DETAILED METHODOLOGY FOR THE 2016 VALUE MODIFIER AND THE 2014 QUALITY AND RESOURCE USE REPORT

August 2015

Centers for Medicare & Medicaid Services

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EXHIBITS

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ABOUT THE DETAILED METHODOLOGY

The Detailed Methodology for the 2016 Value Modifier describes the process and methodology used to compute the Value Modifier that will be used to adjust the Medicare Physician Fee Schedule (PFS) payments to physicians in groups with 10 or more eligible professionals in 2016.

Section I provides an overview of the 2016 Value Modifier, including the relationship between the 2016 Value Modifier and the 2014 Quality and Resource Use Reports (QRURs) that the Centers for Medicare & Medicaid Services (CMS) disseminates to groups and solo practitioners. Section II describes the methodology for computing the 2016 Value Modifier, and Section III explains the methodology for producing additional statistics included in the 2014 Mid-Year and 2014 Annual QRURs to help physicians and other eligible professionals better understand the measures included in the 2016 Value Modifier and support practice improvement.

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I. OVERVIEW OF THE 2016 VALUE MODIFIER AND 2014 MID-YEAR AND 2014 ANNUAL QUALITY AND RESOURCE USE REPORTS

A. Statutory Authority and Phased Approach to Implementation

Section 3007 of the 2010 Patient Protection and Affordable Care Act (ACA) directs the Secretary of the U.S. Department of Health and Human Services to establish a budget-neutral Value-Based Payment Modifier (referred to here as the Value Modifier) that provides for differential payment under the Medicare PFS based upon the quality of care compared to the cost of care furnished to Fee-for-Service (FFS) Medicare beneficiaries during a performance period. CMS computes the Value Modifier at the Taxpayer Identification Number (TIN) level, which means that all physicians subject to the Value Modifier and billing under a given TIN receive the Value Modifier computed for that TIN.

The ACA requires application of the Value Modifier to specific physicians and groups of physicians starting January 1, 2015, and to all physicians by January 1, 2017. CMS consequently has followed a phased approach to implementing the Value Modifier. As described in greater detail below, in 2016, physicians in most TINs with 10 or more eligible professionals will be subject to the Value Modifier, based on their TIN's performance in 2014.

B. The 2016 Value Modifier

CMS will apply the 2016 Value Modifier to physicians in groups (as identified by their TINs) with 10 or more eligible professionals, provided that at least one physician submitted a Medicare claim in 2014 under that TIN. TINs in which at least one physician participated in the Medicare Shared Savings Program, the Pioneer Accountable Care Organization (ACO) Model, or the Comprehensive Primary Care (CPC) initiative in 2014 are not subject to the 2016 Value Modifier.

To avoid an automatic negative two percent (-2.0%) Value Modifier payment adjustment in 2016, eligible professionals in TINs with 10 or more eligible professionals were required to participate in the Physician Quality Reporting System (PQRS) and satisfy PQRS requirements as a group or as individuals in 2014. TINs with 10 or more eligible professionals could avoid the automatic -2.0% Value Modifier payment adjustment in 2016 by participating in one of three reporting mechanisms under the 2014 PQRS Group Practice Reporting Option (GPRO): (1) Web Interface (for TINs with 25 or more eligible professionals), (2) Qualified PQRS Registry, or (3) Electronic Health Record (EHR)—via Direct EHR using Certified EHR Technology (CEHRT) or CEHRT Data Submission Vendor—and meeting the criteria to avoid the 2016 PQRS payment adjustment.

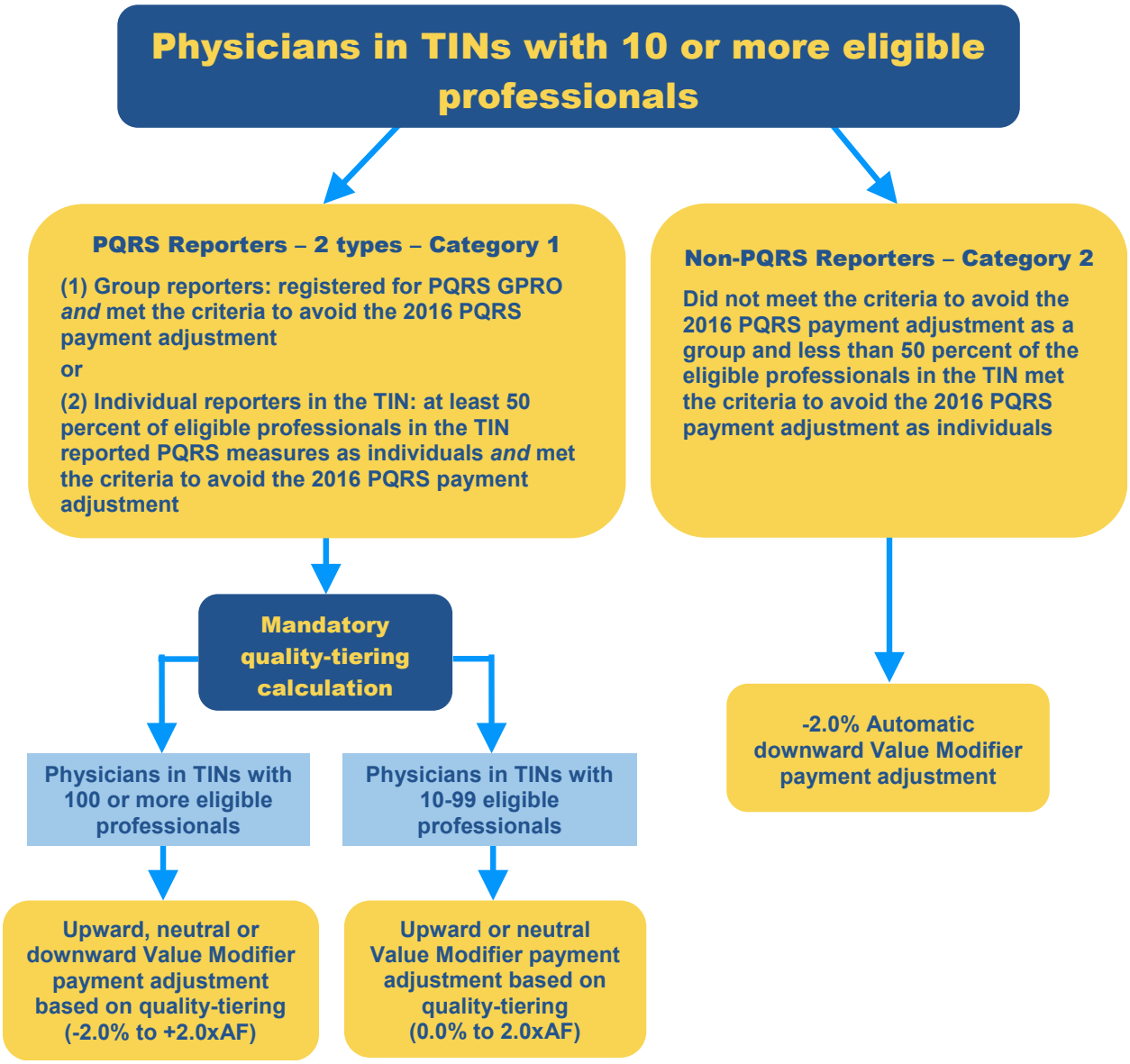
Alternatively, TINs with 10 or more eligible professionals that did not register for the 2014 PQRS GPRO could avoid the automatic -2.0% Value Modifier payment adjustment in 2016 if at least 50 percent of the eligible professionals in the TIN participated in the PQRS as individuals in 2014 and met the criteria to avoid the 2016 PQRS payment adjustment. Additional information on avoiding the 2016 PQRS payment adjustment is available at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Payment-Adjustment-Information.html. CMS refers to TINs subject to the

2016 Value Modifier that avoid the automatic -2.0% Value Modifier payment adjustment as Category 1 TINs. TINs subject to the 2016 Value Modifier that do not meet the criteria for inclusion in Category 1 are classified as Category 2 TINs. Physicians in Category 2 TINs will be subject to the automatic -2.0% Value Modifier payment adjustment in 2016. The 2016 Value Modifier is applied separately from and in addition to any PQRS payment adjustment and payment adjustments from other Medicare-sponsored programs or initiatives that may be applied to the TIN or to individual eligible professionals within the TIN.

As described in Section II, for Category 1 TINs, quality-tiering determines the direction (upward, neutral, or downward) and the size of the Value Modifier payment adjustment for each TIN based on the TIN's performance on quality and cost measures during the performance period. For the 2016 Value Modifier, quality-tiering is mandatory for all TINs subject to the Value Modifier. Based on the TIN's performance on quality and cost measures in 2014, (1) physicians in TINs with 100 or more eligible professionals could receive an upward, neutral, or downward Value Modifier payment adjustment to their Medicare PFS payments in 2016; and (2) physicians in TINs with between 10 and 99 eligible professionals could receive an upward or neutral Value Modifier payment adjustment to their Medicare PFS payments in 2016 and are held harmless from any downward adjustment derived under the quality-tiering methodology.

Exhibit I.1 summarizes how the Value Modifier will be applied in 2016.

Exhibit I.1. Overview of the application of the 2016 Value Modifier



C. Relationship between the 2016 Value Modifier and the 2014 QRURs

In 2015, CMS will disseminate two confidential feedback reports to every TIN nationwide, including those not subject to the 2016 Value Modifier.

- **2014 Mid-Year QRURs** will provide interim information to TINs about their performance on the three claims-based quality outcome measures and six cost measures. These measures are a subset of the measures that will be used to calculate the 2016 Value Modifier. The data included for these measures in the Mid-Year QRURs is based on care provided from July 1, 2013 through June 30, 2014. The 2014 Mid-Year QRURs do not contain information about the 2016 Value Modifier payment adjustment, Quality and Cost Composite Scores, or quality measures data reported under the PQRS. The

information contained in the Mid-Year QRURs will not affect the TIN's payments under the Medicare PFS. The Mid-Year QRUR is intended to provide timely feedback so that providers may better understand and improve the care they provide and their performance on the claims-based quality and cost measures that will be included in the 2016 Value Modifier. The 2014 Mid-Year QRURs were made available in April 2015.

- **2014 Annual QRURs** will provide information on the TINs' performance on all available quality and cost measures used to calculate the 2016 Value Modifier. Calendar year 2014 is the performance period for the 2016 Value Modifier. For physicians in TINs with 10 or more eligible professionals that are subject to the Value Modifier in 2016, the 2014 Annual QRURs will provide information on how the TINs' quality and cost performance will affect their physicians' Medicare PFS payments in 2016.

For detailed information about the 2014 QRURs, see http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/2014-QRUR.html.

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II. COMPUTATION OF THE 2016 VALUE MODIFIER

A. Overview

To calculate the Value Modifier for TINs that are subject to the Value Modifier in 2016, CMS computes a Quality Composite Score that summarizes a TIN's performance on quality measures and a Cost Composite Score that summarizes a TIN's performance on resource use for its attributed beneficiaries. For each measure with a sufficient number of cases, CMS uses benchmark data to standardize measure-level performance to permit valid cross-measure comparisons. Standardized quality performance measures are categorized into one of six domains, and standardized cost performance measures are categorized into one of two domains. From the standardized measures, CMS computes performance scores for each domain, which are in turn averaged and standardized to yield the Quality Composite Score and the Cost Composite Score.

Using the Quality Composite and Cost Composite Scores, quality-tiering analysis determines the direction of a TIN's Value Modifier payment adjustment (upward, neutral, or downward) and the magnitude of the adjustment. Each Quality and Cost Composite Score indicates how many standard deviations a TIN's composite performance is from the national mean composite score. Only composite scores that are statistically significantly different from the mean and at least one standard deviation from the mean are assigned to a high or low quality or cost tier. Composite scores that are not statistically significantly different from the mean or not at least one standard deviation from the mean are deemed to be average for the purpose of quality-tiering. Exhibit II.1 summarizes the methodology for calculating the 2016 Value Modifier.

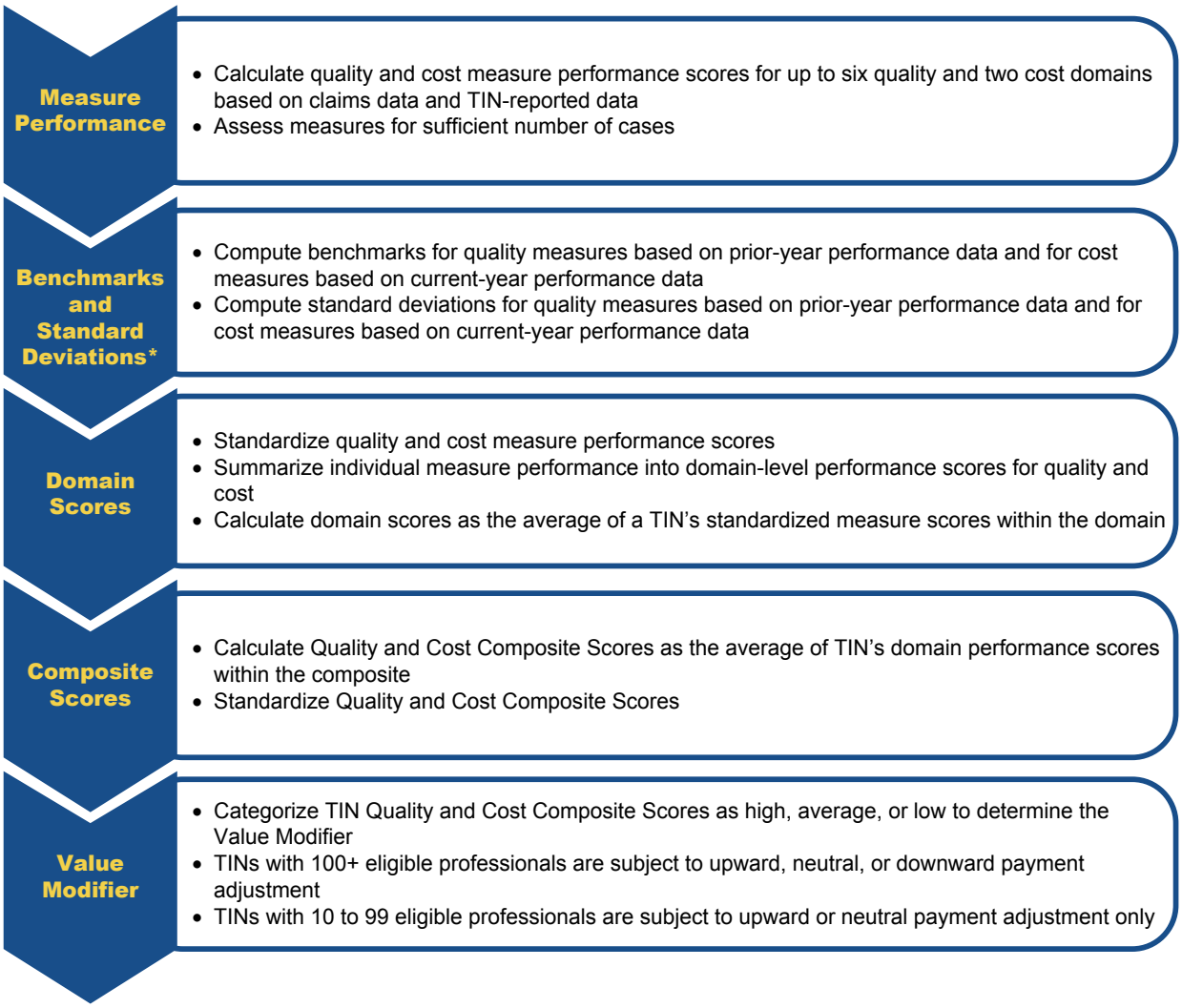
B. TINs Subject to the Value Modifier

CMS will apply the 2016 Value Modifier to physicians in TINs with 10 or more eligible professionals, provided that at least one physician submitted a Medicare claim in 2014 under that TIN. To determine TIN size, CMS first counts the number of eligible professionals associated with the TIN, based on information reported through the Provider Enrollment, Chain and Ownership System (PECOS) as of October 16, 2014. Specifically, CMS first identifies the actively enrolled medical professionals, as identified by their National Provider Identifier (NPI), that have reassigned their billing rights to each TIN. We then examine each NPI's specialty under that TIN to determine whether the individual is an eligible professional. Exhibit E.1 in Appendix E provides a list of eligible professional specialties. CMS then identifies the number of eligible professionals that billed under the TIN for services furnished during the performance period, based on Medicare claims received during the performance period and through 90 days after the performance period (to account for lag in claims submission). The TIN's size category (100 or more eligible professionals, between 10 and 99 eligible professionals, fewer than 10 eligible professionals) for the purpose of applying the Value Modifier is the lower of the TIN's number of eligible professionals in PECOS and the number of eligible professionals that billed under the TIN during the performance period.

