HOW TO UNDERSTAND YOUR 2016 ANNUAL QUALITY AND RESOURCE USE REPORT

CONTENTS

A. Background and Purpose of the Annual Quality and Resource Use Reports

The 2016 Annual Quality and Resource Use Reports (QRURs) are confidential feedback reports that are available for all groups and solo practitioners nationwide that billed for Medicare-covered services under a single Taxpayer Identification Number (TIN) from January 1, 2016 through December 31, 2016. These reports show how groups and solo practitioners, as identified by their TIN, performed in 2016 on the quality and cost measures used to calculate the 2018 Value-Based Payment Modifier (Value Modifier). For groups with two or more eligible professionals and solo practitioners who are subject to the 2018 Value Modifier, the QRUR shows how the Value Modifier will apply to payments for items and services provided under the Medicare Physician Fee Schedule (PFS) for physicians, physician assistants (PAs), nurse practitioners (NPs), clinical nurse specialists (CNSs), and certified registered nurse anesthetists (CRNAs) who bill under the TIN in 2018.[1]

The 2018 Value Modifier will be waived for TINs if (1) at least one eligible professional who billed for Medicare PFS items and services under the TIN during 2016 participated in the Pioneer Accountable Care Organization (ACO) Model, the Comprehensive Primary Care (CPC) initiative, the Next Generation ACO Model, the Oncology Care Model, or the Comprehensive End Stage Renal Disease (ESRD) Care Model, and (2) the TIN did not participate in a Shared Savings Program ACO in 2016. In addition, the 2018 Value Modifier does not apply to TINs that had no clinicians subject to the Value Modifier billing under the TIN in 2016 or TINs that had no clinicians subject to the Value Modifier who reassigned their billing rights to the TIN in the Provider Enrollment, Chain, and Ownership System (PECOS). The QRUR is available for these TINs for informational purposes only and will not affect their payments under the Medicare PFS in 2018.

The QRUR contains exhibits on both quality and cost measures. The quality measures included in the QRUR are measures reported to the Physician Quality Reporting System (PQRS), the Consumer Assessment of Healthcare Providers and Systems (CAHPS) for PQRS, and CAHPS for ACOs, if applicable. The QRUR also includes up to three claims-based quality outcome measures calculated by the Centers for Medicare & Medicaid Services (CMS). These measures are the 30-day All-Cause Hospital Readmission measure and two Hospital Admissions for Acute and Chronic Ambulatory Care–Sensitive Conditions (ACSC) measures: Acute Conditions Composite and Chronic Conditions Composite. These measures are based on Medicare Fee-For-Service (FFS) claims submitted by all providers treating beneficiaries attributed to your TIN.

All six cost measures included in the QRUR are calculated using administrative claims. Like the three claims-based quality outcome measures, these measures are based on Medicare FFS claims submitted by all providers treating Medicare beneficiaries or Medicare Spending per

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[1] Eligible professionals include physicians, practitioners, physical or occupational therapists or qualified speech-language therapists, and qualified audiologists. A physician is one of the following: doctor of medicine, doctor of osteopathy, doctor of dental surgery or dental medicine, doctor of podiatric medicine, doctor of optometry, or doctor of chiropractic. A practitioner is any of the following: clinical nurse specialist, certified registered nurse anesthetist, anesthesiology assistant, certified nurse midwife, clinical social worker, clinical psychologist, nurse practitioner, physician assistant, or registered dietician or nutrition professional.

Beneficiary episodes attributed to your TIN. These measures are Per Capita Costs for All Attributed Beneficiaries, Per Capita Costs for Beneficiaries with Specific Conditions (Diabetes, Chronic Obstructive Pulmonary Disease [COPD], Coronary Artery Disease [CAD], and Heart Failure), and Medicare Spending per Beneficiary (MSPB).

All exhibits in the 2016 Annual QRUR are directly relevant to the Value Modifier. However, you can also access additional detailed information in tables that are provided with the QRUR. The tables must be accessed separately from the QRUR. Instructions for accessing your 2016 Annual QRUR and Tables are available at: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Obtain-2013-QRUR.html. The information in the tables is for informational purposes only. Groups and solo practitioners should use the data presented in this report to identify opportunities to improve the quality and efficiency of the care they deliver. This document provides suggestions for how the 2016 Annual QRUR may be used to achieve these goals. Information on understanding the tables is also provided.

