Medicare CY 2019 Outpatient Prospective Payment System (OPPS) Proposed Rule Claims Accounting

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 2017 claims data to produce the proposed prospective CY 2019 OPPS payment rates. 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 85 million single procedure (natural single), generated single procedure (pseudo single), and generated single "session" composite claim records to set the Ambulatory Payment Classification (APC) rates to be paid under Medicare OPPS for CY 2019.[1]

Included is a narrative description of the accounting of claims used in the setting of payment rates for Medicare's 2019 Outpatient Prospective Payment System (OPPS). For the CY 2019 OPPS, we are proposing to continue developing relative payment weights using APC geometric mean costs.

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 proposed APC 5012, the outpatient clinic visit APC in CY 2019. As discussed in Part 2 of this narrative, the resulting unscaled weights were scaled for budget neutrality to ensure that the recalibration of APC weights for CY 2019 does not increase

[1] Proposed CY 2019 rates are based on 2017 calendar year outpatient claims data, specifically final action claims processed through the common working file as of December 31, 2017.

total OPPS spending. The scaled weights were multiplied by the proposed CY 2019 OPPS conversion factor to determine the national unadjusted payment rate for the CY 2019 APCs. Payment rates for drugs and biologicals are an exception, as their payment rates are a percentage of average sales price and are not scaled.

This section of the claims accounting narrative is intended to help the public understand the order in which CMS processed claims to produce the proposed CY 2019 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 2016). 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.

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

Selected claims for calendar year 2017 from the national claims history, n=166,610,255 records, with a total claim count of 163,302,974. 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=394,470). 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=1,663).

Excluded claims for services furnished in Maryland, Guam, US Virgin Islands, American Samoa, and the Northern Marianas (n=2,209,266).

Balance = 157,027,289

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=32,616,207).

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=124,397,930).

3) Bill type 76X (CMHC). These claims are used to set the per diem partial hospitalization rate for CMHCs (n=13,152).

Balance for Bill Types 12X, 13X, and 14X = 124,397,930

Incorporated all new Category I and III CPT codes and new Level II HCPCS codes that were effective as of April 1, 2018, July 1, 2018, or will be effective January 1, 2019.

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.

For the CCR calculation process, we used the same general approach that we used in developing the APC rates for CY 2007 and thereafter, using the revised CCR calculation that excluded the costs of paramedical education programs and weighted the outpatient charges by the volume of outpatient services furnished by the hospital. We refer readers to the CY 2007 OPPS/ASC proposed rule with comment period for more information (71 FR 67983 through 67985). We first limited the population of cost reports to only those hospitals that filed outpatient claims in CY 2017 before determining whether the CCRs for such hospitals were valid.

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=124,397,930).

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=2,065,269).

Identified claims with condition code 41 and removed to another file (n=53,979). These claims were used to calculate the partial hospitalization service per diem rate for hospital-based partial hospitalization programs. (Component of the limited data set (LDS) available for purchase from CMS).

Excluded claims without a HCPCS code (n=9,216).

Removed to another file claims that contain nothing but flu vaccine and PPV vaccine services (n=71,239).

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 = 122,198,227

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=406,454,563).
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.

As described in the proposed rule with comment period, our data development process is designed with the goal of using appropriate cost information in setting the APC relative payment weights. This section discusses how we develop “pseudo” single procedure claims (as defined below), with the intention of using more appropriate data from the available claims. In some cases, the bypass process allows us to use some portion of the submitted claim for cost

estimation purposes, while the remaining information on the claim continues to be unusable. Consistent with the goal of using appropriate information in our data development process, we only use claims (or portions of each claim) that are appropriate for ratesetting purposes.

The proposed APC relative weights and payments for CY 2019 in Addenda A and B to this proposed rule with comment period (which are available via the Internet on the CMS Web site) were calculated using claims from CY 2017 that were processed through December 31, 2017. While prior to CY 2013 we historically based the payments on median hospital costs for services in the APC groups, beginning with the CY 2013 OPPS, we established the cost-based relative payment weights for the OPPS using geometric mean costs, as discussed in the CY 2013 OPPS/ASC proposed rule with comment period (77 FR 68259 through 68271). For the CY 2019 OPPS proposed rule with comment period, we continue to use this same methodology, basing payments on geometric mean costs. Under this methodology, we select claims for services paid under the OPPS and match these claims to the most recent cost report filed by the individual hospitals represented in our claims data. We continue to believe that it is appropriate to use the most current full calendar year claims data and the most recently submitted cost reports to calculate the relative costs underpinning the APC relative payment weights and the CY 2019 payment rates.

Use of Single and Multiple Procedure Claims

For CY 2019, in general, we continued to use single procedure claims to set the costs on which the APC relative payment weights are based. We generally use single procedure claims to set the estimated costs for APCs because we believe that the OPPS relative weights on which payment rates are based should be derived from the costs of furnishing one unit of one procedure and because, in many circumstances, we are unable to ensure that packaged costs can be appropriately allocated across multiple procedures performed on the same date of service.

It is generally desirable to use the data from as many claims as possible to recalibrate the APC relative payment weights, including those claims for multiple procedures. As we have for several years, we continue to use date of service stratification and a list of codes to be bypassed to convert multiple procedure claims to “pseudo” single procedure claims. Through bypassing

specified codes that we believe do not have significant packaged costs, we are able to use more data from multiple procedure claims. In many cases, this enables us to create multiple "pseudo" single procedure claims from claims that were submitted as multiple procedure claims spanning multiple dates of service, or claims that contained numerous separately paid procedures reported on the same date on one claim. We refer to these newly created single procedure claims as "pseudo" single procedure claims.