CMS will not apply the 2016 Value Modifier to TINs, regardless of their size, if at least one physician billing under the TIN participated in the Medicare Shared Savings Program, the

Pioneer ACO Model, or the CPC initiative in 2014. CMS uses participation lists from each of these programs/initiatives to identify the TINs to which the 2016 Value Modifier would not apply because of physician participation in the Medicare Shared Savings Program, the Pioneer ACO Model, or the CPC initiative in 2014.

Exhibit II.1. Methodology for Determining the 2016 Value Modifier for Category 1 TINs



*The performance rates of TINs with fewer than 20 eligible cases for a given cost or quality measure are excluded from the calculation of the benchmark for the measure.

C. Quality Measures Included in the Quality Composite Score

In calculating the Quality Composite Score for the 2016 Value Modifier, CMS includes (1) PQRS measures reported by the TIN or by individual eligible professionals within the TIN and (2) three quality outcome measures calculated from FFS claims submitted for Medicare beneficiaries attributed to the TIN. Measures from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) for PQRS Survey are also included if the TIN was eligible to

report them through the PQRS and elected to include these survey results in the calculation of the TIN's 2016 Value Modifier.

We very briefly describe these quality measures below. More detailed information about the quality measures is available in the Measure Information Forms available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html.

1. CMS-Calculated Claims-Based Quality Outcome Measures

Hospital Admissions for Ambulatory Care-Sensitive Conditions (ACSCs): Acute Conditions Composite. This is the risk-adjusted rate of hospital admissions among Medicare beneficiaries for three acute ACSCs—bacterial pneumonia, urinary tract infection, and dehydration—that are potentially avoidable with appropriate primary and preventive care. This measure is computed at the TIN level.

Hospital Admissions for ACSCs: Chronic Conditions Composite. This is the risk-adjusted rate of hospital admissions among Medicare beneficiaries for three chronic ACSCs—diabetes, chronic obstructive pulmonary disease (COPD), and heart failure—that are potentially avoidable with appropriate primary and preventive care. This measure is computed at the TIN level.

30-Day All-Cause Hospital Readmissions. This is the risk-adjusted rate of unplanned hospital readmissions for any cause within 30 days after discharge from an acute care or critical access hospital. This measure is computed at the TIN level.

For additional information about the two-step process that is used to attribute beneficiaries to TINs for the claims-based quality outcome measures, please refer to the Attribution Fact Sheet available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html

2. PQRS Quality Measures

For TINs that registered to report quality data to PQRS as a group through the PQRS GPRO in 2014 and met the criteria to avoid the 2016 PQRS payment adjustment, the TIN-level PQRS quality measures used to calculate the Quality Composite Score for the 2016 Value Modifier reflect data reported through whichever reporting mechanism the TIN selected—GPRO Web Interface, or a qualified registry. In addition, TINs with 25 or more eligible professionals could elect to include the results of their 2014 CAHPS for PQRS Survey in the calculation of their 2016 Value Modifier. The CAHPS for PQRS survey assesses patients' experience of care within a group practice. CAHPS measures are listed at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2014PQRS_CMS-CertifiedSurveyVendorMadeSimple_F01-21-2014.pdf.

CMS will not be using data submitted for the 2014 reporting year through the GPRO EHR reporting option for purposes of calculating GPRO TINs' Quality Composite Scores, because we are unable to determine the accuracy of these data. For TINs that reported through this mechanism, the TIN's Quality Composite Score will be based on the three claims-based quality outcome measures and the CAHPS for PQRS summary survey measures (if applicable).

- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as low quality for purposes of calculating the Value Modifier, then the TIN will instead be classified as average quality.
- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as high quality, then the TIN will retain the high quality designation
- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as average quality, then CMS will continue to classify the TIN as average quality.
- If the TIN does not have sufficient data for any of the three claims-based outcome measures, then CMS will classify the TIN as average quality.[1]

For information on reporting requirements under the different GPRO reporting mechanisms, please refer to http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/2014_Physician_Quality_Reporting_System.html.

For TINs that did not register to report via GPRO, CMS evaluated their quality performance based on PQRS measures reported by individual eligible professionals in their TIN, provided at least 50 percent of the eligible professionals in the TIN met the criteria as individuals to avoid the 2016 PQRS payment adjustment (a criterion for inclusion in Category 1). CMS calculated the percentage of a TIN's eligible professionals that met the criteria as individuals to avoid the 2016 PQRS payment adjustment as the number of eligible professionals under the TIN who avoided the 2016 PQRS payment adjustment, divided by the lower of: 1) the number of eligible professionals in PECOS associated with the TIN or 2) the number of eligible professionals who billed under the TIN in 2014.

The individually-reported PQRS measures are computed at the TIN-NPI level. To convert these to TIN-level measures, we sum performance numerators across all of the eligible professionals reporting that measure under the TIN who avoided the 2016 PQRS payment adjustment. Then, we sum performance denominators and compute the TIN-level performance rates as the ratio of the aggregated performance numerator to the aggregated performance denominator, multiplied by 100. We are unable to determine the accuracy of PQRS data submitted by individual eligible professionals under the QCDR (XML submissions) and EHR reporting options (both QRDA I and QRDA III submissions). Therefore, these data are not included in calculations of TINs' PQRS performance. If QCDR and EHR submissions are the only data sources for a TIN's PQRS measure performance, then CMS will not calculate PQRS measure performance for the TIN and the TIN's Quality Composite Score will be based on only the three claims-based quality outcome measures.

- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as low quality for purposes of calculating the Value Modifier, then the TIN will instead be assigned to the average quality tier.

[1] This policy reflects a proposal included in the 2016 Medicare PFS Proposed Rule (80 FR 41894) and may be subject to change.

- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as high quality, then the TIN will retain the high quality designation.
- If calculating the Quality Composite Score based on these limited measures would result in classifying the TIN as average quality, then CMS will continue to classify the TIN as average quality.
- If the TIN does not have sufficient data for any of the three claims-based outcome measures, then CMS will classify the TIN as average quality. [2]

Detailed specifications and additional information about the 2014 PQRS quality measures can be found at: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/2014_Physician_Quality_Reporting_System.html.

Each PQRS measure is assigned to one of the following six quality domains: (1) Effective Clinical Care, (2) Person- and Caregiver-Centered Experience and Outcomes, (3) Community/Population Health, (4) Patient Safety, (5) Communication and Care Coordination, and (6) Efficiency and Cost Reduction. (The three CMS-calculated claims-based quality outcome measures are assigned to the Communication and Care Coordination Domain.) See Appendix B for a list of PQRS measures that are included in each quality domain. For PQRS measures with multiple performance rates, CMS determines an overall rate for inclusion in the 2016 Value Modifier either by calculating a mean of the component parts or by selecting one component part that represents overall performance, depending on the particular measure. See Appendix C for details on PQRS measures with multiple performance rates and a PQRS measure that CMS has excluded from calculations of the 2016 Value Modifier for technical reasons.

D. Cost Measures Included in the Cost Composite Score

For all TINs, CMS calculates six cost measures based on FFS Medicare claims submitted for Medicare beneficiaries attributed to the TIN. These measures are categorized into one of two Cost Domains. The Per Capita Costs for All Attributed Beneficiaries Domain includes two distinct measures—Per Capita Costs for All Attributed Beneficiaries and Medicare Spending per Beneficiary (MSPB). The Per Capita Costs for Beneficiaries with Specific Conditions Domain includes four condition-specific per capita cost measures for beneficiaries with the following conditions: diabetes, coronary artery disease (CAD), COPD, and heart failure.

Per Capita Costs for All Attributed Beneficiaries. This measure represents the mean of all FFS Medicare Parts A and B allowed charges for a TIN's attributed beneficiaries during the performance period. Part D outpatient drug costs are not included.

Per Capita Costs for Beneficiaries with Specific Conditions. These four measures are computed analogously to the Per Capita Cost for All Attributed Beneficiaries measure but are computed only for attributed beneficiaries with diabetes, CAD, COPD, or heart failure.

[2] This policy reflects a proposal included in the 2016 Medicare PFS Proposed Rule (80 FR 41894) and may be subject to change.

Medicare Spending per Beneficiary. This measure captures all Medicare Part A and Part B payments for services provided to the TIN's attributed Medicare beneficiaries during spending-per-beneficiary episodes spanning from three days before an inpatient hospital admission through 30 days after discharge.

Although the methodologies for calculating the per capita cost and MSPB measures differ in key respects, all cost measures are adjusted to account for differences in Medicare payment rates for different group types and geographic locations, a process known as payment standardization. They are also adjusted to account for differences in beneficiary characteristics, including prior health conditions that can affect their medical costs or utilization (risk adjustment) and differences in the mix of specialties across TINs (specialty adjustment).

More detailed information about the cost measures, including detailed descriptions of patient attribution, risk adjustment, and specialty adjustment, is available in the Measure Information Forms available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html. Additional details relating to the payment standardization algorithm are available at http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228772057350.[3]

E. Determining Which Measures Have a Sufficient Number of Eligible Cases to be Included

To be included in 2016 Value Modifier calculations, each measure must have at least 20 eligible cases after applying any measure-specific exclusions. For PQRS measures reported by individual eligible professionals, the total number of eligible cases across all eligible professionals submitting the measure under the TIN is used to determine whether the 20-case threshold was reached. For multi-part measures that are rolled up to a single performance rate based on a *non*-equally-weighted mean of the component parts, the number of eligible cases for the rolled-up measure is the sum of the number of eligible cases for each component part. For multi-part measures rolled up based on an equally-weighted mean, the number of eligible cases is the number of eligible cases for any one of the component parts.

F. Computing Measure Benchmarks and Standard Deviations

For 2016 Value Modifier calculations, the benchmark for each quality measure is the case-weighted mean performance rate on the measure in the year prior to the performance period (in this case, 2013), where the mean is calculated across the relevant peer group. The peer group for each quality measure is composed of all TINs nationwide with at least 20 eligible cases for the given measure during the year prior to the performance period. Benchmarks are calculated for quality measures for which at least 20 TINs have at least 20 cases during the year prior to the performance period. Quality measures for which no prior-year benchmark is available (for example, measures new to PQRS in 2014) are not included in the calculation of the Quality Composite Score, but they are reported in the 2014 Annual QRUR for informational purposes only. Additional information on the benchmarks for the 2014 QRURs is available at

[3] The CMS document refers to this process as "price standardization" rather than "payment standardization," but the two terms are equivalent.

http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/PY2014-Prior-Year-Benchmarks.pdf.

The benchmark for cost measures is the case-weighted mean performance rate on the same measure for the performance period, which is 2014 for the 2016 Value Modifier, calculated for the peer group for that measure. The peer group for cost measures is composed of all TINs nationwide that had at least 20 eligible cases for the measure during the performance period. Benchmarks are calculated for cost measures for which at least 20 TINs have at least 20 cases during the performance period.

In addition to computing benchmarks, CMS also computes each measure's standard deviation. Peer group standard deviations for cost and quality measures are case weighted, with the measure performance rate for each TIN within the peer group receiving a weight equal to the number of eligible cases that the TIN had for the specific measure. As with the benchmarks, the standard deviations for quality measures are based on data from the year prior to the performance year (in this case, 2013) and the standard deviations for cost measures are based on data from the performance period (2014).

G. Standardizing Scores and Computing Domain Scores

Standardizing measure performance transforms measures with disparate scales to a common scale, which enables different measures to be compared and combined with one another into a composite. Measure-level performance is standardized by subtracting the benchmark for the measure from the TIN's performance rate and dividing by the case-weighted standard deviation of the measure. A standardized score for a measure reflects the number of standard deviations by which a TIN's performance differs from the benchmark.

Quality and Cost Domain Scores are calculated as the simple (equally-weighted) mean of the TIN's standardized measure scores within the domain, if the TIN has a score for at least one measure included in the Quality or Cost Domain. Only measures with at least 20 eligible cases and for which benchmarks are available are included in Quality and Cost Domain Scores for the 2016 Value Modifier. A domain score is not computed for any domain for which the TIN does not have at least one measure with at least 20 cases.