B. Exhibits Included in the Annual Quality and Resource Use Reports

Your TIN's 2018 Value Modifier

The front page of your report states whether your TIN is subject to the 2018 Value Modifier. If applicable, then your TIN's 2018 Value Modifier payment adjustment is provided. This adjustment will apply to payments for all items and services paid under the Medicare PFS for physicians, PAs, NPs, CNSs, and CRNAs billing under your TIN in 2018.

If applicable, below your TIN's 2018 Value Modifier is a scatterplot that displays your TIN's overall Quality and Cost Composite Scores in comparison to how a representative sample of other TINs performed on the Quality and Cost Composite Scores used to calculate the 2018 Value Modifier. Please refer to "Exhibit 2. Your TIN's Quality Composite Score" and "Exhibits 3-A and B. Information Used in the Calculation of Your TIN's Quality Composite Score" for more information on your TIN's quality performance. Please refer to "Exhibit 5. Your TIN's Cost Composite Score" and "Exhibits 6-A and B. Information Used in the Calculation of Your TIN's Cost Composite Score" for more information on your TIN's cost performance.

Use this information to identify your TIN's 2018 Value Modifier and for a high-level summary of your TIN's overall quality and cost performance during 2016.

Exhibit 1. 2018 Value Modifier Payment Adjustments under Quality-Tiering

Exhibit 1 displays your TIN's payment adjustment under the 2018 Value Modifier, based on your TIN's quality and cost performance in 2016. The highlighted cell shows your TIN's quality and cost performance, classified into one of nine cells that represent different combinations of quality and cost categories. High, average, and low quality and cost categories are called quality and cost "tiers." Your TIN's quality and cost tiers are used to determine your TIN's 2018 Value Modifier payment adjustment.[2] An asterisk (*) appearing in the highlighted cell indicates that an additional upward adjustment of 1.0 times the Adjustment Factor (AF) was applied to your TIN

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[2] Upward adjustments are based on an Adjustment Factor (AF) derived from actuarial estimates of the aggregate amount of downward payment adjustments available for redistribution to high-performing TINs.

for serving a disproportionate share of high-risk beneficiaries in 2016. Refer to the "How does the high-risk bonus adjustment apply to your TIN?" section for more information. Only TINs that have either High Quality or Low Cost and do not have Low Quality or High Cost are eligible to earn this additional upward adjustment. Exhibit 1 also displays the payment adjustments that correspond to other quality and cost tier combinations.

Use this information to identify your TIN's payment adjustment under the 2018 Value Modifier. Please note that this adjustment will apply to payments for all items and services paid under the Medicare PFS for clinicians subject to the Value Modifier who bill under your TIN in 2018, but it will not affect payments to other eligible professionals who are not subject to the Value Modifier.

Exhibit 2. Your TIN's Quality Composite Score

Exhibit 2 displays your TIN's Quality Composite Score (the diamond labeled "You") that was used to calculate the 2018 Value Modifier. The score shows how far your TIN's overall performance on quality measures was from the mean for your TIN's peer group (with the mean represented as zero). For all TINs subject to the 2018 Value Modifier, the peer group consists of all TINs for which a Quality Composite Score was calculated and used to determine the 2018 Value Modifier. For TINs that were not subject to the Value Modifier, the peer group consists of all TINs for which a Quality Composite Score can be calculated (including TINs with no eligible professionals subject to the Value Modifier), with the exception of those that participated in the Pioneer ACO Model, the CPC initiative, the Next Generation ACO Model, the Oncology Care Model, or the Comprehensive ESRD Care Model in 2016.

The Quality Composite Score standardizes a TIN's quality performance relative to the mean for the TIN's peer group, such that zero represents the peer group mean and the TIN's Quality Composite Score indicates how many standard deviations a TIN's performance is from the mean. Higher scores indicate better performance relative to other TINs in your peer group, while lower scores indicate worse performance relative to other TINs in your peer group. TINs with scores of one (1.0) or higher that are statistically significantly different from zero are classified as High Quality. Likewise, TINs with scores of negative one (-1.0) or lower that are statistically significantly different from zero are classified as Low Quality. All other TINs are classified as Average Quality. Use this information to identify how your TIN's performance on quality measures compared to that of other TINs.

Your TIN's Quality Composite Score was not calculated if (1) your TIN did not avoid the 2018 PQRS payment adjustment through the Group Practice Reporting Option (GPRO), or (2) fewer than 50 percent of eligible professionals in your TIN avoided the PQRS payment adjustment as individuals, or (3) your TIN is a solo practitioner TIN and you did not avoid the PQRS payment adjustment as an individual. For TINs that participated in a Shared Savings Program ACO, your Quality Composite Score was not calculated if your ACO did not avoid the 2018 PQRS payment adjustment as an ACO and your TIN did not avoid the PQRS adjustment in any of the three ways noted above.