For CY 2019, we are proposing to bypass 169 HCPCS codes that are identified in Addendum N to this proposed rule with comment period (which is available via the Internet on the CMS Web site). Since the inception of the bypass list, the list of codes to be bypassed to convert multiple procedure claims to "pseudo" single procedure claims, we have calculated the percent of "natural" single claims that contained packaging for each HCPCS code and the amount of packaging on each "natural" single claim for each code. Each year, we generally retain the codes on the previous year's bypass list and use the updated year's data (9 months of CY 2017 claims processed through 9 months that would typically be used for the Advisory Panel on Hospital Outpatient Payment (the Panel) in addition to CY 2016 claims processed through June 30th, 2017) used in the CY 2018 OPPS/ASC final rule to determine whether it would be appropriate to add additional codes to the previous year's bypass list. For CY 2019, we are proposing to continue to bypass all of the HCPCS codes on the CY 2017 OPPS bypass list, with the exception of HCPCS codes that we deleted for CY 2019, which are listed in Table 1 of the proposed rule with comment period. (We refer readers to Addendum N to the CY 2019 OPPS/ASC proposed rule for the CY 2019 OPPS bypass list. Addendum N is available via the Internet on the CMS Web site.)

Because we must make some assumptions about packaging in the multiple procedure claims in order to assess a HCPCS code for addition to the bypass list, we assumed that the representation of packaging on "natural" single procedure claims for any given code is comparable to packaging for that code in the multiple procedure claims. The proposed criteria for the bypass list are:

● There are 100 or more "natural" single procedure claims for the code. This number of single procedure claims ensures that observed outcomes are sufficiently representative of packaging that might occur in the multiple claims.

● Five percent or fewer of the "natural" single procedure claims for the code have packaged costs on that single procedure claim for the code. This criterion results in limiting the amount of packaging being redistributed to the separately payable procedures remaining on the claim after the bypass code is removed and ensures that the costs associated with the bypass code represent the cost of the bypassed service.

● The geometric mean cost of packaging observed in the "natural" single procedure claims is equal to or less than $60. This criterion also limits the amount of error in redistributed costs. During the assessment of claims against the bypass criteria, we do not know the dollar value of the packaged cost that should be appropriately attributed to the other procedures on the claim. Therefore, ensuring that redistributed costs associated with a bypass code are small in amount and volume protects the validity of cost estimates for low cost services billed with the bypassed service.

● The code cannot be a code for an unlisted service. Unlisted codes do not describe a specific service and, therefore, their costs would not be appropriate for bypass list purposes. Further, unlisted codes are not used in establishing the percent of claims contributing to the APC, nor are their costs used in the calculation of the APC geometric mean.

As a result of the multiple imaging composite APCs that we established in CY 2009, the program logic for creating "pseudo" single procedure claims from bypassed codes that are also members of multiple imaging composite APCs changed. When creating the set of "pseudo" single procedure claims, claims that contain "overlap bypass codes" (those HCPCS codes that are both on the bypass list and are members of the multiple imaging composite APCs) were identified first. These HCPCS codes were then processed to create multiple imaging composite "single session" claims, that is, claims containing HCPCS codes from only one imaging family, thus suppressing the initial use of these codes as bypass codes. However, these "overlap bypass codes" were retained on the bypass list because, at the end of the "pseudo" single processing logic, 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 procedure claims. This process also created multiple imaging composite “single session” claims that could be used for calculating composite APC costs. “Overlap bypass codes” that are members of the proposed multiple imaging composite APCs are identified by asterisks (*) in Addendum N to the proposed rule with comment period (which is available via the Internet on the CMS Web site).

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. of the CY 2019 OPPS/ASC proposed 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. We note that we finalized our proposal to include lines items with SI=“R” and “U” in this trim for the CY 2017 OPPS, and are proposing to continue doing so in the CY 2019 OPPS. 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=1,556,548).

For the CY 2019 OPPS proposed rule with comment period, we are proposing to continue excluding line item data for pass-through drugs and biologicals (status indicator “G” for CY 2016 claims data), brachytherapy sources (status indicator “U” for CY 2017 claims), blood and blood products (status indicator “R” for CY 2017 claims), and non-pass through drugs and biological (status indicator “K” for CY 2017 claims data) that do not receive payment (n=172,310).

We note that this will be the first year in which claims data containing lines with the modifier “PN” will be available, which indicate nonexcepted items and services furnished and billed by off-campus provider-based departments (PBDs) of hospitals. Because nonexcepted services are not paid under the OPPS, we are proposing to remove those claim lines reported with modifier “PN” from the claims data used in ratesetting for the CY 2019 OPPS and subsequent years. However, we are retaining lines with these modifiers for purposes of the OPPS limited data set.

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 claim, 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 claim, 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 2018 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 hospital ancillary (12X bill type) or outpatient (13X bill type) claim with no OPPS service assigned to status indicator J1, J2, S, T, V, Q1, Q2, or Q3; otherwise, they are designated status indicator N. Q4 laboratory services billed on reference laboratory (14X bill type) claims are always designated for separate payment with status indicator A.