H. Computing Mean Domain Scores and Standardized Composite Scores

For each TIN with sufficient data to compute at least one Quality Domain Score,[4] CMS computes the simple (equally-weighted) mean of the TIN's Quality Domain Scores. CMS standardizes this score to generate a distribution of mean Quality Domain Scores centered at a mean of 0 and with a standard deviation of 1. This involves subtracting from each TIN's domain score the peer group mean domain score and dividing the difference by the standard deviation among scores within the peer group. The peer group for the mean Quality Domain Score for TINs with at least 10 eligible professionals is all TINs subject to the Value Modifier with at least 10 eligible professionals for which a mean Quality Domain Score can be computed. For TINs

[4] A TIN has sufficient data for a Quality (or Cost) Domain Score to be calculated if the TIN has at least 20 eligible cases for at least one measure included in the Quality (or Cost) Domain

with fewer than 10 eligible professionals, the peer group is TINs with at least 1 eligible professional for which the mean Quality Domain Score can be computed (excluding those that had any physicians who participated in the Medicare Shared Savings Program, Pioneer ACO Model, or CPC initiative).[5] The standardized score created through this process is the Quality Composite Score. If a TIN's Quality Composite Score cannot be calculated because the TIN does not have at least one quality measure with at least 20 eligible cases, then the TIN's quality performance will be designated as average for the 2016 Value Modifier.[6]

The Cost Composite Score is computed analogously to the Quality Composite Score. For each TIN with sufficient data to compute at least one Cost Domain Score, CMS computes the simple (equally-weighted) mean of the TIN's Cost Domain Scores. CMS standardizes this score to generate a distribution of mean Cost Domain Scores centered at a mean of 0 and with a standard deviation of 1. This involves subtracting from each TIN's score the peer group mean and dividing the difference by the standard deviation among scores within the peer group. The peer group for the mean Cost Domain Score for TINs with at least 10 eligible professionals is all TINs subject to the Value Modifier with at least 10 eligible professionals for which a mean Cost Domain Score can be computed. For TINs with fewer than 10 eligible professionals, the peer group is all TINs for which the Cost Domain Score was computed.[2] The standardized score created through this process is the Cost Composite Score. A Cost Composite Score is not calculated for TINs that do not have sufficient data to generate a score for any of the cost domains. If a TIN's Cost Composite Score cannot be calculated because the TIN does not have at least one cost measure with at least 20 eligible cases, then the TIN's cost performance will be designated as average for the 2016 Value Modifier.

I. Categorizing TINs on Quality and Cost Performance Based on Composite Scores and Statistical Significance (Quality-Tiering)

TINs subject to the 2016 Value Modifier that meet the criteria to avoid the 2016 PQRS payment adjustment (Category 1) will have their Value Modifier calculated using a quality-tiering approach based on their 2014 quality and cost performance.

To be considered either a high or low performer relative to its peers on the Quality Composite Score, a TIN's score must be at least one standard deviation above or below the peer group mean Quality Composite Score and statistically significantly different from the peer group mean. (The peer groups are defined above.) This ensures that payment adjustments under the Value Modifier are made to only those TINs whose performance reflects a meaningful difference from the mean. If a TIN's score is at least one standard deviation above or below the peer group mean Quality Composite Score, but the difference between the TIN's score and the mean is not statistically significant, then the TIN is categorized as having insufficient data for quality-tiering and is classified as average quality for purposes of calculating the Value Modifier. If the TIN's score is within one standard deviation of the peer group mean, regardless of whether it is

[5] Although TINs with fewer than 10 eligible professionals are not subject to the 2016 Value Modifier, they receive this performance information in their Annual QRURs.

[6] This policy reflects a proposal included in the 2016 Medicare PFS Proposed Rule (80 FR 41894) and may be subject to change.

statistically significant, its performance is designated as average. Statistical significance is assessed using a two-tailed test.

High, average, and low performance is determined similarly for the Cost Composite Score as for the Quality Composite Score; however, lower Cost Composite Scores are associated with better performance. To be considered either a high or low performer relative to its peers on the Cost Composite Score, a TIN's score must be at least one standard deviation above or below the peer group mean Cost Composite Score and statistically significantly different from the peer group mean. If a TIN's score is at least one standard deviation above or below the peer group mean Cost Composite Score, but the difference between the TIN's score and the mean is not statistically significant, then the TIN is categorized as having insufficient data for quality-tiering and is classified as average cost for purposes of calculating the Value Modifier. If the TIN's score is within one standard deviation of the peer group mean, regardless of whether it is statistically significant, its performance is designated as average.

Exhibit II.2 below displays the basic structure of the Value Modifier under the quality-tiering approach. Since the Value Modifier must be budget-neutral, the precise size of the upward payment adjustment for higher-performing TINs—those that are at least average on both quality and cost, and better than average on at least one of these composites—depends on the projected Medicare PFS payments to these TINs relative to those of lower-performing TINs and TINs that fail to avoid the automatic -2.0% Value Modifier payment adjustment (Category 2 TINs). This Adjustment Factor is calculated after the conclusion of the performance period and is reflected in the exhibit as the variable AF. The AF will vary from year to year with differences in actuarial estimates and is based on the number and relative performance of TINs subject to quality-tiering.

Exhibit II.2. 2016 Value Modifier Based on Quality-Tiering

	Low quality	Average quality	High Quality
TINs with 10-99 eligible professionals			
Low cost	0.0%	+[1.0/2.0] x AF*	+[2.0/3.0] x AF*
Average cost	0.0%	0.0%	+[1.0/2.0] x AF*
High cost	0.0%	0.0%	0.0%
TINs with 100+ eligible professionals			
Low cost	0.0%	+[1.0/2.0] x AF*	+[2.0/3.0] x AF*
Average cost	-1.0%	0.0%	+[1.0/2.0] x AF*
High cost	-2.0%	-1.0%	0.0%

Notes: AF refers to a payment adjustment factor yet to be determined.

*Higher-performing TINs treating high-risk beneficiaries (based on mean Hierarchical Condition Category [HCC] risk scores) are eligible for an additional adjustment of +1.0 x AF.

The 2016 Value Modifier will be applied on a claim-by-claim basis to claims for services paid under the Medicare PFS and for which the Medicare provider has accepted assignment.

J. Assessing whether the TIN treats beneficiaries with high risk

TINs whose attributed beneficiaries have mean risk scores at or above the 75th percentile of all beneficiary risk scores nationwide are eligible for an additional +1.0xAF upward payment adjustment in the Value Modifier under the quality-tiering approach if they are categorized as low cost–average quality, low cost–high quality, or average cost–high quality performers. The (calendar year) 2013 Hierarchical Condition Category (HCC) risk scores that are calculated by CMS are used to measure the mean risk of each TIN's attributed beneficiaries. These same HCC risk scores are used to risk adjust the per capita cost measures included in the Cost Composite Score. The risk score assigned to each Medicare beneficiary predicts the beneficiary's medical costs in 2014 relative to mean costs among all FFS Medicare beneficiaries nationwide based on the presence of factors known to affect costs and utilization. A score of 1.0 represents average risk, with higher scores corresponding to higher risk. The 2013 CMS-HCC risk score distribution, spanning the lowest beneficiary risk score to the highest beneficiary risk score, as well as percentile thresholds, were determined for all FFS Medicare beneficiaries nationally. Mean risk scores for beneficiaries attributed to TINs subject to the Value Modifier were compared with these national thresholds to determine whether they were at or above the 75th percentile.

K. Computation of budget-neutral adjustment factor

For the CMS Office of the Actuary (OACT) to compute the budget-neutral adjustment factor (AF) for the 2016 Value Modifier, OACT must estimate the total value of both negative and positive payment adjustments under the Value Modifier in 2016. OACT's calculations are based on a file of claim line amounts paid to physicians in 2014 under the Medicare PFS, aggregated to the TIN level. This file includes information about which TINs will be subject to a positive, neutral, or negative payment adjustment under the 2016 Value Modifier. Line items are considered paid under the Medicare PFS if the Healthcare Common Procedure Coding System (HCPCS) code and modifiers on the claim line are associated with any of the following status codes: Active, Carriers Price the Code, Anesthesia Services, Restricted Coverage, or Injections. Certain pathology codes[7] are paid under the Medicare PFS only if the line item includes a modifier value of 26 (professional component); otherwise, they are paid under the Clinical Laboratory Fee Schedule and thus are not included in the billings sum.

[7] These include services with any of the following HCPCS codes: 83020, 84165, 84166, 84181, 84182, 85390, 85576, 86153, 86255, 86256, 86320, 86325, 86327, 86334, 86335, 87164, 87207, 88371, 88372, and 89060.

III. COMPUTATION OF ADDITIONAL STATISTICS

The 2014 Mid-Year and 2014 Annual QRURs include additional information that help report recipients better understand their TINs' quality and cost performance. These include data on hospital admissions for any cause, costs disaggregated by type of service, and medical professionals' specialties. This section describes the computational details underlying these statistics.

A. Hospital Admissions for Any Cause

Given that hospital costs are a large portion of per capita costs, Exhibit 7 in the 2014 Annual QRUR and Exhibit 6 in the Mid-Year QRUR identify hospitals that accounted for at least five percent of a TIN's attributed beneficiary hospital stays during the performance period to help TINs understand their per capita costs. We identify beneficiary hospital stays by looking at admissions for beneficiaries attributed to each TIN via the two-step attribution process for per capita cost measures and quality outcome measures.[8] We identify the names, CMS Certification Numbers (CCNs), and locations of these hospitals by combining information from the Provider of Service (POS) files and PECOS.

Supplementary Exhibit 3 in the 2014 Annual and Mid-Year QRURs further identifies each beneficiary-level hospital admission. Individual attributed beneficiaries are identified by an index variable, based on healthcare insurance claim (HIC) number, sex, and date of birth, which allows users to link beneficiary-level information across supplementary exhibits without using personally identifiable information. Each hospital stay listed also indicates the date of discharge and discharge disposition based on the two-digit patient discharge status code on the last claim in a hospital stay (Exhibit III.1).

Hospital admissions with a principal diagnosis for conditions associated with alcohol and substance abuse are excluded from Supplementary Exhibit 3 for purposes of confidentiality but are included in total counts of hospital admissions in the Annual QRUR Exhibit 7 and Mid-Year QRUR Exhibit 6.

We provide similar information to help TINs understand hospital admissions reflected in the MSPB measure based on beneficiary MSPB episodes attributed to a TIN. However, we report admissions for beneficiary MSPB episodes attributed to a TIN via the MSPB attribution rule instead of the two-step attribution process. Exhibit 8 in the 2014 Annual QRUR identifies hospitals that accounted for at least five percent of beneficiary MSPB episodes attributed to the TIN through the MSPB attribution rule during the performance period. Supplementary Exhibit 4 in the 2014 Annual and Mid-Year QRURs provides information on the beneficiaries attributed to the TIN for the MSPB measure.

[8] For additional information about the two-step attribution process, refer to the Attribution Fact Sheet, available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html

Exhibit III.1. Medicare hospital claim patient discharge status codes

Discharge status code	Discharge status
01	Discharged to home
02	Transferred to another short-term general hospital
03	Discharged to SNF with Medicare certification
04	Discharged to intermediate care facility
05	Discharged to other hospital
06	Discharged to home health
07	Left against medical advice (AMA)
08	(Discontinued)
09	Admitted to same hospital
20	Expired
21	Discharged to court
30	Still patient
40	Expired home – hospice
41	Expired facility – hospice
42	Expired unknown – hospice
43	Discharged to federal hospital
50	Discharged to hospice – home
51	Discharged to hospice – facility
61	Transferred to Medicare-approved swing bed
62	Discharged to rehabilitation facility
63	Discharged to long-term care hospital
64	Discharged to SNF with Medicaid certification
65	Discharged to psychiatric hospital
66	Discharged to critical access hospital
69	Discharged to designated disaster alternate care
70	Discharged to other facility
71	(Discontinued)
72	(Discontinued)
81	Discharged to home – planned readmission
82	Transferred to short-term general hospital – planned readmission
83	Discharged to SNF with Medicare certification – planned readmission
84	Discharged to custodial or support care – planned readmission
85	Discharged to other hospital – planned readmission
86	Discharged to home health – planned readmission
87	Discharged to court – planned readmission
88	Discharged to federal hospital – planned readmission
89	Transferred to Medicare-approved swing bed – planned readmission
90	Discharged to rehabilitation facility – planned readmission
91	Discharged to long-term care hospital – planned readmission
92	Discharged to SNF with Medicaid certification – planned readmission
93	Discharged to psychiatric hospital – planned readmission
94	Discharged to critical access hospital – planned readmission
95	Discharged to other facility – planned readmission

Source: Research Data Assistance Center (ResDAC) 2013, http://www.resdac.org/cms-data/variables/patient-discharge-status-code.

B. Categorical Breakdown of Costs by Type of Service

Each of the cost measures included in the Cost Composite Score is derived from total Medicare Part A and Part B payments for services provided to all attributed Medicare beneficiaries eligible for the measure. Annual QRUR Exhibits 11 and 12 provide a summary breakdown of the TIN's per capita or per episode costs for each measure in comparison to peers by type of service. In addition, more detailed cost breakdowns are provided for each cost measure in Annual QRUR and Mid-Year QRUR Supplementary Exhibits 5 through 10. These data are reported for informational purposes only to help TINs better understand what is driving their beneficiaries' costs; they are not used in calculations of the Cost Composite Score. Exhibit III.2 lists the categories of services displayed in the 2014 QRURs and supplementary exhibits. Appendix D provides more detail on how Medicare claims are categorized into the mutually exclusive service categories for the per capita cost measures displayed in Exhibit D.1. Exhibit D.2. displays how cost categories are defined for the MSPB measure.

The disaggregated statistics relate to the measure scores as follows:

Exhibit III.2. Service categories displayed in the 2014 QRURs

Major category	Subcategories
Outpatient E&M services, procedures, and therapy (excluding emergency department)	E&M services billed by EPs – Your TIN E&M services billed by EPs – Other TINs Other facility-billed E&M expenses Major procedures billed by EPs – Your TIN Major procedures billed by EPs – Other TINs Other facility-billed expenses for major procedures Ambulatory/minor procedures billed by EPs – Your TIN Ambulatory/minor procedures billed by EPs –Other TINs Other facility-billed expenses for ambulatory/minor procedures Outpatient physical, occupational, or speech and language pathology therapy
Ancillary services	Laboratory, pathology, and other tests Imaging services DME
Hospital inpatient services	Inpatient hospital facility services EP services during hospitalization—Your TIN EP services during hospitalization—Other TINs
Emergency services that did not result in a hospital admission	Emergency E&M services Procedures Laboratory, pathology, and other tests Imaging services
Post-acute services	Home health SNF Home health Inpatient rehabilitation or long-term care hospital
Hospice	None
All other services	Ambulance services Chemotherapy and other Part B–covered drugs Dialysis Anesthesia services All other services not otherwise classified

In addition to separating costs by service type, for two categories—evaluation and management (E&M) services and procedures in non-emergency settings—services are further broken down based on whether the service was provided by eligible professionals in the TIN or by eligible professionals in another TIN. For each of these two categories, service costs are further divided by the broad specialty category of the eligible professionals rendering them: primary care physicians (PCPs), medical specialists, surgeons, and other professionals (including physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, clinical social workers, clinical psychologists, dieticians, audiologists, physical and occupational therapists, and speech-language pathologists). The method for determining an eligible professional's specialty is described in the next section.