Exhibit 3. Information Used in the Calculation of Your TIN's Quality Composite Score

Exhibits 3-A and 3-B display a summary of the information used to calculate your TIN's Quality Composite Score. The Quality Composite Score displayed in Exhibit 3-A is calculated using the TIN's quality domain scores displayed in Exhibit 3-B. A score for each quality domain is calculated as the equally-weighted average of measure scores within the domain, for all measures that have 2015 benchmarks and the required minimum number of eligible cases. Performance is then summarized across all quality domains for which scores could be calculated. This summary score is standardized relative to the mean of summary scores within the TIN's peer group to create a TIN's Quality Composite Score. The Quality Composite Score reflects how many standard deviations your TIN's performance across quality domains is from the mean. This score is computed by taking the mean of domain scores shown in Exhibit 3-B (also noted as the summary score in Exhibit 3-A), subtracting the benchmark, and dividing the result by the standard deviation displayed in Exhibit 3-A.

Exhibit 4. Performance on Quality Measures, by Domain

All quality measures are classified into 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. A score for each quality domain is calculated as the equally-weighted average of measure scores within the domain for all measures that have 2015 benchmarks. Only measures for which your TIN had the required minimum number of eligible cases are included in the calculation of the quality domain score.

In a series of tables organized by the quality domains detailed above, Exhibit 4 presents: (1) your TIN's quality domain scores (if calculated), and (2) measure-level performance rates for each quality measure in each domain, provided there was at least one measure in the domain with at least one eligible case. The "Number of Eligible Cases" column displays the number of eligible cases for each measure. The "Standardized Performance Score" column displays your TIN's score for each measure. The standardized score reflects by how many standard deviations your TIN's performance on a given quality measure differed from the benchmark for that measure. The "Included in Domain Score?" column indicates whether each measure is included in your TIN's domain score. Only the measures for which benchmarks are available and your TIN met the minimum case size (number of eligible cases) were included in your TIN's domain score. For all measures, except the 30-day All-Cause Hospital Readmission measure, the minimum case size is 20 eligible cases. For the 30-day All-Cause Hospital Readmission measure, the minimum case size is 200 eligible cases; however, this measure is not included in the domain score for TINs with fewer than 10 eligible professionals.[3]

The quality measures may include the three CMS-calculated claims-based quality outcome measures (Acute Conditions Composite, Chronic Conditions Composite, and 30-day All-Cause Hospital Readmission); PQRS measures, submitted either through the PQRS GPRO or by

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[3] For ACOs, there is no minimum number of eligible professionals or case size for the 30-day All-Cause Hospital Readmission measure.

individual eligible professionals who avoided the 2018 PQRS payment adjustment as individuals; and CAHPS for PQRS measures.

For TINs that participated in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS, Exhibit 4 displays only the ACO's performance on the 30-day All-Cause Hospital Readmission measure, any GPRO Web Interface measures the ACO submitted, and CAHPS for ACO measures.

For TINs that participated in the Pioneer ACO Model, the CPC initiative, the Next Generation ACO Model, the Oncology Care Model, or the Comprehensive ESRD Care Model, Exhibit 3 displays PQRS data reported outside of the model or initiative, including data reported by the TIN's Shared Savings Program ACO (if applicable). Exhibit 3 also displays performance on up to three claims-based quality outcome measures and (if applicable) the CAHPS for PQRS or CAHPS for ACOs measures.

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1. **How can we use this information to improve our performance on quality measures?**

Review each measure in Exhibit 4 to identify those for which your TIN's performance rates compare least favorably to the benchmark presented in the seventh column, which is the case-weighted average performance rate for the peer group based on 2015 data. The peer group for the 30-day All-Cause Hospital Readmission measure is defined as all non–Shared Savings Program TINs nationwide with 10 or more eligible professionals that had at least 200 eligible cases and all ACOs in the Shared Savings Program with at least 1 eligible case. The peer group for all other quality measures is defined as all TINs nationwide that had at least 20 eligible cases for the measure. For measures for which higher performance rates indicate better performance (those without an asterisk after the Measure Identification Number), identify the measure(s) for which your TIN's performance rate is lower than the benchmark; for measures for which lower performance rates indicate better performance (those with an asterisk after the Measure Identification Number), identify the measure(s) for which your TIN's performance rate exceeds the benchmark. You may then use this information to develop a targeted quality improvement strategy.