Previously, Q4 codes on hospital outpatient (13X bill type) claims with paid OPPS services received status indicator A and separate payment if billed with modifier L1, indicating the Q4 laboratory service was unrelated to the OPPS services on the claim. However, use of the L1 modifier to identify unrelated lab services was discontinued on January 1, 2017. As a result for the CY 2019 OPPS modeling, Q4s present on the same hospital outpatient claim as a payable OPPS service of status indicator J1, J2, S, T, V, Q1, Q2, or Q3 are assigned a packaged status with status indicator N, regardless of the presence of an L1 modifier.

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. Files with an asterisk (*) beside their name are a component of the limited data set (LDS) available for purchase from CMS.

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; 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. All of these single major claims will be used in ratesetting (n=57,165,513).

We also include claims with services assigned to status indicator J1 and J2 in this category. These claims receive special processing under the CY 2019 comprehensive APC policy discussed in section II.A.2.b. of the CY 2019 OPPS/ASC proposed rule with comment period.

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 claim and no higher weighted Q2 code on the same claim); 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=21,687,889).

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=5,601,728). 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 claim, 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 claim and no other separately paid procedures (n=29,047,491).

5) Non-OPPS claims: These claims have no services payable under OPPS on the claim and are excluded (n=8,695,606). 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 21,687,889 multiple major claims without a J1 service or the J2 comprehensive, we were able to use 14,864,757 of those claims to create 37,821,797 pseudo single claims. Of the pseudo single claims created, 936,269 were single "session" imaging composite claims. As noted above, the multiple major claims already contained the proposed 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 2019 OPPS/ASC proposed rule with comment period.

We then subsetted claims out 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 2019 OPPS, we are proposing to continue 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 30,628,171 claims because these claims continued to contain multiple separately payable procedures with significant packaging and could not be split (n=3,514,608) or because the claims contained services with SI=N and no separately payable procedures on the claim (n=27,113,563). We also were not able to use claims with the following characteristics: major procedure with a zero cost (n= 3,905), major procedure with charges less than $1.01 (n=13,119); or packaging flag of 3 (n=35,804), suggesting token charges. We do not believe that these charges, which were token charges as submitted by the hospital, are valid reflections of hospital resources. We also deleted claims for which the charges equaled the revenue center payment (that is, the Medicare payment) on the assumption that, where the charge equaled the payment, to apply a CCR to the charge would not yield a valid estimate of relative provider cost.

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 claim, packaged all packaged costs, including other Q1 and Q2 costs, into the code with the highest CY 2017 payment weight based on CY 2017 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 1,933,519 pseudo singles from the multiple minor claims. We were not able to use 27,113,563 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 5,601,728 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 = 97,857,098 (the sum of single majors without a J1 service or the J2 comprehensive = 57,165,513, and pseudo singles from multiple majors, multiple minors, and the single “session” composite claims = 40,691,585.

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 in the packaged revenue code table under Table 3 of this document. 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 97,857,098 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 use the pre reclassified wage indices for standardization because we believe that they better reflect the true costs of items and services in the area in which the hospital is located than the post reclassification wage indices and, therefore, would result in the most accurate unadjusted geometric mean costs.

We left STAGE 4 with 97,857,098 single procedure claim records containing summarized costs for the payable HCPCS and all packaged codes and revenue centers on the claim.

Balance = 97,857,098

STAGE 5: Calculated HCPCS and APC costs

We began with 97,857,098 single procedure claim records with summarized costs.

We excluded 669,179 claim records that had zero costs after summing all costs on the claim in STAGE 4.

We excluded 0 records because we lacked an appropriate wage index.

We excluded 645,671 claim records that were outside +/- 3 standard deviations from the geometric mean cost for each HCPCS code.

We excluded 28 claim records that contained more than 31 units of the code on the claim.

We excluded 8,869,859 claim records from 1,259 providers that used a cost allocation method of ‘‘square feet’’ to calculate CCRs used to estimate costs associated with the CT and MRI APCs. We identified providers using ‘‘square feet’’ as the cost allocation method by extracting the character (or “alpha”) HCRIS data on Worksheet B–1 of the Medicare cost report Form CMS 2552-10.

Balance = 85,067,528

We used the balance of 85,067,528 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 proposed geometric mean per diem cost for APC 5853 (Partial Hospitalization (3 or more services per day) for CMHCs), calculated from the bill type 76x claims from Pre-STAGE 1. We also added a geometric mean per diem cost for APC 5863 (Partial Hospitalization (3 or more services per day) 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 proposed rule with comment period, such as those discussed in section II.A.2.c. of the CY 2019 OPPS/ASC proposed rule with comment period. The unique assumptions behind each composite or alternative geometric mean calculation methodology are discussed in greater detail in the CY 2019 OPPS/ASC proposed rule with comment period.

We note that, for purposes of identifying significant HCPCS codes for examination in the 2 times rule, we consider codes that have more than 1,000 single major claims or codes that have both greater than 99 single major claims and contribute at least 2 percent of the single major claims used to establish the APC geometric mean cost to be significant. This longstanding definition of when a HCPCS code is significant for purposes of the 2 times rule was selected because we believe that a subset of 1,000 claims is negligible within the set of approximately 85 million single procedure or single session claims we use for establishing geometric mean costs. Similarly, a HCPCS code for which there are fewer than 99 single claims and which comprises less than 2 percent of the single major claims within an APC will have a negligible impact on the APC geometric mean.