Medicare payments included in the cost measures that make up the Cost Composite Score for the Value Modifier are payment standardized. The cost measures are also risk adjusted and specialty adjusted at the measure level. Breakdowns of per capita or per episode costs by categories of service are provided for informational purposes, so that TINs may better understand services contributing to their performance on these measures. Medicare standardized payments in each category are multiplied by a factor that is equal to the ratio between the payment standardized, risk adjusted, and specialty adjusted total cost used in the final cost measure and the total, payment standardized but non-risk adjusted and non-specialty adjusted costs in the measure.

C. Physicians and non-physician eligible professionals billing under the TIN

In order to attribute beneficiaries to TINs for the per capita cost and claims-based quality outcome measures included in the Value Modifier, CMS needs to determine which medical professionals billing under the TIN are physicians and what their specialty is. Information on treating physicians' medical specialty is also used in cost-of-service breakdowns, as described above. CMS uses the following broad specialty categories for these purposes: PCP, medical specialist, surgeon, and other eligible professional. CMS uses the two-digit CMS specialty codes that appear on Medicare carrier claims to define specialties. The Medicare Claims Processing Manual delineates which specialties are physician specialties and which are not. Assignment of medical professionals to broad specialty categories, referred to here as professional stratification categories, comprises two steps. First, each provider is assigned a medical specialty. Second, each specialty is assigned a broad specialty category.

Some medical professionals provide different CMS specialty codes on different claims—for example, general practitioner versus endocrinologist. In such cases, CMS determines the medical professional's specialty from carrier claims based on the CMS specialty code listed most frequently on line items for services rendered by the professional during the performance period. In the case of a tie, the specialty listed on the most recent claim is selected. Appendix E provides a mapping from CMS specialty codes to physician, eligible professional, and provider stratification categories.

APPENDIX A

DESCRIPTION OF DATA SOURCES

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CMS uses multiple data sources, described briefly below, to calculate the quality and cost included in the 2016 Value Modifier. More detailed discussion of how these sources are used in specific quality and cost measures is available in the Measure Information Forms available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html

A. PQRS quality measure data

PQRS reporting and performance data included in the 2016 Value Modifier and displayed in the 2014 Annual QRURs are obtained from the PQRS contractor. PQRS data from calendar year 2014 are used for the 2014 Annual QRUR and 2016 Value Modifier. The data include information on measures submitted by TINs (via GPRO) and individual eligible professionals, by TIN, including which measures were submitted, number of cases submitted, number of exclusions, number of cases successfully meeting the relevant measure criteria, and performance rates. The UDS contains similar data for non-PQRS QCDR measures. The UDS data also include information on which TINs or individual eligible professionals avoided the 2016 PQRS payment adjustment and the reporting mechanism(s) by which the measures were submitted: Medicare Part B claims, qualified PQRS registry, direct EHR, CEHRT, CEHRT via data submission vendor, QCDR, or GPRO Web Interface.

For groups that report CAHPS for PQRS and elect to have it included in the calculation of their Value Modifier, CMS uses CAHPS for PQRS data collected by the Medicare-certified CAHPS survey vendor in the performance year. Like the other PQRS data, the CAHPS data include information on number of responses and performance rate. They also include additional information needed to incorporate CAHPS measures into the 2016 Value Modifier for TINs electing that option, such as CAHPS-specific standard errors.

B. Medicare enrollment data

CMS uses Medicare Part A and Part B enrollment data to attribute beneficiaries to TINs for the three claims-based quality outcome measures and six cost measures included in the 2016 Value Modifier. Medicare enrollment data from calendar year 2014 are used for the 2014 Annual QRUR and 2016 Value Modifier. Medicare enrollment data from July 1, 2013 through June 30, 2014 are used for the 2014 Mid-Year QRURS. These data contain demographic and enrollment information about each beneficiary enrolled in Medicare during a calendar year. The data include the beneficiary's unique Medicare identifier, state and county residence codes, zip code, date of birth, date of death, sex, race/ethnicity, age, monthly Medicare entitlement indicators, reasons for entitlement, whether the beneficiary's state of residence paid for the beneficiary's Medicare Part A or Part B monthly premiums ("state buy-in"), and monthly Medicare managed care enrollment indicators. These variables help determine whether a given beneficiary should be attributed to a TIN. For example, beneficiaries enrolled in Medicare managed care or living outside the U.S., its territories, and its possessions are excluded from many of the administrative claims-based measures included in the Value Modifier. The enrollment data are accessed via CMS's Integrated Data Repository (IDR). The denominator table, updated quarterly, is accessed via the Medicare Enrollment Database (EDB). The beneficiary table, updated daily, is accessed via the Common Medicare Environment (CME).

C. Medicare claims data

For the 2014 Mid-Year and Annual QRURs, computations for the three claims-based quality outcome measures and six cost measures use all final-action Medicare claims for services provided during the performance period. Specifically, CMS analyzes inpatient hospital; outpatient hospital; SNF; home health; hospice; carrier (physician/supplier); and durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) claims, as appropriate for the relevant measure. These claims data are pulled from CMS' Integrated Data Repository (IDR) at least 90 days after the end of the performance period to allow for more complete data submission. Since the IDR claims are updated each weekend through the following Tuesday, we lock the 90 days of run-out claims on the first Wednesday after the first full weekend of that same month. This process ensures that claims for the last few days of the month are captured in the weekly updates.

Under Medicare procedures, when an error is discovered on a claim, a duplicate claim is submitted indicating that the prior claim was in error; a subsequent claim containing the corrected information can then be submitted. The National Claims History database is the source of FFS claims in the IDR. The IDR contains only the final action claims developed from the Medicare National Claims History database—that is, non-rejected claims for which a payment has been made after all disputes and adjustments have been resolved and details clarified—and these are the claims used to populate the Annual QRUR and calculate the Value Modifier. The scope of claims on the IDR is national. Medicare Administrative Contractors (MACs) submit data continually to CMS, which updates it weekly on the IDR. For the purpose of computing the Value Modifier, the end date of the claim determines the performance period with which the claim is associated. TINs submit claims to their MAC for processing and payment.

D. Other data

HCC risk scores. Derived from Medicare enrollment and claims data, HCC risk scores are used to (1) risk adjust the Per Capita Costs for All Attributed Beneficiaries and Per Capita Costs for Beneficiaries with Specific Conditions measures[9] and (2) determine which high-performing TINs are eligible for an additional upward payment adjustment for treating high-risk beneficiaries. The 2016 Value Modifier uses final risk scores obtained directly from the contractor that produces these scores for CMS. HCC risk scores from calendar year 2013 are used for the 2014 Annual QRUR and 2016 Value Modifier. HCC risk scores from calendar year 2012 are used for the 2014 Mid-Year QRURS.

Standardized payments. Standardized payments data are used to standardize Medicare allowed charges for the cost measures included in the 2016 Value Modifier. These data associate a standardized amount with each actual allowed amount for each service billed by Medicare providers. These data are obtained directly from the contractor responsible for producing CMS's agency-wide standardized payments. Standardized payments data from calendar year 2014 are used for the 2014 Annual QRUR and 2016 Value Modifier. Standardized payments data from July 1, 2013 through June 30, 2014 are used for the 2014 Mid-Year QRURS.

[9] For additional details about the risk-adjustment methodology for the per capita cost measures, see the per capita cost Measure Information Forms available at http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/ValueBasedPaymentModifier.html

PECOS. CMS used PECOS data to develop an initial list of TINs that could be subject to the 2016 Value Modifier, based on the number of eligible professionals associated with the TIN in PECOS as of October 16, 2014. The PECOS database includes information on enrolled eligible professionals, including their NPIs, any TINs to which they have reassigned their billing rights, and their primary and (if applicable) secondary specialties. We accessed the PECOS data by querying the PECOS reporting database 10 calendar days after the 2014 PQRS GPRO registration period ended.

ACO and CPC initiative participation lists. To assess which TINs will be exempt from the 2016 Value Modifier because physicians billing under the TIN participated in the Medicare Shared Savings Program, the Pioneer ACO Model, or the CPC initiative during 2014, CMS obtains TIN-level and TIN-NPI-level participation lists directly from the contractors supporting these programs and initiatives.

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APPENDIX B

EFFECTIVE CLINICAL CARE DOMAIN QUALITY INDICATORS

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The exhibits in this appendix display, by quality domain, the PQRS measures considered for inclusion in the 2016 Value Modifier and included in the 2014 Annual QRURs. The three CMS-calculated quality outcome measures, as shown in Exhibit B.6, are included in the 2014 Mid-Year QRURs and 2014 Annual QRURs.

