexity Adj. Evaluation” table in Addendum J shows all combinations evaluated for complexity adjustment eligibility along with the complexity adjusted APC to which the combination’s claims would be promoted, the frequency of combinations from the claim subset described above, the modeled geometric mean cost of the combinations from the claim subset described above, and the eligibility cost threshold determined by two times the comprehensive geometric mean cost of the lowest.
significant HCPCS in the primary procedure’s APC when modeled without complexity adjustments.

Before modeling C-APC cost statistics, all comprehensive claims are assessed for complexity adjustments based on the list of eligible combinations in the Addendum J “Complexity Adjustments” table. Claims receiving complexity adjustments must have an eligible combination’s primary service identified as the claim’s primary J1 service and must report the combination’s corresponding secondary service (regardless of the other services reported). Complexity adjusted claims are removed from modeling of the original primary service and reassigned to the adjusted primary and described by a code of the following general type: “last 4 digits of original primary procedure code” + “A”. All complexity adjusted claims with the same original primary are modeled under the same adjusted primary. The adjusted primary is assigned to the combination’s complexity adjusted APC found in the Addendum J “Complexity Adjustments” table that corresponds to the next higher cost C-APC in the original primary procedure’s clinical family of C-APCs relative to the claim’s original C-APC, and the claim is modeled under this higher cost C-APC.
Comprehensive Observation Modeling

As part of the expansion of the C-APC payment policy methodology, payment for all qualifying extended assessment and management encounters [formerly APC 8009 “Extended Assessment and Management (EAM)” composite] will be paid through the newly created C-APC 8011 “Comprehensive Observation Services”. The status indicator of J2 is assigned to the new C–APC 8011 to distinguish between the logic required to identify the claims qualifying for the new C–APC 8011 and the other C–APCs. A claim is qualified for C–APC 8011 when it contains a specific combination of services performed with each other, as opposed to the presence of a single service identified by status indicator J1 for all other C-APCs.

Claims that qualify for C-APC 8011 are separated from the usual OPPS modeling to undergo comprehensive specific modeling. C-APC 8011 modeling claims are identified by meeting the following criteria: 1) claim does not contain a HCPCS code with status indicator T; 2) claim contains 8 or more units of service for G0378 (observation services, per hour); 3) claim contains one of the following codes: G0379 (direct referral of patient for hospital observation care) on the same date of service as G0378; 99281, 99282, 99283, 99284, 99285 (emergency department visit for the evaluation and management of a patient (Levels 1-5)), G0380, G0381, G0382, G0383, G0384 (type B emergency department visit (Levels 1-5)), 99291 (critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes), or G0463 (hospital outpatient clinic visit for assessment and management of a patient) provided on the same date of service or 1 day before the date of service for G0378; 4) claim does not contain a HCPCS code with status indicator J1. If a claim reports services that qualify for C–APC 8011 modeling and reports a status indicator J1 service, then the J2 services and all other items and services on the claim are packaged with the payment for the J1 C-APC.

All claims that meet the criteria for C-APC 8011 are used in ratesetting and to develop the geometric mean cost of the comprehensive service based on the costs of all reported OPPS payable services reported on the claim (excluding all preventive services and certain Medicare Part B Inpatient services according to the comprehensive modeling policy described above).