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 proposed outpatient clinic visit APC in CY 2019, we began the process of calculating budget neutrality adjustments and the outlier threshold to determine proposed payment rates. The result of all proposed payment policies are presented in the impact table in Section XXI. Regulatory Impact Analysis of the CY 2019 OPPS/ASC proposed 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 proposed rule with comment period 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 2017 claims look like they would if they were paid in the current OPPS year, CY 2018, and the prospective OPPS year, CY 2019. We created a summary utilization file for services in the CY 2017 claims database that would be paid under the 2018 OPPS and a summary utilization file for services that would be paid under the proposed 2019 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 July 2018 IOCE specifications (v19.2) are available at: https://www.cms.gov/Medicare/Coding/OutpatientCodeEdit/OCEQtrReleaseSpecs.html

We constructed a summary utilization file for the CY 2019 OPPS proposed rule with comment period using single and multiple bills from STAGE 2 of this document (n=113,502,621), the partial hospitalization claims (n=53,979) from STAGE 1, and those from CMHCs (13,152) 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 proposed CY 2019 payment policies, we summarized these files to a single CY 2019 summary file of 3,623,519 observations from 3,762 hospitals (including cancer and children's hospitals) and 44 CMHCs, which only provide one service, partial hospitalization. We used this summary file as the basis for modeling the CY 2019

weight in the weight scaler calculation and estimated payment in CY 2019 in the CY2019 proposed rule with comment period impact table.

We also constructed a baseline summary utilization file to reflect the existing CY 2018 OPPS. For the CY 2018 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 3,660,975 services by hospitals and CMHCs. We used this summary file as the basis for modeling the current CY 2018 weight in the weight scaler calculation and estimated payment in CY 2018 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 2019, we used unscaled weights, the APC geometric mean cost divided by the geometric mean cost for proposed 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 2017 and 2019. The proposed summary utilization file for the prospective CY 2019 OPPS contains 3,723,331 (including CMHCs) observations for 3,806 providers, and the proposed summary utilization file for the current 2018 OPPS contains 3,709,069 (including CMHCs) observations for 3,806 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 2019 = 3,723,331 HCPCS, by SI, by APC, by Provider

Balance baseline CY 2018 = 3,709,069 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 2019 OPPS/ASC proposed rule with comment period. The weight scaler compares total scaled weight under the current OPPS for 3,806 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 2019 OPPS/ASC proposed 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:

(UNSCALED_2019_WEIGHT*.4+UNSCALED_2019_WEIGHT*.6
*CY2018_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:

(UNSCALED_2019_WEIGHT*.4+UNSCALED_2019_WEIGHT*.6
*CY2018_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:

UNSCALED_2019_WEIGHT*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 2019 proposed 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 2019 = 3,806 providers
Balance baseline CY 2018 = 3,806 providers

Proposed CY 2019 weight scaler = 1.4553

STAGE 8: Calculated the Wage and Provider Adjustments

We used the same providers to estimate the budget neutrality adjustment for adopting the proposed IPPS FY 2019 post reclassification wage index for the CY 2019 OPPS, discussed in section II.C. of the CY 2019 OPPS/ASC proposed rule with comment period. Using the same wage-adjusted weight formulas presented above, the wage adjustment compares differences in total scaled, proposed CY 2019 weight providers varying only the wage index between CY 2018 and CY 2019, and using the 2018 rural adjustment. The budget neutrality adjustment for changes in the wage index is 1.0004. We are proposing to 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 proposed dedicated cancer hospital adjustment for the CY 2019 OPPS, discussed in section II.F. of the CY 2019 OPPS/ASC proposed rule with comment period. We calculated a CY 2019 budget neutrality adjustment factor by comparing the estimated total CY 2019 payments under section 1833(t) of the Act, including the CY 2019 cancer hospital adjustment relative to the CY 2017 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 proposed budget neutrality adjustment for the proposed CY 2019 cancer hospital adjustment is 1.0000.

We are proposing to continue the CY 2018 payment policy for drugs purchased under the 340B drug discount program, as described in section V.B.7. of the CY 2018 OPPS final rule. Therefore there is no change to the proposed CY 2019 OPPS conversion factor under the proposed policy, which is included in both the current and prospective OPPS for purposes of the impact model.

Balance CY 2019 providers = 3,806

Total wage index adjustment to the conversion factor = 1.0004
Total rural adjustment to the conversion factor = 1.0000
Total cancer hospital adjustment to the conversion factor = 1.0000
Total budget neutrality adjustment to the conversion factor = 1.0004

Calculation of the proposed 2019 OPPS Conversion Factor

Steps	2018 OPPS CF	Return PT and outliers (/)	Wage Index (x)	Cancer Hospital (x)	Rural Hospital (x)	Hospital Outpatient Update (x)	Remove PT and outliers (x)	2019 OPPS CF
Value applied		(1-.01-.0004)	1.0004	1.0000	1.0000	1.0125	(1-.01-.17)	
CF	78.636	79.462	79.494	79.494	79.494	80.488	79.546	79.546

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 99,815,597 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 3,762 hospitals using the April 2018 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 2018. We used internally calculated CCRs to substitute for any missing CCRs on the April 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, instead proposing to continue in CY 2019 the policy of 3.4 times payment for APC 5853 (Partial Hospitalization (3 or more services per day) for CMHCs). 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 2019 OPPS/ASC proposed rule with comment period, we simulated CY 2019 costs by applying a charge inflation factor of 1.085868 to charges on the CY 2017 claims and by applying the CCR adjustment of 0.987842 to the April 2018 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 $4,600 fixed dollar threshold, we estimated outlier payments for 2,840 hospitals for column 5 of the impact table.