Exhibit B.1. Effective Clinical Care Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
1* (GPRO DM-2, CMS122v2)	Diabetes Mellitus (DM): Hemoglobin A1c Poor Control	Effective Clinical Care
2 (CMS163v2)	Diabetes Mellitus (DM): Low Density Lipoprotein (LDL-C) Control	Effective Clinical Care
5 (CMS135v2)	Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)	Effective Clinical Care
6	Coronary Artery Disease (CAD): Antiplatelet Therapy	Effective Clinical Care
7 (CMS145v2)	Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVSD) (LVEF < 40%)	Effective Clinical Care
8 (GPRO HF-6, CMS144v2)	Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	Effective Clinical Care
9 (CMS128v2)	Anti-Depressant Medication Management	Effective Clinical Care
12 (CMS143v2)	Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation	Effective Clinical Care
14	Age-Related Macular Degeneration (AMD): Dilated Macular Examination	Effective Clinical Care
18 (CMS167v2)	Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy	Effective Clinical Care
19 (CMS142v2)	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care	Effective Clinical Care
28	Aspirin at Arrival for Acute Myocardial Infarction (AMI)	Effective Clinical Care
31	Stroke and Stroke Rehabilitation: Venous Thromboembolism (VTE) Prophylaxis for Ischemic Stroke or Intracranial Hemorrhage	Effective Clinical Care
32	Stroke and Stroke Rehabilitation: Discharged on Antithrombotic Therapy	Effective Clinical Care
33	Stroke and Stroke Rehabilitation: Anticoagulant Therapy Prescribed for Atrial Fibrillation (AF) at Discharge	Effective Clinical Care
35	Stroke and Stroke Rehabilitation: Screening for Dysphagia	Effective Clinical Care
36	Stroke and Stroke Rehabilitation: Rehabilitation Services Ordered	Effective Clinical Care
39	Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older	Effective Clinical Care
40	Osteoporosis: Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older	Effective Clinical Care
41	Osteoporosis: Pharmacologic Therapy for Men and Women Aged 50 Years and Older	Effective Clinical Care
43	Coronary Artery Bypass Graft (CABG): Use of Internal Mammary Artery (IMA) in Patients with Isolated CABG Surgery	Effective Clinical Care
44	Coronary Artery Bypass Graft (CABG): Preoperative Beta-Blocker in Patients with Isolated CABG Surgery	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
48	Urinary Incontinence: Assessment of Presence or Absence of Urinary Incontinence in Women Aged 65 Years and Older	Effective Clinical Care
49	Urinary Incontinence: Characterization of Urinary Incontinence in Women Aged 65 Years and Older	Effective Clinical Care
51	Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation	Effective Clinical Care
52	Chronic Obstructive Pulmonary Disease (COPD): Bronchodilator Therapy	Effective Clinical Care
53	Asthma: Pharmacologic Therapy for Persistent Asthma—Ambulatory Care Setting	Effective Clinical Care
54	Emergency Medicine: 12-Lead Electrocardiogram (ECG) Performed for Non-Traumatic Chest Pain	Effective Clinical Care
55	Emergency Medicine: 12-Lead Electrocardiogram (ECG) Performed for Syncope	Effective Clinical Care
56	Emergency Medicine: Community-Acquired Pneumonia (CAP): Vital Signs	Effective Clinical Care
59	Emergency Medicine: Community-Acquired Pneumonia (CAP): Empiric Antibiotic	Effective Clinical Care
64	Asthma: Assessment of Asthma Control—Ambulatory Care Setting	Effective Clinical Care
67	Hematology: Myelodysplastic Syndrome (MDS) and Acute Leukemias: Baseline Cytogenetic Testing Performed on Bone Marrow	Effective Clinical Care
68	Hematology: Myelodysplastic Syndrome (MDS): Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy	Effective Clinical Care
69	Hematology: Multiple Myeloma: Treatment with Bisphosphonates	Effective Clinical Care
70	Hematology: Chronic Lymphocytic Leukemia (CLL): Baseline Flow Cytometry	Effective Clinical Care
71 (CMS140v1)	Breast Cancer: Hormonal Therapy for Stage IC—IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer	Effective Clinical Care
72 (CMS141v3)	Colon Cancer: Chemotherapy for AJCC Stage III Colon Cancer Patients	Effective Clinical Care
83	Hepatitis C: Confirmation of Hepatitis C Viremia	Effective Clinical Care
84	Hepatitis C: Ribonucleic Acid (RNA) Testing Before Initiating Treatment	Effective Clinical Care
85	Hepatitis C: Hepatitis C Virus (HCV) Genotype Testing Prior to Treatment	Effective Clinical Care
87	Hepatitis C: Hepatitis C Virus (HCV) Ribonucleic Acid (RNA) Testing at Week 12 of Treatment	Effective Clinical Care
91	Acute Otitis Externa (AOE): Topical Therapy	Effective Clinical Care
99	Breast Cancer Resection Pathology Reporting: pT Category (Primary Tumor) and pN Category (Regional Lymph Nodes) with Histologic Grade	Effective Clinical Care
100	Colorectal Cancer Resection Pathology Reporting: pT Category (Primary Tumor) and pN Category (Regional Lymph Nodes) with Histologic Grade	Effective Clinical Care
104	Prostate Cancer: Adjuvant Hormonal Therapy for High Risk Prostate Cancer Patients	Effective Clinical Care
106	Adult Major Depressive Disorder (MDD): Comprehensive Depression Evaluation: Diagnosis and Severity	Effective Clinical Care
107 (CMS161v2)	Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
108	Rheumatoid Arthritis (RA): Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy	Effective Clinical Care
111 (GPRO PREV-8, CMS127v2)	Preventive Care and Screening: Pneumococcal Vaccination for Older Adults	Effective Clinical Care
113 (GPRO PREV-6, CMS130v2)	Preventive Care and Screening: Colorectal Cancer Screening	Effective Clinical Care
117 (CMS131v2)	Diabetes Mellitus (DM): Dilated Eye Exam	Effective Clinical Care
118 (GPRO CAD-7)	Coronary Artery Disease (CAD): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy—Diabetes or Left Ventricular Systolic Dysfunction (LVSD) (LVEF < 40%)	Effective Clinical Care
119 (CMS134v2)	Diabetes Mellitus (DM): Medical Attention for Nephropathy	Effective Clinical Care
121	Adult Kidney Disease: Laboratory Testing (Lipid Profile)	Effective Clinical Care
122	Adult Kidney Disease: Blood Pressure Management	Effective Clinical Care
123*	Adult Kidney Disease: Patients On Erythropoiesis-Stimulating Agent (ESA)—Hemoglobin Level > 12.0 g/dL	Effective Clinical Care
126	Diabetes Mellitus (DM): Diabetic Foot and Ankle Care, Peripheral Neuropathy—Neurological Evaluation	Effective Clinical Care
127	Diabetes Mellitus (DM): Diabetic Foot and Ankle Care, Ulcer Prevention—Evaluation of Footwear	Effective Clinical Care
137	Melanoma: Continuity of Care—Recall System	Effective Clinical Care
140	Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement	Effective Clinical Care
142	Osteoarthritis (OA): Assessment for Use of Anti-Inflammatory or Analgesic Over-the-Counter (OTC) Medications	Effective Clinical Care
149	Back Pain: Physical Exam	Effective Clinical Care
150	Back Pain: Advice for Normal Activities	Effective Clinical Care
151	Back Pain: Advice Against Bed Rest	Effective Clinical Care
159	HIV/AIDS: CD4+ Cell Count or CD4+ Percentage	Effective Clinical Care
160 (CMS52v2)	HIV/AIDS: Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis	Effective Clinical Care
163 (CMS123v2)	Diabetes Mellitus (DM): Foot Exam	Effective Clinical Care
164*	Coronary Artery Bypass Graft (CABG): Prolonged Intubation	Effective Clinical Care
165*	Coronary Artery Bypass Graft (CABG): Deep Sternal Wound Infection Rate	Effective Clinical Care
166*	Coronary Artery Bypass Graft (CABG): Stroke	Effective Clinical Care
167*	Coronary Artery Bypass Graft (CABG): Postoperative Renal Failure	Effective Clinical Care
168*	Coronary Artery Bypass Graft (CABG): Surgical Re-Exploration	Effective Clinical Care
169	Coronary Artery Bypass Graft (CABG): Antiplatelet Medications at Discharge	Effective Clinical Care
170	Coronary Artery Bypass Graft (CABG): Beta-Blockers Administered at Discharge	Effective Clinical Care
171	Coronary Artery Bypass Graft (CABG): Anti-Lipid Treatment at Discharge	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
172	Hemodialysis Vascular Access Decision-Making by Surgeon to Maximize Placement of Autogenous Arterial Venous (AV) Fistula	Effective Clinical Care
176	Rheumatoid Arthritis (RA): Tuberculosis Screening	Effective Clinical Care
177	Rheumatoid Arthritis (RA): Periodic Assessment of Disease Activity	Effective Clinical Care
178	Rheumatoid Arthritis (RA): Functional Status Assessment	Effective Clinical Care
179	Rheumatoid Arthritis (RA): Assessment and Classification of Disease Prognosis	Effective Clinical Care
187	Stroke and Stroke Rehabilitation: Thrombolytic Therapy	Effective Clinical Care
191 (CMS133v2)	Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery	Effective Clinical Care
194	Oncology: Cancer Stage Documented	Effective Clinical Care
195	Radiology: Stenosis Measurement in Carotid Imaging Reports	Effective Clinical Care
197 (GPRO CAD-2)	Coronary Artery Disease (CAD): Lipid Control	Effective Clinical Care
198	Heart Failure (HF): Left Ventricular Ejection Fraction (LVEF) Assessment	Effective Clinical Care
204 (GPRO IVD-2, CMS164v2)	Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	Effective Clinical Care
205	HIV/AIDS: Sexually Transmitted Disease Screening for Chlamydia, Gonorrhea, and Syphilis	Effective Clinical Care
228	Heart Failure (HF): Left Ventricular Function (LVF) Testing	Effective Clinical Care
231	Asthma: Tobacco Use: Screening—Ambulatory Care Setting	Effective Clinical Care
232	Asthma: Tobacco Use: Intervention—Ambulatory Care Setting	Effective Clinical Care
233	Thoracic Surgery: Recording of Performance Status Prior to Lung or Esophageal Cancer Resection	Effective Clinical Care
236 (GPRO HTN-2, CMS165v2)	Hypertension (HTN): Controlling High Blood Pressure	Effective Clinical Care
241 (GPRO IVD-1, CMS182v3)	Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (<100 mg/dL)	Effective Clinical Care
242	Coronary Artery Disease (CAD): Symptom Management	Effective Clinical Care
243	Cardiac Rehabilitation Patient Referral from an Outpatient Setting	Effective Clinical Care
245	Chronic Wound Care: Use of Wound Surface Culture Technique in Patients with Chronic Skin Ulcers (Overuse Measure)	Effective Clinical Care
246	Chronic Wound Care: Use of Wet to Dry Dressings in Patients with Chronic Skin Ulcers (Overuse Measure)	Effective Clinical Care
247	Substance Use Disorders: Counseling Regarding Psychosocial and Pharmacologic Treatment Options for Alcohol Dependence	Effective Clinical Care
248	Substance Use Disorders: Screening for Depression Among Patients with Substance Abuse or Dependence	Effective Clinical Care
249	Barrett's Esophagus	Effective Clinical Care
250	Radical Prostatectomy Pathology Reporting	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
251	Immunohistochemical (IHC) Evaluation of Human Epidermal Growth Factor Receptor 2 Testing (HER2) for Breast Cancer Patients	Effective Clinical Care
254	Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain	Effective Clinical Care
255	Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure	Effective Clinical Care
257	Statin Therapy at Discharge after Lower Extremity Bypass (LEB)	Effective Clinical Care
263	Preoperative Diagnosis of Breast Cancer	Effective Clinical Care
264	Sentinel Lymph Node Biopsy for Invasive Breast Cancer	Effective Clinical Care
266	Epilepsy: Seizure Type(s) and Current Seizure Frequency(ies)	Effective Clinical Care
267	Epilepsy: Documentation of Etiology of Epilepsy or Epilepsy Syndrome	Effective Clinical Care
268	Epilepsy: Counseling for Women of Childbearing Potential with Epilepsy	Effective Clinical Care
269	Inflammatory Bowel Disease (IBD): Type, Anatomic Location and Activity All Documented	Effective Clinical Care
270	Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Sparing Therapy	Effective Clinical Care
271	Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury—Bone Loss Assessment	Effective Clinical Care
272	Inflammatory Bowel Disease (IBD): Preventive Care: Influenza Immunization	Effective Clinical Care
273	Inflammatory Bowel Disease (IBD): Preventive Care: Pneumococcal Immunization	Effective Clinical Care
274	Inflammatory Bowel Disease (IBD): Testing for Latent Tuberculosis (TB) Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy	Effective Clinical Care
275	Inflammatory Bowel Disease (IBD): Assessment of Hepatitis B Virus (HBV) Status Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy	Effective Clinical Care
276	Sleep Apnea: Assessment of Sleep Symptoms	Effective Clinical Care
277	Sleep Apnea: Severity Assessment at Initial Diagnosis	Effective Clinical Care
278	Sleep Apnea: Positive Airway Pressure Therapy Prescribed	Effective Clinical Care
279	Sleep Apnea: Assessment of Adherence to Positive Airway Pressure Therapy	Effective Clinical Care
281 (CMS149v2)	Dementia: Cognitive Assessment	Effective Clinical Care
282	Dementia: Functional Status Assessment	Effective Clinical Care
283	Dementia: Neuropsychiatric Symptom Assessment	Effective Clinical Care
284	Dementia: Management of Neuropsychiatric Symptoms	Effective Clinical Care
285	Dementia: Screening for Depressive Symptoms	Effective Clinical Care
287	Dementia: Counseling Regarding Risks of Driving	Effective Clinical Care
288	Dementia: Caregiver Education and Support	Effective Clinical Care
289	Parkinson's Disease: Annual Parkinson's Disease Diagnosis Review	Effective Clinical Care
290	Parkinson's Disease: Psychiatric Disorders or Disturbances Assessment	Effective Clinical Care
291	Parkinson's Disease: Cognitive Impairment or Dysfunction Assessment	Effective Clinical Care
292	Parkinson's Disease: Querying about Sleep Disturbances	Effective Clinical Care
293	Parkinson's Disease: Rehabilitative Therapy Options	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
294	Parkinson's Disease: Parkinson's Disease Medical and Surgical Treatment Options Reviewed	Effective Clinical Care
295	Hypertension (HTN): Appropriate Use of Aspirin or Other Antithrombotic Therapy	Effective Clinical Care
296	Hypertension (HTN): Complete Lipid Profile	Effective Clinical Care
297	Hypertension (HTN): Urine Protein Test	Effective Clinical Care
298	Hypertension (HTN): Annual Serum Creatinine Test	Effective Clinical Care
299	Hypertension (HTN): Diabetes Mellitus Screening Test	Effective Clinical Care
300	Hypertension (HTN): Blood Pressure Control	Effective Clinical Care
301	Hypertension (HTN): Low Density Lipoprotein (LDL-C) Control	Effective Clinical Care
302	Hypertension (HTN): Dietary and Physical Activity Modifications Appropriately Prescribed	Effective Clinical Care
303	Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery	Effective Clinical Care
325	Adult Major Depressive Disorder (MDD): Coordination of Care of Patients with Specific Comorbid Conditions	Effective Clinical Care
327	Pediatric Kidney Disease: Adequacy of Volume Management	Effective Clinical Care
328*	Pediatric Kidney Disease: End Stage Renal Disease (ESRD) Patients Receiving Dialysis: Hemoglobin Level < 10 g/dL	Effective Clinical Care
329*	Adult Kidney Disease: Catheter Use at Initiation of Hemodialysis	Effective Clinical Care
330*	Adult Kidney Disease: Catheter Use for Greater Than or Equal to 90 Days	Effective Clinical Care
331*	Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Appropriate Use)	Effective Clinical Care
332	Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin Prescribed for Patients with Acute Bacterial Sinusitis	Effective Clinical Care
337	Tuberculosis Prevention for Psoriasis and Psoriatic Arthritis Patients on a Biological Immune Response Modifier	Effective Clinical Care
338	HIV Viral Load Suppression	Effective Clinical Care
339	Prescription of HIV Antiretroviral Therapy	Effective Clinical Care
343	Screening Colonoscopy Adenoma Detection Rate	Effective Clinical Care
344	Rate of Carotid Artery Stenting (CAS) for Asymptomatic Patients, Without Major Complications (Discharged to Home by Post-Operative Day #2)	Effective Clinical Care
345*	Rate of Postoperative Stroke or Death in Asymptomatic Patients Undergoing Carotid Artery Stenting (CAS)	Effective Clinical Care
346*	Rate of Postoperative Stroke or Death in Asymptomatic Patients Undergoing Carotid Endarterectomy (CEA)	Effective Clinical Care
347*	Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital	Effective Clinical Care
348*	HRS-3: Implantable Cardioverter-Defibrillator (ICD) Complications Rate	Effective Clinical Care
349	Optimal Vascular Care Composite	Effective Clinical Care
354*	Anastomotic Leak Intervention	Effective Clinical Care
355*	Unplanned Reoperation within the 30 Day Postoperative Period	Effective Clinical Care
356*	Unplanned Hospital Readmission within 30 Days of Principal Procedure	Effective Clinical Care
357*	Surgical Site Infection (SSI)	Effective Clinical Care
-	Diabetes Mellitus (DM): Composite (All or Nothing Scoring)	Effective Clinical Care

Exhibit B.1 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
(GPRO DM-13)	Diabetes Mellitus (DM): High Blood Pressure Control	Effective Clinical Care
(GPRO DM-14)	Diabetes Mellitus (DM): Low Density Lipoprotein (LDL-C) Control	Effective Clinical Care
(GPRO DM-15)	Diabetes Mellitus (DM): Hemoglobin A1c Control (< 8%)	Effective Clinical Care
(GPRO DM-16)	Diabetes Mellitus (DM): Daily Aspirin or Antiplatelet Medication Use for Patients with Diabetes and Ischemic Vascular Disease (IVD)	Effective Clinical Care
(GPRO DM-17)	Diabetes Mellitus (DM): Tobacco Non-Use	Effective Clinical Care
-	Coronary Artery Disease (CAD): Composite (All or Nothing Scoring)	Effective Clinical Care

*Lower performance rates on this measure indicate better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

Exhibit B.2. Person and Caregiver-Centered Experience and Outcomes Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
50	Urinary Incontinence: Plan of Care for Urinary Incontinence in Women Aged 65 Years and Older	Person and Caregiver Experience
109	Osteoarthritis (OA): Function and Pain Assessment	Person and Caregiver Experience
143 (CMS157v2)	Oncology: Medical and Radiation —Pain Intensity Quantified	Person and Caregiver Experience
144	Oncology: Medical and Radiation —Plan of Care for Pain	Person and Caregiver Experience
304	Cataracts: Patient Satisfaction within 90 Days Following Cataract Surgery	Person and Caregiver Experience
342	Pain Brought Under Control within 48 Hours	Person and Caregiver Experience
358	Patient-Centered Surgical Risk Assessment and Communication	Person and Caregiver Experience

*Lower performance rates on this measure indicate better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

Exhibit B.3. Community/Population Health Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
110 (GPRO PREV-7, CMS147v2)	Preventive Care and Screening: Influenza Immunization	Community/Population Health
128 (GPRO PREV-9, CMS69v2)	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up	Community/Population Health
131	Pain Assessment and Follow-Up	Community/Population Health
134 (GPRO PREV-12, CMS2v3)	Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	Community/Population Health
173	Preventive Care and Screening: Unhealthy Alcohol Use—Screening	Community/Population Health
183	Hepatitis C: Hepatitis A Vaccination in Patients with Hepatitis C Virus (HCV)	Community/Population Health
226 (GPRO PREV-10, CMS138v2)	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	Community/Population Health
317 (GPRO PREV-11, CMS22v2)	Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Community/Population Health

*Lower performance rates on this measure indicate better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

Exhibit B.4. Patient Safety Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
20	Perioperative Care: Timing of Prophylactic Parenteral Antibiotic— Ordering Physician	Patient Safety
21	Perioperative Care: Selection of Prophylactic Antibiotic—First OR Second Generation Cephalosporin	Patient Safety
22	Perioperative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures)	Patient Safety
23	Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)	Patient Safety
30	Perioperative Care: Timing of Prophylactic Antibiotic—Administering Physician	Patient Safety
45	Perioperative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Cardiac Procedures)	Patient Safety
46 (GPRO CARE-1)	Medication Reconciliation: Reconciliation After Discharge from an Inpatient Facility	Patient Safety
76	Prevention of Catheter-Related Bloodstream Infections (CRBSI): Central Venous Catheter (CVC) Insertion Protocol	Patient Safety
130 (CMS68v3)	Documentation of Current Medications in the Medical Record	Patient Safety
145	Radiology: Exposure Time Reported for Procedures Using Fluoroscopy	Patient Safety
154	Falls: Risk Assessment	Patient Safety
156	Oncology: Radiation Dose Limits to Normal Tissues	Patient Safety
157	Thoracic Surgery: Recording of Clinical Stage Prior to Lung Cancer or Esophageal Cancer Resection	Patient Safety
181	Elder Maltreatment Screen and Follow-Up Plan	Patient Safety
192* (CMS132v2)	Cataracts: Complications Within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures	Patient Safety
193	Perioperative Temperature Management	Patient Safety
234	Thoracic Surgery: Pulmonary Function Tests Before Major Anatomic Lung Resection (Pneumonectomy, Lobectomy or Formal Segmentectomy)	Patient Safety
262	Image Confirmation of Successful Excision of Image-Localized Breast Lesion	Patient Safety
286	Dementia: Counseling Regarding Safety Concerns	Patient Safety
318 (GPRO CARE-2, CMS139v2)	Falls: Screening for Future Fall Risk	Patient Safety
326	Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy	Patient Safety
335	Maternity Care: Elective Delivery or Early Induction Without Medical Indication at ≥ 37 and < 39 Weeks	Patient Safety
351	Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation	Patient Safety
352	Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet	Patient Safety
353	Total Knee Replacement: Identification of Implanted Prosthesis in Operative Report	Patient Safety
360	Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies	Patient Safety

Exhibit B.4 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
361	Optimizing Patient Exposure to Ionizing Radiation: Reporting to a Radiation Dose Index Registry	Patient Safety

*Lower performance rates on this measure indicate better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

Exhibit B.5. Communication and Care Coordination Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
24	Osteoporosis: Communication with the Physician Managing Ongoing Care Post-Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older	Communication and Care Coordination
47	Advance Care Plan	Communication and Care Coordination
81	Adult Kidney Disease: Hemodialysis Adequacy: Solute	Communication and Care Coordination
82	Adult Kidney Disease: Peritoneal Dialysis Adequacy: Solute	Communication and Care Coordination
93	Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy—Avoidance of Inappropriate Use	Communication and Care Coordination
138	Melanoma: Coordination of Care	Communication and Care Coordination
141	Primary Open-Angle Glaucoma (POAG): Reduction of Intraocular Pressure (IOP) by 15% OR Documentation of a Plan of Care	Communication and Care Coordination
147	Nuclear Medicine: Correlation with Existing Imaging Studies for All Patients Undergoing Bone Scintigraphy	Communication and Care Coordination
155	Falls: Plan of Care	Communication and Care Coordination
180	Rheumatoid Arthritis (RA): Glucocorticoid Management	Communication and Care Coordination
182	Functional Outcome Assessment	Communication and Care Coordination
185	Endoscopy & Polyp Surveillance: Colonoscopy Interval for Patients with a History of Adenomatous Polyps—Avoidance of Inappropriate Use	Communication and Care Coordination
217	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Knee Impairments	Communication and Care Coordination
218	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Hip Impairments	Communication and Care Coordination
219	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Lower Leg, Foot or Ankle Impairments	Communication and Care Coordination
220	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Lumbar Spine Impairments	Communication and Care Coordination
221	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Shoulder Impairments	Communication and Care Coordination
222	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Elbow, Wrist or Hand Impairments	Communication and Care Coordination
223	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Neck, Cranium, Mandible, Thoracic Spine, Ribs or Other General Orthopedic Impairments	Communication and Care Coordination
225	Radiology: Reminder System for Mammograms	Communication and Care Coordination
258	Rate of Open Repair of Small or Moderate Non-Ruptured Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-Operative Day #7)	Communication and Care Coordination
259	Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-Operative Day #2)	Communication and Care Coordination

Exhibit B.5 *(continued)*

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
260	Rate of Carotid Endarterectomy (CEA) for Asymptomatic Patients without Major Complications (Discharged to Home by Post-Operative Day #2)	Communication and Care Coordination
261	Referral to Otologic Evaluation for Patients with Acute or Chronic Dizziness	Communication and Care Coordination
265	Biopsy Follow-Up	Communication and Care Coordination
280	Dementia: Staging of Dementia	Communication and Care Coordination
320	Endoscopy/Polyp Surveillance: Appropriate Follow-Up Interval for Normal Colonoscopy in Average Risk Patients	Communication and Care Coordination
336	Maternity Care: Post-Partum Follow-Up and Care Coordination	Communication and Care Coordination
350	Total Knee Replacement: Shared Decision-Making: Trial of Conservative (Non-Surgical) Therapy	Communication and Care Coordination
359	Optimizing Patient Exposure to Ionizing Radiation: Utilization of a Standardized Nomenclature for Computerized Tomography (CT) Imaging Description	Communication and Care Coordination
362	Optimizing Patient Exposure to Ionizing Radiation: Computed Tomography (CT) Images Available for Patient Follow-Up and Comparison Purposes	Communication and Care Coordination
363	Optimizing Patient Exposure to Ionizing Radiation: Search for Prior Computed Tomography (CT) Imaging Studies Through a Secure, Authorized, Media-Free, Shared Archive	Communication and Care Coordination
364	Optimizing Patient Exposure to Ionizing Radiation: Appropriateness: Follow-Up CT Imaging for Incidentally Detected Pulmonary Nodules According to Recommended Guidelines	Communication and Care Coordination
CAHPS	Getting Timely Care	Communication and Care Coordination
CAHPS	Provider Communication	Communication and Care Coordination
CAHPS	Rating of Provider	Communication and Care Coordination
CAHPS	Access to Specialists	Communication and Care Coordination
CAHPS	Health Promotion and Education	Communication and Care Coordination
CAHPS	Shared Decision-Making	Communication and Care Coordination
CAHPS	Health Status/Functional Status	Communication and Care Coordination
CAHPS	Courteous/Helpful Office Staff	Communication and Care Coordination
CAHPS	Care Coordination	Communication and Care Coordination
CAHPS	Between Visit Communication	Communication and Care Coordination
CAHPS	Education About Medication Adherence	Communication and Care Coordination
CAHPS	Stewardship of Patient Resources	Communication and Care Coordination

Exhibit B.5 *(continued)*

*Lower performance rates on this measure indicate better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

Note: CAHPS for PQRS measures are scored on a 0 to 100 point scale. Data on the "Health Status/Functional Status" measure, a descriptive measure of beneficiary characteristics, is being provided to TINs for their information only. Since this measure will not be used in the calculation of the 2016 Value Modifier, no benchmark is calculated.

Exhibit B.6. Communication and Care Coordination Domain Quality Indicators (CMS-Calculated Quality Outcome Measures)

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
CMS-1	**Acute Conditions Composite**	Communication and Care Coordination
-	Bacterial Pneumonia	Communication and Care Coordination
-	Urinary Tract Infection	Communication and Care Coordination
-	Dehydration	Communication and Care Coordination
CMS-2	**Chronic Conditions Composite**	Communication and Care Coordination
-	Diabetes (composite of 4 indicators)	Communication and Care Coordination
-	COPD or Asthma	Communication and Care Coordination
-	Heart Failure	Communication and Care Coordination
CMS-3	**All-Cause Hospital Readmissions**	Communication and Care Coordination

Note: Lower performance rates on these measures indicates better performance. However, when standardizing measures for inclusion in the domain score, CMS transforms these measures to ensure that for all standardized scores entering the domain score, positive (+) scores indicate better performance and negative (-) scores indicate worse performance. CMS-1, CMS-2, and CMS-3 are calculated by CMS using administrative claims data.

Exhibit B.7. Efficiency and Cost Reduction Domain Quality Indicators

PQRS Number (GPRO/eCQM Number)	Measure Name	Quality Domain
65 (CMS154v2)	Appropriate Treatment for Children with Upper Respiratory Infection (URI)	Efficiency and Cost Reduction
66 (CMS146v2)	Appropriate Testing for Children with Pharyngitis	Efficiency and Cost Reduction
102 (CMS129v3)	Prostate Cancer: Avoidance of Overuse of Bone Scan for Staging Low Risk Prostate Cancer Patients	Efficiency and Cost Reduction
116	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	Efficiency and Cost Reduction
146*	Radiology: Inappropriate Use of 'Probably Benign' Assessment Category in Mammography Screening	Efficiency and Cost Reduction
148	Back Pain: Initial Visit	Efficiency and Cost Reduction
224	Melanoma: Overutilization of Imaging Studies in Melanoma	Efficiency and Cost Reduction
322*	Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Preoperative Evaluation in Low Risk Surgery Patients	Efficiency and Cost Reduction
323*	Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Routine Testing After Percutaneous Coronary Intervention (PCI)	Efficiency and Cost Reduction
324*	Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Testing in Asymptomatic, Low Risk Patients	Efficiency and Cost Reduction
333	Adult Sinusitis: Computerized Tomography (CT) for Acute Sinusitis (Overuse)	Efficiency and Cost Reduction
334*	Adult Sinusitis: More than One Computerized Tomography (CT) Scan Within 90 Days for Chronic Sinusitis (Overuse)	Efficiency and Cost Reduction
340	HIV Medical Visit Frequency	Efficiency and Cost Reduction
341*	Gap in HIV Medical Visits	Efficiency and Cost Reduction

*Lower performance rates on this measure indicate better performance. However, the domain score for this domain has been calculated such that positive (+) scores indicate better performance and negative (-) scores indicate worse performance.

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APPENDIX C

APPROACH TO PQRS MEASURES WITH MULTIPLE PERFORMANCE RATES OR TECHNICAL ERRORS

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Beginning in 2014, several PQRS measures have multiple sub-parts, but not necessarily a single overall performance rate. For each multi-part PQRS measure included in the Annual QRUR, CMS determined on a case-by-case basis how to compute a single overall rate, as described in Exhibit C.1. This exhibit also describes CMS's approach to one measure with technical errors.

Exhibit C.1. Approach to PQRS measures with multiple performance rates and measures with technical errors

PQRS Number (GPRO/eCQM Number)	Measure Name	Reporting Method(s) Affected	Approach
Measures with Multiple Performance Rates			
7 (CMS145v2)	Coronary Artery Disease (CAD): Beta-Blocker Therapy—Prior Myocardial Infarction (MI) or Left Ventricular Systolic Dysfunction (LVSD) (LVEF < 40%)	Registry	Overall rate is computed as the case-weighted average of each sub-measure if reported via Registry.
9 (CMS128v2)	Anti-Depressant Medication Management	Registry	Overall rate is computed as the case-weighted average of each sub-measure. (Denominators of each sub-measure are defined to be identical. Records submitted with unequal sub-measure denominators are excluded from the QRUR.) Measure will be excluded from the 2016 Value Modifier if reported via Registry because the prior year benchmark is not comparable.
53	Asthma: Pharmacologic Therapy for Persistent Asthma—Ambulatory Care Setting	Registry	The third sub-measure, which measure specifications define as the overall rate, is used as the overall rate if reported via Registry.
122	Adult Kidney Disease: Blood Pressure Management	Claims, Registry	The third sub-measure, which measure specifications define as the overall rate, is used as the overall rate if reported via Claims or Registry.
160 (CMS52v2)	HIV/AIDS: Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis	Registry	The fourth sub-measure, which measure specifications define as the overall rate, is used as the overall rate if reported via Registry.
197 (GPRO CAD-2)	Coronary Artery Disease (CAD): Lipid Control	Registry	The third sub-measure, which measure specifications define as the overall rate, is used as the overall rate if reported via Registry.
349	Optimal Vascular Care Composite	Registry	The first sub-measure, which measure specifications define as the overall rate, is used as the overall rate. Measure will be excluded from the 2016 Value Modifier if reported via Registry because no prior year benchmark is available.

Exhibit C.1 (*continued*)

PQRS Number (GPRO/eCQM Number)	Measure Name	Reporting Method(s) Affected	Approach
Measures with Technical Errors			
112 (GPRO Prev-5, CMS125v2)	Breast Cancer Screening	Claims, Registry, Registry Measures Group, GPRO Web Interface	Measure is excluded from the QRUR.

APPENDIX D

METHOD FOR DEFINING SERVICE CATEGORIES

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For the purposes of reporting cost breakdowns by category of service in Exhibit 11 of the 2014 Annual QRUR and Supplementary Exhibit 5 of the Annual QRUR and Mid-Year QRUR, each Medicare claim for an attributed beneficiary is categorized into one of the service categories displayed in Exhibit D.1. Claim costs are included in a given service category based on the claim type, Berenson-Eggers Type of Service (BETOS) code, place of service, type of bill, type of service, HCPCS modifier, and/or provider type. For the purposes of reporting cost breakdowns by category of service in Exhibit 12, Supplementary Exhibit 4, and Supplementary Exhibit 6 of the Annual QRUR, each claim associated with an MSPB episode is categorized into one of the service categories displayed in Exhibit D.2. Episode costs are included in a given service category based on the claim type, BETOS code, claim criteria, and provider type. CMS assigns a BETOS code to each HCPCS code that might appear on a carrier or outpatient hospital claim. For example, BETOS code M1A (office visits—new) consists of the following E&M HCPCS codes: 99201, 99202, 99203, 99204, 99205, 99381, 99382, 99383, 99384, 99385, 99386, 99387, 0500F, G0101, G0245, G0248, and G0402. CMS developed the BETOS coding system primarily for analyzing the growth in Medicare expenditures. The coding system covers all HCPCS codes, assigns a HCPCS code to one and only one BETOS code, consists of readily understood clinical categories (as opposed to statistical or financial categories), consists of categories that permit objective assignment, is stable over time, and is relatively immune to minor changes in technology or practice patterns. Exhibit D.3 lists BETOS code descriptions.