We repeated this exercise for the current year CY 2018 OPPS. We used 99,815,597 claims to estimate the percentage of total payment attributable to outlier payments in 2018. We inflated charges on the CY 2016 claims by an inflation factor for one year, 1.04205, and using the CCRs from the April 2018 update to the Outpatient Provider Specific File, we estimated CY 2018 costs and compared them to wage-adjusted CY 2018 payment for each service. Ultimately, we estimated outlier payments for 2,880 hospitals for column 5 of the impact table. We also estimated total outlier payments to be 1.02% of total CY 2017 OPPS payments.

Balance CY 2019 = 3,762 hospitals
Balance baseline CY 2018 = 3,762 hospitals

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

The impact table in section XXI. Regulatory Impact Analysis of the CY 2019 OPPS/ASC proposed rule with comment period compares OPPS payment for 3,806 providers in the baseline CY 2016 file to the proposed CY 2019 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 2019 proposed rule with comment period to the baseline CY 2017 payment and we show this result in column 2. The detailed calculations behind the table columns are discussed in section XXI. of the CY 2019 OPPS/ASC proposed rule with

comment period. Proposed rule payment presented in column 6 of the impact table compares total estimated payment, including outlier payments, but excludes pass-through payment for the current and prospective years.

We also included a column describing the impact of our CY 2019 proposal to control for unnecessary increases in the volume of outpatient service by paying for clinic visits furnished at an off-campus provider-based department at an MPFS-equivalent rate under the OPPS rather than at the standard OPPS rate. This is described in more detail in section X.B. of the CY 2019 OPPS/ASC proposed rule with comment period.

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 3,762 hospitals with any claim used to model the proposed OPPS. We do not have complete descriptive information for the 44 CMHCs 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 2019 payments, including outlier payments, by provider for the subset of 3,762 hospitals excluding children's and cancer hospitals, which are permanently held harmless, and 44 CMHCs for which we present detailed information in the impact table that accompanies the CY 2019 OPPS/ASC proposed rule with comment period.

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. We summed total copayments for each year and divided by respective total payment. We estimate that total beneficiary liability for copayments would be 18.5% percent in CY 2019.

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=406,454,563). 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 April 2018 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 2017 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 2019, we are proposing to continue paying for separately payable drugs and biologicals under the OPPS at ASP plus 6 percent for non-340B drugs, based upon the statutory default described in section 1833(t)(14)(A)(iii)(II) of the Act. For CY 2019, we are proposing to continue adjusting the applicable payment rate for separately payable drugs and biologicals (other than drugs on pass through and vaccines) acquired under the 340B program from ASP plus 6 percent to ASP minus 22.5 percent. We refer readers to section V of the CY 2019 OPPS/ASC proposed rule for a complete discussion of our policy to pay for separately paid drugs and biologicals in CY 2019.

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 2019 OPPS/ASC proposed rule with comment period.

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, that contain a J1 bilateral service with modifier 50, 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: [first 4 characters of HCPCS] + [last character of HCPCS mapped to adjustment character] (1=A, 2=B, 3=C, 4=D, 5=E, 6=G, 7=Q, 8=R, 9=S, 0=X, T=Z). 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.

We note that due to an overlap issue between the nomenclature for the complexity adjustment methodology and the temporary CPT codes for CY 2019, we hardcoded a change for the complexity adjustment that would otherwise be tracked as 3853X, instead using the code 3853Y.

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 proposed C-APC 8011 “Comprehensive Observation Services”. The status indicator of J2 is assigned to proposed 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).

Statewide Average Default CCRs

For CY 2019, we are proposing to continue using our standard methodology of calculating the statewide average default CCRs using the same hospital overall CCRs that we use to adjust charges to costs on claims data for setting the proposed CY 2019 OPPS relative payment weights. The proposed CCRs represent the ratio of total costs to total charges for those cost centers relevant to outpatient services from each hospital's most recently submitted cost report, weighted by Medicare Part B charges. We also adjust ratios from submitted cost reports to reflect the proposed settled status by applying the differential between settled to submitted overall CCRs for the cost centers relevant to outpatient services from the most recent pair of proposed settled and submitted cost reports. We then weight each hospital's CCR by the volume of separately paid line-items on hospital claims corresponding to the year of the majority of cost reports used to calculate the overall CCRs. We refer readers to the CY 2008 OPPS/ASC proposed rule with comment period (72 FR 66680 through 66682) and prior OPPS rules for a more detailed discussion of our established methodology for calculating the statewide average default CCRs, including the hospitals used in our calculations and our trimming criteria.

For Maryland, we are proposing to continue using an overall weighted average CCR for all hospitals in the Nation as a substitute for Maryland CCRs. Few hospitals in Maryland are eligible to receive payment under the OPPS, which limits the data available to calculate an accurate and representative CCR. The weighted CCR is used for Maryland because it takes into account each hospital's volume, rather than treating each hospital equally. We refer readers to the CY 2005 OPPS proposed rule with comment period (69 FR 65822) for further discussion and the rationale for our longstanding policy of using the national average CCR for Maryland. In general, observed changes in the statewide average default CCRs between CY 2018 and CY 2019 are modest and the few significant changes are associated with areas that have a small number of hospitals.