Exhibit D.1. Categorization codes for type of service categories

		Criteria for Including Claim (Line Item) in Category		
Category	Claim Type(s)	Claim Criterion	Place of Service Criterion	Specialty Criterion
Outpatient E&M Services, Procedures, and Therapy (Excluding Emergency Department)	Sum of 1a, 1b, 1c, 2a, 2b, 2c, 2d, 2e, 2f, 2g			
1a. E&M Services Billed by EPs – Your TIN	Carrier claim line items	All Carrier line items with BETOS in {M1-M6}, HCPCS modifier* not equal to GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to Carrier line items provided by a performing NPI associated with the TIN (“Your Group”)
1b. E&M Services Billed by EPs – Other TINs	Carrier claim line items	All Carrier line items with BETOS in {M1-M6}, HCPCS modifier* not equal to GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency room), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to Carrier line items provided by a performing NPI NOT associated with the TIN (“Other Groups”)

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category		
		Claim Criterion	Place of Service Criterion	Specialty Criterion
1c. Other Facility-Billed E&M Expenses	Outpatient claim line items plus (for QRUR only) carrier claim line items	All claims/line items with BETOS in {M1-M6}; HCPCS modifier* not equal to GN, GO, or GP; for outpatient claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis); and, for carrier claims, CMS specialty code = 49 or Type of Service = F (Ambulatory Surgical Center)	For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department); For carrier claims, Place of Service not equal to 23 (emergency room), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	
2a. Major Procedures Billed by EPs – Your TIN	Carrier claim line items	All Carrier line items with BETOS in {P1-P3, P7}, HCPCS modifier* not in GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to Carrier line items provided by a performing NPI associated with the TIN ("Your Group")
2b. Major Procedures Billed by EPs – Other TINs	Carrier claim line items	All Carrier line items with BETOS in {P1-P3, P7}, HCPCS modifier* not in GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to carrier line items provided by a performing NPI NOT associated with the TIN ("Other Groups")
2c. Other Facility-Billed Expenses for Major Procedures	Outpatient claim line items plus (for QRUR only) carrier claim line items	All claims/line items with BETOS in {P1-P3, P7}; HCPCS modifier* not equal to GN, GO, or GP; for outpatient claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis); and, for carrier claims, CMS specialty code = 49 or Type of Service = F (Ambulatory Surgical Center)	For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department); For carrier claims, Place of Service not equal to 23 (emergency room), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	Not applicable

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category		
		Claim Criterion	Place of Service Criterion	Specialty Criterion
2d. Ambulatory/ Minor Procedures Billed by EPs – Your TIN	Carrier claim line items	All carrier line items with BETOS in {P4-P6, P8}, HCPCS modifier* not equal to GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to carrier line items provided by a performing NPI associated with the TIN ("Your Group")
2e. Ambulatory/ Minor Procedures Billed by EPs –Other TINs	Carrier claim line items	All carrier line items with BETOS in {P4-P6, P8}, HCPCS modifier* not equal to GN, GO, or GP (outpatient therapy), and (for QRUR only) Type of Service not equal to F (Ambulatory Surgical Center)	Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to carrier line items provided by a performing NPI NOT associated with the TIN ("Other Groups")
2f. Other Facility-Billed Expenses for Ambulatory/Minor Procedures	Outpatient claim line items plus (for QRUR only) carrier claim line items	All claims/line items with BETOS in {P4-P6, P8}; HCPCS modifier* not equal to GN, GO, or GP (outpatient therapy); for outpatient claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis); and, for carrier claims, CMS specialty code = 49 or Type of Service = F (Ambulatory Surgical Center)	For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department); For carrier claims, Place of Service not equal to 23 (emergency room), 21 (inpatient hospital), or 51 (inpatient psychiatric facility)	Not applicable
2g. Outpatient Physical, Occupational, or Speech and Language Pathology Therapy	Outpatient claim line items plus carrier claim line items	All claims/line items with HCPCS modifier* equal to GN, GO, or GP, BETOS code not in {P0, P9, O1A, O1D, O1E, or D1G}, and, for outpatient claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis)	For carrier claim line items, Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility); For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department)	Not applicable
3. Ancillary Services	Sum of 3a, 3b, 3c			

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category		
		Claim Criterion	Place of Service Criterion	Specialty Criterion
3a. Ancillary services: Laboratory, Pathology, and Other Tests	Outpatient claim line items plus carrier claim line items	All BETOS codes in {T1, T2}; HCPCS modifier* not equal to GN, GO, or GP; and for outpatient Claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis)	For carrier claim line items, Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility); For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981}	Not applicable
3b. Ancillary services: Imaging Services	Outpatient claim line items plus carrier claim line items	All BETOS codes in {I1-I4}; HCPCS modifier* not equal to GN, GO, or GP; and for outpatient Claims, Type of Bill not equal to 22x or 23x (SNF), 33x or 34x (Home Health), or 72x (dialysis)	For carrier claim line items, Place of Service not equal to 23 (emergency department), 21 (inpatient hospital), or 51 (inpatient psychiatric facility); For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981}	Not applicable
3c. Ancillary services: Durable Medical Equipment and Supplies	Durable medical equipment claims	All DME claims with BETOS code not in {O1D, O1E, D1G}	Not applicable	Not applicable
4. Hospital Inpatient Services	Sum of 4a, 4b, 4c			
4a. Hospital Inpatient Services: Inpatient Hospital Facility Services	Inpatient claims	Inpatient short-stay and psychiatric inpatient claims	Provider (CCN) number ends in {0001-0899}, {1300-1399}, {4000–4499} or its third position is in {M, S}	Not applicable
4b. Hospital Inpatient Services: Eligible Professional Services during Hospitalization—Your TIN	Carrier claim line items	All carrier line items with BETOS not in {P0, P9, O1A, O1D, O1E, or D1G}	Place of Service equal to 21 (inpatient hospital) or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to carrier line items provided by a performing NPI associated with the TIN (“Your Group”)

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category		
		Claim Criterion	Place of Service Criterion	Specialty Criterion
4c. Hospital Inpatient Services: Eligible Professional Services during Hospitalization—Other TINs	Carrier claim line items	All carrier line items with BETOS not in {P0, P9, O1A, O1D, O1E, or D1G}	Place of Service equal to 21 (inpatient hospital) or 51 (inpatient psychiatric facility)	CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2} AND limited to carrier line items provided by a performing NPI NOT associated with the TIN ("Other Groups")
5. Emergency Services That Did Not Result in a Hospital Admission	Sum of 5a, 5b, 5c, 5d			
5a. Emergency Services: Emergency Evaluation & Management Services	Outpatient claim line items plus carrier claim line items	All BETOS codes in {M1-M6} and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	For carrier claim line items, Place of Service = 23; For outpatient claims, Revenue Center line code in {0450-0459, 0981}	None for outpatient claims;** for carrier claims: CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2}
5b. Emergency Services: Procedures	Outpatient claim line items plus carrier claim line items	All BETOS codes in {P1-P8} and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	For carrier claim line items, Place of Service = 23; For outpatient claims, Revenue Center line code in {0450-0459, 0981}	None for outpatient claims;** for carrier claims: CMS specialty code NOT in {31, 45, 47, 49, 51–61, 63, 69, 73–75, 87–88, 95–96, A0–A8, B2–B5, C1, or C2}
5c. Emergency Services: Laboratory, Pathology, and Other Tests	Outpatient claim line items plus carrier claim line items	All BETOS codes in {T1, T2} and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	For carrier claim line items, Place of Service = 23; For outpatient claims, Revenue Center line code in {0450-0459, 0981}	Not applicable
5d. Emergency Services: Imaging Services	Outpatient claim line items plus carrier claim line items	All BETOS codes in {I1- I4} and, for outpatient claims, type of bill not equal to 72x (dialysis)	For carrier claim line items, Place of Service = 23; For outpatient claims, Revenue Center line code in {0450-0459, 0981}	Not applicable
6. Post-Acute Services	Sum of 6a, 6b, 6c			
6a. Post-Acute Services: Home Health	Home health claims and outpatient claim line items	All home health claims and all outpatient claims with Type of Bill = 33x or 34x and BETOS code not in {P0, P9, O1A, O1D, O1E, DIG}	None for Home Health claims; For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department)	Not applicable

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category		
		Claim Criterion	Place of Service Criterion	Specialty Criterion
6b. Post-Acute Services: Skilled Nursing Facilities	Skilled nursing facility claims and outpatient claim line items	All SNF claims and all outpatient claims with Type of Bill = 22x or 23x and BETOS code not in {P0, P9, O1A, O1D, O1E, DIG}	None for SNF claims; For outpatient claims, Revenue Center line code is NOT in {0450-0459, 0981} (emergency department)	Not applicable
6c. Post-Acute services: Inpatient Rehabilitation or Long-Term Care Hospital	Inpatient claims	Not applicable	Provider (CCN) number ends in {2000-2299, 3025–3099} or its third position is in {R, T}	Not applicable
7. Hospice	Hospice	Not applicable	Not applicable	Not applicable
8. All Other Services	Sum of 8a, 8b, 8c, 8d, 8e			
8a. Ambulance Services	Outpatient hospital claims plus carrier claim line items	All claims with BETOS code = O1A, and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	Not applicable	Not applicable
8b. Chemotherapy and Other Part B–Covered Drugs	Outpatient hospital claims plus carrier claim line items plus durable medical equipment claims	All claims with BETOS code in {O1D, O1E, D1G}, and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	Not applicable	Not applicable
8c. Dialysis	Outpatient claim line items plus carrier claim line items	All Carrier claim line items or outpatient claims with BETOS code = P9 or outpatient claims with Type of Bill = 72x	Not applicable	Not applicable
8d. Anesthesia Services	Outpatient claim line items plus carrier claim line items	All claims with BETOS code = P0, and, for outpatient claims, Type of Bill not equal to 72x (dialysis)	Not applicable	Not applicable
8e. All Other Services Not Otherwise Classified	Remainder of total costs from claims files (excluding Part D)	Total costs associated with all claims and/or line items not identified in rows above	Not applicable	Not applicable

* We consider only the first four HCPCS modifiers due to data constraints.

** Under the “Emergency Services” category, in the “Lab Tests,” and “Imaging” subcategories, we include services from non-eligible professionals (which is consistent with the definition of the “Ancillary Services” subcategories “Lab Tests,” and “Imaging”). In the “Visits,” and “Procedures” subcategories, we limit carrier claims to those provided by an eligible professional (which is consistent with the definition of the “E&M Services,” and “Procedures” type-of-service categories (1a, 1b, 2a, 2b, 2d, 2e)). However, given that outpatient claims do not include a specialty code, this exclusion is not made on outpatient claims.

Exhibit D.2. Definitions for Cost Categories

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category			
		BETOS	Claim Criterion	Provider Number Criterion	Additional Criterion
Acute Inpatient Services					
Inpatient Hospital: Trigger	Inpatient			MSPB-eligible hospitals	Acute inpatient hospitalization that triggered the MSPB episode
Inpatient Hospital: Readmission	Inpatient			Provider number with '0' in third digit (Acute Hospital) or with third and fourth digit = '13' (Critical Access Hospital CAH) or a Psychiatric hospital as identified by provider number ending in {4000-4499} or its third position is in {M, S}.	Any acute inpatient hospitalization other than the one that triggered the episode
Physician Services During Hospitalization	Carrier		Carrier claims line items between from_dt and thru_dt (exclusive) of trigger or readmission inpatient claim with no place of service restriction. For Acute and CAH inpatient stays, carrier claims line items on the from_dt must have Place of Service 21, 22, or 23 while carrier claims on the thru_dt must have Place of Service 21. For Psychiatric inpatient stays, carrier claims line items on the from_dt or thru_dt must have Place of Service 51.		
Post-Acute Care					
Home Health	Home Health, Outpatient		All Home Health claims. Outpatient claims with Type of Bill 34x		
Skilled Nursing Facility	Skilled Nursing Facility, Outpatient		All Skilled Nursing Facility claims. Outpatient claims with Type of Bill 22x or 23x		
Inpatient Rehabilitation or Long-Term Care Hospital	Inpatient			Provider number ending in {2000-2299, 3025-3099} or with third position in {R, T}	

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category			
		BETOS	Claim Criterion	Provider Number Criterion	Additional Criterion
Emergency Room Outpatient Hospital Services					
ER Evaluation & Management Services	Outpatient, Carrier	All M Codes	Outpatient revenue center line code in {0450-0459, 0981}, or carrier claim line items occurring during such an Outpatient claim and Place of Service 23.		Must not be counted in any categories above
ER Procedures	Outpatient, Carrier	P0, P1, P2, P3, P4, P5, P6, P7, P8	Outpatient revenue center line code in {0450-0459, 0981}, or carrier claim occurring during such an Outpatient claim and Place of Service 23		Must not be counted in any categories above
ER Laboratory, Pathology and Other Tests	Outpatient, Carrier	All T codes	Outpatient revenue center line code in {0450-0459, 0981}, or carrier claim occurring during such an Outpatient claim and Place of Service 23		Must not be counted in any categories above
ER Imaging Services	Outpatient, Carrier	All I codes	Outpatient revenue center line code in {0450-0459, 0981}, or carrier claim occurring during such an Outpatient claim and Place of Service 23		Must not be counted in any categories above
Outpatient (Non-ER) Hospital and Physician Office Services					
Outpatient Physical, Occupational, or Speech and Language Pathology Therapy	Outpatient, Carrier				Any modifier GN, GO, or GP
Dialysis	Outpatient, Carrier		Outpatient claims Type of Bill 72x. Carrier claim line items with BETOS code P9		Must not be counted in any categories above
Outpatient Non-ER Evaluation & Management Services	Outpatient, Carrier	All M Codes			Must not be counted in any categories above
Major Procedures and Anesthesia	Outpatient, Carrier	P0, P1, P2, P3, P7			Must not be counted in any categories above
Ambulatory/Minor procedures	Outpatient, Carrier	P4, P5, P6,P8			Must not be counted in any categories above

Exhibit D.2 *(continued)*

Category	Claim Type(s)	Criteria for Including Claim (Line Item) in Category			
		BETOS	Claim Criterion	Provider Number Criterion	Additional Criterion
Ancillary Services in All Non-Inpatient Settings					
Ancillary Laboratory, Pathology, and Other Tests	Outpatient, Carrier	All T codes			Must not be counted in any categories above
Ancillary Imaging Services	Outpatient, Carrier	All I codes			Must not be counted in any categories above
Durable Medical Equipment and Supplies	Durable Medical Equipment	All codes except O1D (chemotherapy), O1E and D1G (drugs)			Must not be counted in any categories above
Hospice					
Hospice	Hospice				
Other Services					
Ambulance Services	Outpatient, Carrier	O1A			
Chemotherapy And Other Part B-Covered Drugs	Outpatient, Carrier, Durable Medical Equipment	O1D, O1E, D1G			
All Other Services Not Otherwise Classified	All remaining costs from all Parts A and B claim types				

Exhibit D.3. 2014 BETOS codes and descriptions

Code	Description
	Evaluation and management
M1A	Office visits—new
M1B	Office visits—established
M2A	Hospital visit—initial
M2B	Hospital visit—subsequent
M2C	Hospital visit—critical care
M3	Emergency room visit
M4A	Home visit
M4B	Nursing home visit
M5A	Specialist—pathology
M5B	Specialist—psychiatry
M5C	Specialist—ophthalmology
M5D	Specialist—other
M6	Consultations
	Procedures
P0	Anesthesia
P1A	Major procedure—breast
P1B	Major procedure—colectomy
P1C	Major procedure—cholecystectomy
P1D	Major procedure—transurethral resection of the prostate
P1E	Major procedure—hysterectomy
P1F	Major procedure—explor/decompr/excisdisc
P1G	Major procedure—other
P2A	Major procedure, cardiovascular— coronary artery bypass grafting
P2B	Major procedure, cardiovascular—aneurysm repair
P2C	Major procedure, cardiovascular—thromboendarterectomy
P2D	Major procedure, cardiovascular— percutaneous transluminal coronary angioplasty
P2E	Major procedure, cardiovascular—pacemaker insertion
P2F	Major procedure, cardiovascular—other
P3A	Major procedure, orthopedic—hip fracture repair
P3B	Major procedure, orthopedic—hip replacement
P3C	Major procedure, orthopedic—knee replacement
P3D	Major procedure, orthopedic—other
P4A	Eye procedure—corneal transplant
P4B	Eye procedure—cataract removal/lens insertion
P4C	Eye procedure—retinal detachment
P4D	Eye procedure—treatment of retinal lesions

Exhibit D.2 *(continued)*

Code	Description
P4E	Eye procedure—other
P5A	Ambulatory procedures—skin
P5B	Ambulatory procedures—musculoskeletal
P5C	Ambulatory procedures—groin hernia repair
P5D	Ambulatory procedures—lithotripsy
P5E	Ambulatory procedures—other
P6A	Minor procedures—skin
P6B	Minor procedures—musculoskeletal
P6C	Minor procedures—other (Medicare fee schedule)
P6D	Minor procedures—other (non-Medicare fee schedule)
P7A	Oncology—radiation therapy
P7B	Oncology—other
P8A	Endoscopy—arthroscopy
P8B	Endoscopy—upper gastrointestinal
P8C	Endoscopy—sigmoidoscopy
P8D	Endoscopy—colonoscopy
P8E	Endoscopy—cystoscopy
P8F	Endoscopy—bronchoscopy
P8G	Endoscopy—laparoscopic cholecystectomy
P8H	Endoscopy—laryngoscopy
P8I	Endoscopy—other
P9A	Dialysis services (Medicare fee schedule)
P9B	Dialysis services (non-Medicare fee schedule)
	Imaging
I1A	Standard imaging—chest
I1B	Standard imaging—musculoskeletal
I1C	Standard imaging—breast
I1D	Standard imaging—contrast gastrointestinal
I1E	Standard imaging—nuclear medicine
I1F	Standard imaging—other
I2A	Advanced imaging—CAT/CT/CTA: brain/head/neck
I2B	Advanced imaging—CAT/CT/CTA: other
I2C	Advanced imaging—MRI/MRA: brain/head/neck
I2D	Advanced imaging—MRI/MRA: other
I3A	Echography/ultrasonography—eye
I3B	Echography/ultrasonography—abdomen/pelvis
I3C	Echography/ultrasonography—heart
I3D	Echography/ultrasonography—carotid arteries

Exhibit D.2 *(continued)*

Code	Description
I3E	Echography/ultrasonography—prostate, transrectal
I3F	Echography/ultrasonography—other
I4A	Imaging/procedure—heart including cardiac catheter
I4B	Imaging/procedure—other
	Tests
T1A	Lab tests—routine venipuncture (non-Medicare fee schedule)
T1B	Lab tests—automated general profiles
T1C	Lab tests—urinalysis
T1D	Lab tests—blood counts
T1E	Lab tests—glucose
T1F	Lab tests—bacterial cultures
T1G	Lab tests—other (Medicare fee schedule)
T1H	Lab tests—other (non-Medicare fee schedule)
T2A	Other tests—electrocardiograms
T2B	Other tests—cardiovascular stress tests
T2C	Other tests—electrocardiogram monitoring
T2D	Other tests—other
	Durable medical equipment
D1A	Medical/surgical supplies
D1B	Hospital beds
D1C	Oxygen and supplies
D1D	Wheelchairs
D1E	Other DME
D1F	Prosthetic/orthotic devices
D1G	Drugs administered through DME
	Other
O1A	Ambulance
O1B	Chiropractic
O1C	Enteral and parenteral
O1D	Chemotherapy
O1E	Other drugs
O1F	Hearing and speech services
O1G	Immunizations/vaccinations
	Exceptions/unclassified
Y1	Other—Medicare fee schedule
Y2	Other—non-Medicare fee schedule
Z1	Local codes

Exhibit D.2 *(continued)*

Code	Description
Z2	Undefined codes

Source: Centers for Medicare & Medicaid Services Health Care Common Procedure Coding System, 2014.

Note: For a crosswalk of HCPCS codes to BETOS codes, see http://www.cms.gov/apps/ama/license.asp?file=/MedHCPCSGenInfo/downloads/betpuf14.zip

CAT = computerized axial tomography; CT = computerized tomography; CTA = computed tomography angiography; MRI = magnetic resonance imaging; MRA = magnetic resonance angiogram.

APPENDIX E

PROVIDER SPECIALTIES AND PROFESSIONAL STRATIFICATION CATEGORIES

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Exhibit E.1 identifies which specialties are physician specialties and the broad professional stratification categories to which each specialty is assigned. Specialty codes for which the provider stratification category is not applicable generally indicate nonmedical professionals, such as facilities or medical supply companies.

Exhibit E.1. Provider specialties and professional stratification categories

Provider or supplier specialty description	CMS specialty code	Eligible professional?	Physician?	Provider stratification category
Primary care specialties				
Family practice	08	Yes	Yes	PCPs
General practice	01	Yes	Yes	PCPs
Geriatric medicine	38	Yes	Yes	PCPs
Internal medicine	11	Yes	Yes	PCPs
All other specialties				
Addiction medicine	79	Yes	Yes	Medical specialists
All other suppliers (for example, drug stores)	87	No	No	Not applicable
Allergy/immunology	03	Yes	Yes	Medical specialists
Ambulance service supplier (for example, private ambulance companies, funeral homes)	59	No	No	Not applicable
Ambulatory surgical center	49	No	No	Not applicable
Anesthesiologist assistant	32	Yes	No	Other eligible professionals
Anesthesiology	05	Yes	Yes	Other eligible professionals
Audiologist (billing independently)	64	Yes	No	Other eligible professionals
Cardiac electrophysiology	21	Yes	Yes	Medical specialists
Cardiac surgery	78	Yes	Yes	Surgeons
Cardiology	06	Yes	Yes	Medical specialists
Centralized flu	C1	No	No	Not applicable
Certified clinical nurse specialist	89	Yes	No	Other eligible professionals
Certified nurse midwife	42	Yes	No	Other eligible professionals
Certified registered nurse anesthetist	43	Yes	No	Other eligible professionals
Chiropractor, licensed	35	Yes	Yes	Other eligible professionals
Clinical laboratory (billing independently)	69	No	No	Not applicable
Clinical psychologist	68	Yes	No	Other eligible professionals
Clinical psychologist (billing independently)	62	Yes	No	Other eligible professionals
Colorectal surgery (formerly proctology)	28	Yes	Yes	Surgeons

Exhibit E.1 *(continued)*

Provider or supplier specialty description	CMS specialty code	Eligible professional?	Physician?	Provider stratification category
Critical care (intensivists)	81	Yes	Yes	Medical specialists
Department store	A7	No	No	Not applicable
Dermatology	07	Yes	Yes	Medical specialists
Diagnostic radiology	30	Yes	Yes	Other eligible professionals
Emergency medicine	93	Yes	Yes	Other eligible professionals
Endocrinology	46	Yes	Yes	Medical specialists
Gastroenterology	10	Yes	Yes	Medical specialists
General surgery	02	Yes	Yes	Surgeons
Geriatric psychiatry	27	Yes	Yes	Medical specialists
Grocery store	A8	No	No	Not applicable
Gynecologist/oncologist	98	Yes	Yes	Surgeons
Hand surgery	40	Yes	Yes	Surgeons
Hematology	82	Yes	Yes	Medical specialists
Hematology/oncology	83	Yes	Yes	Medical specialists
Home health agency	A4	No	No	Not applicable
Hospice and palliative care	17	Yes	Yes	Medical specialists
Hospital	A0	No	No	Not applicable
Independent diagnostic testing facility	47	No	No	Not applicable
Indirect payment procedure	C2	No	No	Not applicable
Individual certified orthotist	55	No	No	Not applicable
Individual certified prosthetist	56	No	No	Not applicable
Individual certified prosthetist-orthotist	57	No	No	Not applicable
Infectious disease	44	Yes	Yes	Medical specialists
Intensive cardiac rehabilitation	31	No	No	Not applicable
Intermediate care nursing facility	A2	No	No	Not applicable
Interventional pain management	09	Yes	Yes	Medical specialists
Interventional radiology	94	Yes	Yes	Other eligible professionals
Licensed clinical social worker	80	Yes	No	Other eligible professionals
Mammography screening center	45	No	No	Not applicable
Mass immunization roster biller	73	No	No	Not applicable
Maxillofacial surgery	85	Yes	Yes	Surgeons
Medical oncology	90	Yes	Yes	Medical specialists
Medical supply company not included in 51, 52, or 53	54	No	No	Not applicable

Exhibit E.1 *(continued)*

Provider or supplier specialty description	CMS specialty code	Eligible professional?	Physician?	Provider stratification category
Medical supply company with certified orthotist	51	No	No	Not applicable
Medical supply company with certified prosthetist	52	No	No	Not applicable
Medical supply company with certified prosthetist-orthotist	53	No	No	Not applicable
Medical supply company with pedorthic personnel	B3	No	No	Not applicable
Medical supply company with registered pharmacist	58	No	No	Not applicable
Medical supply company with respiratory therapist	A6	No	No	Not applicable
Nephrology	39	Yes	Yes	Medical specialists
Neurology	13	Yes	Yes	Medical specialists
Neuropsychiatry	86	Yes	Yes	Medical specialists
Neurosurgery	14	Yes	Yes	Surgeons
Nuclear medicine	36	Yes	Yes	Other eligible professionals
Nurse practitioner	50	Yes	No	Other eligible professionals
Nursing facility, other	A3	No	No	Not applicable
Obstetrics/gynecology	16	Yes	Yes	Surgeons
Occupational therapist (independently practicing)	67	Yes	No	Other eligible professionals
Ocularist	B5	No	No	Not applicable
Ophthalmology	18	Yes	Yes	Surgeons
Optician	96	No	No	Not applicable
Optometrist	41	Yes	Yes	Other eligible professionals
Oral surgery (dentists only)	19	Yes	Yes	Surgeons
Orthopedic surgery	20	Yes	Yes	Surgeons
Osteopathic manipulative therapy	12	Yes	Yes	Medical specialists
Otolaryngology	04	Yes	Yes	Surgeons
Pain management	72	Yes	Yes	Other eligible professionals
Pathology	22	Yes	Yes	Other eligible professionals
Pediatric medicine	37	Yes	Yes	Other eligible professionals
Pedorthic personnel	B2	No	No	Not applicable
Peripheral vascular disease	76	Yes	Yes	Surgeons
Pharmacy	A5	No	No	Not applicable
Physical medicine and rehabilitation	25	Yes	Yes	Medical specialists
Physical therapist (independently practicing)	65	Yes	No	Other eligible professionals

Exhibit E.1 *(continued)*

Provider or supplier specialty description	CMS specialty code	Eligible professional?	Physician?	Provider stratification category
Physician assistant	97	Yes	No	Other eligible professionals
Plastic and reconstructive surgery	24	Yes	Yes	Surgeons
Podiatry	48	Yes	Yes	Other eligible professionals
Portable x-ray supplier	63	No	No	Not applicable
Preventive medicine	84	Yes	Yes	Medical specialists
Psychiatry	26	Yes	Yes	Medical specialists
Public health or welfare agencies (federal, state, and local)	60	No	No	Not applicable
Pulmonary disease	29	Yes	Yes	Medical specialists
Radiation oncology	92	Yes	Yes	Other eligible professionals
Radiation therapy centers	74	No	No	Not applicable
Registered dietician/nutrition professional	71	Yes	No	Other eligible professionals
Rehabilitation agency	B4	No	No	Not applicable
Rheumatology	66	Yes	Yes	Medical specialists
Single or multispecialty clinic or group practice	70	Yes	Yes	Other eligible professionals
SNF	A1	No	No	Not applicable
Sleep medicine	C0	Yes	Yes	Medical specialists
Slide preparation facilities	75	No	No	Not applicable
Speech language pathologists	15	Yes	No	Other eligible professionals
Sports medicine	23	Yes	Yes	Other eligible professionals
Surgical oncology	91	Yes	Yes	Surgeons
Thoracic surgery	33	Yes	Yes	Surgeons
Unknown supplier	95	No	No	Not applicable
Unknown physician	99	Yes	Yes	Other eligible professionals
Unknown provider	88	No	No	Not applicable
Urology	34	Yes	Yes	Surgeons
Vascular surgery	77	Yes	Yes	Surgeons
Voluntary health or charitable agencies (for example, National Cancer Society, National Heart Association, Catholic Charities)	61	No	No	Not applicable

Note: Physician specialties are those identified as such in the Medicare Claims Processing Manual, Chapter 26—Completing and Processing Form CMS-1500 Data Set, available at http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c26.pdf. Non-physician eligible professional specialties are those identified in the PQRS List of Eligible Professionals, available at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/PQRS_List-of-EligibleProfessionals_022813.pdf.

APPENDIX F

LIST OF ACRONYMS

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ACA	Patient Protection and Affordable Care Act
ACO	Accountable Care Organization
ACSC	Ambulatory Care-Sensitive Conditions
AF	adjustment factor
AHRQ	Agency for Healthcare Research and Quality
BETOS	Berenson-Eggers Type of Service
CAD	coronary artery disease
CAH	critical access hospital
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CCN	CMS certification number
CEHRT	certified electronic health record technology
CME	Common Medicare Environment
CMS	Centers for Medicare & Medicaid Services
COPD	chronic obstructive pulmonary disease
CPC	Comprehensive Primary Care (initiative)
DME	durable medical equipment
DMEPOS	durable medical equipment, prosthetics, orthotics, and supplies
EDB	Medicare Enrollment Database
E&M	evaluation and management
EHR	electronic health record
ESRD	end-stage renal disease
FFS	Fee-for-Service
GPRO	Group Practice Reporting Option
HCC	Hierarchical Condition Category
HCPCS	Healthcare Common Procedure Coding System
HIC	health insurance claim (number)
IDR	Integrated Data Repository
MAC	Medicare Administrative Contractor
PFS	Physician Fee Schedule
MSPB	Medicare Spending per Beneficiary
NPI	National Provider Identifier
OACT	CMS Office of the Actuary
PCP	primary care physician
PECOS	Provider Enrollment, Chain, and Ownership System
PQRS	Physician Quality Reporting System
QCDR	qualified clinical data registry
QRUR	Quality and Resource Use Report
SNF	skilled nursing facility
TIN	Taxpayer Identification Number
UDS	Universal Data Set