CCRs used in OPPS Ratesetting

Since the implementation of the OPPS, some commenters have raised concerns about potential bias in the OPPS cost-based weights due to "charge compression," which is the practice of applying a lower charge markup to higher cost services and a higher charge markup to lower cost services. As a result, the cost-based weights may reflect some aggregation bias, undervaluing high-cost items and overvaluing low-cost items when an estimate of average markup, embodied in a single CCR, is applied to items of widely varying costs in the same cost center. This issue was evaluated in a report by the Research Triangle Institute, International (RTI). The RTI proposed report can be found on RTI's Web site at: http://www.rti.org/reports/cms/HHSM-500-2005-0029I/PDF/Refining_Cost_to_Charge_ratios_200807_Proposed.pdf. For a complete discussion of the RTI recommendations, public comments, and our responses, we refer readers to the CY 2009 OPPS/ASC proposed rule with comment period (73 FR 68519 through 68527).

We addressed the RTI finding that there was aggregation bias in both the IPPS and the OPPS cost estimation of expensive and inexpensive medical supplies in the FY 2009 IPPS proposed rule (73 FR 48458 through 45467). Specifically, we created one cost center for "Medical Supplies Charged to Patients" and one cost center for "Implantable Devices Charged to Patients," essentially splitting the then current cost center for "Medical Supplies Charged to Patients" into one cost center for low-cost medical supplies and another cost center for high-cost implantable devices in order to mitigate some of the effects of charge compression. In determining the items that should be reported in these respective cost centers, we adopted commenters' recommendations that hospitals should use revenue codes established by the AHA's NUBC to determine the items that should be reported in the "Medical Supplies Charged to Patients" and the "Implantable Devices Charged to Patients" cost centers. For a complete discussion of the rationale for the creation of the new cost center for "Implantable Devices Charged to Patients," a summary of public comments received, and our responses to those public comments, we refer readers to the FY 2009 IPPS proposed rule.

The cost center for "Implantable Devices Charged to Patients" has been available for use for cost reporting periods beginning on or after May 1, 2009. In the CY 2013 OPPS/ASC proposed rule with comment period, we determined that a significant volume of hospitals were utilizing the

"Implantable Devices Charged to Patients" cost center. Because a sufficient amount of data from which to generate a meaningful analysis was available, we established in the CY 2013 OPPS/ASC proposed rule with comment period a policy to create a distinct CCR using the "Implantable Devices Charged to Patients" cost center (77 FR 68225). We retained this policy through CY 2017, and we are continuing this practice for the CY 2019 OPPS.

In the FY 2011 IPPS/LTCH PPS proposed rule (75 FR 50075 through 50080), we created new standard cost centers for "Computed Tomography (CT)," "Magnetic Resonance Imaging (MRI)," and "Cardiac Catheterization," and to require that hospitals report the costs and charges for these services under these new cost centers on the revised Medicare cost report Form CMS 2552-10. As we discussed in the FY 2009 IPPS and CY 2009 OPPS/ASC proposed and proposed rules, RTI also found that the costs and charges of CT scans, MRIs, and cardiac catheterization differ significantly from the costs and charges of other services included in the standard associated cost center. RTI concluded that both the IPPS and the OPPS relative payment weights would better estimate the costs of those services if CMS were to add standard costs centers for CT scans, MRIs, and cardiac catheterization in order for hospitals to report separately the costs and charges for those services and in order for CMS to calculate unique CCRs to estimate the cost from charges on claims data. We refer readers to the FY 2011 IPPS/LTCH PPS proposed rule (75 FR 50075 through 50080) for a more detailed discussion on the reasons for the creation of standard cost centers for CT scans, MRIs, and cardiac catheterization. The new standard cost centers for CT scans, MRIs, and cardiac catheterization were effective for cost report periods beginning on or after May 1, 2010, on the revised cost report Form CMS-2552-10.

Using the HCRIS update for the proposed 2019 cycle which we used to estimate costs in the CY 2019 OPPS ratesetting process, we were able to calculate a valid implantable device CCR for 2,961 hospitals, a valid MRI CCR for 2,174 hospitals, a valid CT scan CCR for 2,244 hospitals, and a valid Cardiac Catheterization CCR for 1,473 hospitals.

In our CY 2014 OPPS/ASC proposed rule discussion (78 FR 43549), we noted that, for CY 2014, the estimated changes in geometric mean estimated APC cost of using data from the new

standard cost centers for CT scans and MRIs appeared consistent with RTI's analysis of cost report and claims data in the July 2008 proposed report (pages 5 and 6). RTI concluded that "in hospitals that aggregate data for CT scanning, MRI, or nuclear medicine services with the standard line for Diagnostic Radiology, costs for these services all appear substantially overstated, while the costs for plain films, ultrasound and other imaging procedures are correspondingly understated." We also noted that there were limited additional impacts in the implantable device-related APCs from adopting the new cost report Form CMS 2552 10 because we had used data from the standard cost center for implantable medical devices beginning in CY 2013 OPPS ratesetting, as discussed above.

As we indicated in prior rulemaking (77 FR 68223 through 68225), once we determined that cost report data for the new standard cost centers were sufficiently available, we would analyze that data and, if appropriate, we would propose to use the distinct CCRs for new standard cost centers described above in the calculation of the OPPS relative payment weights. As stated in the CY 2014 OPPS/ASC proposed rule with comment period (78 FR 74847), we conducted our analysis and concluded that we should develop distinct CCRs for each of the new cost centers and use them in ratesetting. Therefore, we began in the CY 2014 OPPS, and we proposed to retain this practice for the CY 2019 OPPS, to calculate the OPPS relative payment weights using distinct CCRs for cardiac catheterization, CT scan, MRI, and implantable medical devices.

In the CY 2014 OPPS/ASC proposed rule with comment period (78 FR 74847), we finalized a policy to remove claims from providers that use a cost allocation method of "square feet" to calculate CCRs used to estimate costs associated with the CT and MRI APCs. This change allows hospitals additional time to use one of the more accurate cost allocation methods, and thereby improve the accuracy of the CCRs on which the OPPS relative payment weights are developed. In Table 1 below, we display CCR values for providers based on various cost allocation methods.

TABLE 1. CCR STATISTICAL VALUES BASED ON USE OF DIFFERENT COST ALLOCATION METHODS

Cost Allocation Method	CT		MRI	
	Median CCR	**Mean CCR**	**Median CCR**	**Mean CCR**
All Providers	0.0377	0.0527	0.0780	0.1046
Square Feet Only	0.0309	0.0475	0.0701	0.0954
Direct Assign	0.0553	0.0645	0.1058	0.1227
Dollar Value	0.0446	0.0592	0.0866	0.1166
Direct Assign and Dollar Value	0.0447	0.0592	0.0867	0.1163

As part of the transitional policy to estimate the CT and MRI APC relative payment weights using only cost data from providers that do not use "square feet" as the cost allocation statistic, we adopted a policy in the CY 2014 OPPS/ASC proposed rule with comment period that we will sunset this policy in 4 years once the updated cost report data become available for ratesetting purposes. For CY 2019, we are proposing to extend the transition policy an additional year, for the CY 2019 OPPS. In Table 2 below, we display the impact of excluding claims based on the "square feet" cost allocation method from estimates of CT and MRI costs in CY 2019.

TABLE 2. PERCENTAGE CHANGE IN ESTIMATED COST FOR CT AND MRI APCs WHEN EXCLUDING SINGLE CLAIMS FROM PROVIDERS USING "SQUARE FEET" AS THE COST ALLOCATION METHOD

CY 2019 APC	CY 2019 APC Descriptor	Percent Change
5521	Level 1 Imaging without Contrast	-3.6%
5522	Level 2 Imaging without Contrast	5.5%
5523	Level 3 Imaging without Contrast	4.4%
5524	Level 4 Imaging without Contrast	4.7%
5571	Level 1 Imaging with Contrast	7.7%
5572	Level 2 Imaging with Contrast	8.4%
5573	Level 3 Imaging with Contrast	2.8%
8005	CT and CTA without Contrast Composite	13.9%
8006	CT and CTA with Contrast Composite	11.4%
8007	MRI and MRA without Contrast Composite	6.6%
8008	MRI and MRA with Contrast Composite	7.4%

In summary, we are proposing to continue using data from the "Implantable Devices Charged to Patients" and "Cardiac Catheterization" cost centers to create distinct CCRs for use in calculating the OPPS relative payment weights for the CY 2019 OPPS. For the "Magnetic Resonance Imaging (MRI)" and "Computed Tomography (CT) Scan" APCs, we are proposing to continue our policy of removing claims from cost modeling for those providers using "square feet" as the cost allocation statistic for CY 2017.

To apply this trim, we identify providers reporting using "square feet" as the cost allocation method in the character (or "alpha") data elements of Worksheet B–1 (B10000*), column 2, lines 4 or 5 in the latest HCRIS 2552-10 hospital cost report file. Next, the 2552-10 cost reports of these square foot providers are assessed to determine whether they have reported adequate cost and charge data to derive CCRs for either cost center 5700 (CT Scan) or 5800 (MRI). The single and pseudo single claims which would be otherwise used for ratesetting, for the square foot providers with available CT Scan or MRI cost center CCR data, are then excluded from modeling the costs of services with APC 5521, 5522, 5523, 5524, 5571, 5572, 5573, 8005, 8006, 8007, or 8008.

Revenue Code Use in OPPS Ratesetting

As noted in the CY 2008 OPPS/ASC proposed rule with comment period (72 FR 66606), for the CY 2008 OPPS, we adopted an APC Panel recommendation that CMS should review the proposed list of packaged revenue codes for consistency with OPPS policy and ensure that future versions of the I/OCE edit accordingly. As we have in the past, we are proposing to continue to compare the proposed list of packaged revenue codes that we adopt for CY 2019 to the revenue codes that the I/OCE will package for CY 2019 to ensure consistency.

In the CY 2009 OPPS/ASC proposed rule with comment period (73 FR 68531), we replaced the NUBC standard abbreviations for the revenue codes listed in Table 2 of the CY 2009 OPPS/ASC proposed rule with the most current NUBC descriptions of the revenue code categories and subcategories to better articulate the meanings of the revenue codes without changing the list of revenue codes. In the CY 2010 OPPS/ASC proposed rule with comment period (74 FR 60362 through 60363), we finalized changes to the packaged revenue code list based on our examination of the updated NUBC codes and public comment on the CY 2010 proposed list of packaged revenue codes.

For CY 2019, as we did for CY 2018, we reviewed the changes to revenue codes that were effective during CY 2014 for purposes of determining the charges reported with revenue codes but without HCPCS codes that we will package for CY 2019. We believe that the charges

reported under the revenue codes listed in Table 3 below continue to reflect ancillary and supportive services for which hospitals report charges without HCPCS codes. Therefore, for CY 2019, we are proposing to continue packaging the costs that we derive from the charges reported without HCPCS codes under the revenue codes displayed in the table below for purposes of calculating the geometric mean costs on which the proposed CY 2019 OPPS/ASC payment rates are based.

TABLE 3. PROPOSED CY 2019 PACKAGED REVENUE CODES

Revenue Code	Description
250	Pharmacy; General Classification
251	Pharmacy; Generic Drugs
252	Pharmacy; Non-Generic Drugs
254	Pharmacy; Drugs Incident to Other Diagnostic Services
255	Pharmacy; Drugs Incident to Radiology
257	Pharmacy; Non-Prescription
258	Pharmacy; IV Solutions
259	Pharmacy; Other Pharmacy
260	IV Therapy; General Classification
261	IV Therapy; Infusion Pump
262	IV Therapy; IV Therapy/Pharmacy Svcs
263	IV Therapy; IV Therapy/Drug/Supply Delivery
264	IV Therapy; IV Therapy/Supplies
269	IV Therapy; Other IV Therapy
270	Medical/Surgical Supplies and Devices; General Classification
271	Medical/Surgical Supplies and Devices; Non-sterile Supply
272	Medical/Surgical Supplies and Devices; Sterile Supply
275	Medical/Surgical Supplies and Devices; Pacemaker
276	Medical/Surgical Supplies and Devices; Intraocular Lens
278	Medical/Surgical Supplies and Devices; Other Implants
279	Medical/Surgical Supplies and Devices; Other Supplies/Devices

Revenue Code	Description
280	Oncology; General Classification
289	Oncology; Other Oncology
331	Radiology- Therapeutic and/or Chemotherapy Administration; Chemotherapy Admin – Injected
332	Radiology- Therapeutic and/or Chemotherapy Administration; Chemotherapy Admin – Oral
335	Radiology- Therapeutic and/or Chemotherapy Administration; Chemotherapy Admin – IV
343	Nuclear Medicine; Diagnostic Radiopharmaceuticals
344	Nuclear Medicine; Therapeutic Radiopharmaceuticals
360	Operating Room Services; General Classification
361	Operating Room Services; Minor Surgery
362	Operating Room Services; Organ Transplant- Other than Kidney
369	Operating Room Services; Other OR Services
370	Anesthesia; General Classification
371	Anesthesia; Anesthesia Incident to Radiology
372	Anesthesia; Anesthesia Incident to Other DX Services
379	Anesthesia; Other Anesthesia
390	Administration, Processing and Storage for Blood and Blood Components; General Classification
392	Administration, Processing and Storage for Blood and Blood Components; Processing and Storage
399	Administration, Processing and Storage for Blood and Blood Components; Other Blood Handling
410	Respiratory Services; General Classification
412	Respiratory Services; Inhalation Services
413	Respiratory Services; Hyperbaric Oxygen Therapy
419	Respiratory Services; Other Respiratory Services
621	Medical Surgical Supplies – Extension of 027X; Supplies Incident to Radiology
622	Medical Surgical Supplies – Extension of 027X; Supplies Incident to Other DX Services
623	Medical Supplies – Extension of 027X, Surgical Dressings
624	Medical Surgical Supplies – Extension of 027X; FDA Investigational Devices
630	Pharmacy – Extension of 025X; Reserved
631	Pharmacy – Extension of 025X; Single Source Drug
632	Pharmacy – Extension of 025X; Multiple Source Drug
633	Pharmacy – Extension of 025X; Restrictive Prescription
681	Trauma Response; Level I Trauma
682	Trauma Response; Level II Trauma

Revenue Code	Description
683	Trauma Response; Level III Trauma
684	Trauma Response; Level IV Trauma
689	Trauma Response; Other
700	Cast Room; General Classification
710	Recovery Room; General Classification
720	Labor Room/Delivery; General Classification
721	Labor Room/Delivery; Labor
722	Labor Room/Delivery; Delivery Room
724	Labor Room/Delivery; Birthing Center
729	Labor Room/Delivery; Other Labor Room/Delivery
732	EKG/ECG (Electrocardiogram); Telemetry
760	Specialty Services; General Classification
761	Specialty Services; Treatment Room
762	Specialty services; Observation Hours
769	Specialty Services; Other Specialty Services
770	Preventive Care Services; General Classification
801	Inpatient Renal Dialysis; Inpatient Hemodialysis
802	Inpatient Renal Dialysis; Inpatient Peritoneal Dialysis (Non-CAPD)
803	Inpatient Renal Dialysis; Inpatient Continuous Ambulatory Peritoneal Dialysis (CAPD)
804	Inpatient Renal Dialysis; Inpatient Continuous Cycling Peritoneal Dialysis (CCPD)
809	Inpatient Renal Dialysis; Other Inpatient Dialysis
810	Acquisition of Body Components; General Classification
819	Acquisition of Body Components; Other Donor
821	Hemodialysis-Outpatient or Home; Hemodialysis Composite or Other Rate
824	Hemodialysis-Outpatient or Home; Maintenance – 100%
825	Hemodialysis-Outpatient or Home; Support Services
829	Hemodialysis-Outpatient or Home; Other OP Hemodialysis
942	Other Therapeutic Services (also see 095X, an extension of 094x); Education/Training
943	Other Therapeutic Services (also see 095X, an extension of 094X), Cardiac Rehabilitation
948	Other Therapeutic Services (also see 095X, an extension of 094X), Pulmonary Rehabilitation