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2. **Where can we get more information about our TIN's performance on quality measures?**

Refer to Table 2A for a complete list of your TIN's attributed beneficiaries that contributed to your TIN's performance on the three claims-based quality outcome measures. Table 2B displays the hospitals that provided at least 5 percent of your TIN's attributed beneficiaries' inpatient stays during the performance period. Table 2C provides further detail about the hospitalizations associated with these beneficiaries during the performance period for TINs that did not participate in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS (Tables 6A and 6B present similar information for TINs that did participate in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS). You may also refer to Table 7, which displays PQRS measure performance for each eligible professional at your TIN that reported to PQRS as an individual. Refer to the descriptions of these Tables below for additional tips on how to understand and use the information provided.

Exhibit 5. Your TIN's Cost Composite Score

Exhibit 5 displays your TIN's Cost Composite Score (the diamond labeled "You") that was used to calculate the Value Modifier. The score shows how far your overall performance on cost measures was from the mean for your peer group (with the mean represented as zero). For all TINs subject to the Value Modifier, the peer group consists of all TINs subject to the 2018 Value Modifier for which a Cost Composite Score can be calculated, excluding TINs that participated in a Shared Savings Program ACO in 2016. For TINs that are not subject to the Value Modifier, the peer group consists of all TINs for which a Cost Composite Score can be calculated (including TINs with no clinicians subject to the Value Modifier), with the exception of those TINs that participated in a Shared Savings Program ACO, the Pioneer ACO Model, the CPC initiative, the Next Generation ACO Model, the Oncology Care Model, or the Comprehensive ESRD Care Model in 2016.

The Cost Composite Score standardizes a TIN's cost performance relative to the mean for the TIN's peer group, such that zero represents the peer group mean and the TIN's Cost Composite Score indicates how many standard deviations a TIN's performance is from the mean. Higher scores indicate higher costs relative to other TINs in your peer group, while lower scores indicate lower costs relative to other TINs in your peer group. TINs with scores of one (1.0) or higher that are statistically significantly different from zero are classified as High Cost. Likewise, TINs with scores of negative one (-1.0) or lower that are statistically significantly different from zero are classified as Low Cost. All other TINs are classified as Average Cost. Use this information to identify how your TIN's costs compared to other TINs.

Exhibit 6. Information Used in the Calculation of Your TIN's Cost Composite Score

Exhibits 6-A and 6-B display a summary of the information used to calculate your TIN's Cost Composite Score. The Cost Composite Score displayed in Exhibit 6-A is calculated using the TIN's cost domain scores displayed in Exhibit 6-B. A score for each cost domain is calculated as the equally-weighted average of measure scores within the domain, for all measures that have the required minimum number of eligible cases or episodes. Performance is then summarized across all cost domains for which scores could be calculated. This summary score is standardized relative to the mean of summary scores within the TIN's peer group to create the TIN's Cost Composite Score. The Cost Composite Score reflects how many standard deviations your TIN's performance across cost domains is from the mean. This score is computed by taking the mean of domain scores shown in Exhibit 6-B (also noted as the summary score in Exhibit 6-A), subtracting the benchmark, and dividing the result by the standard deviation displayed in Exhibit 6-A.

Exhibit 7. Costs for Your TIN's Attributed Medicare Beneficiaries

All cost measures are classified into two cost domains: the Per Capita Costs for All Attributed Beneficiaries Domain, and the Per Capita Costs for Beneficiaries with Specific Conditions Domain. A score for each cost domain is calculated as the equally-weighted average of measure scores within the domain.

In two tables organized by the cost domains detailed above, Exhibit 6 presents 1) your TIN's cost domain scores, and 2) the payment-standardized, risk-adjusted, and specialty-adjusted per capita or per episode costs and the number of eligible cases or episodes for the cost measures.

These measures include the five per capita cost measures (Per Capita Costs for All Attributed Beneficiaries, Per Capita Costs for Beneficiaries with Diabetes, Per Capita Costs for Beneficiaries with COPD, Per Capita Costs for Beneficiaries with CAD, Per Capita Costs for Beneficiaries with Heart Failure) and the MSPB measure that are included in the Value Modifier. The "Number of Eligible Cases" column displays the number of eligible cases for each measure. The "Standardized Performance Score" column displays your TIN's score for each measure. The standardized score reflects by how many standard deviations your TIN's performance on a given cost measure differed from the benchmark for that measure. The "Included in Domain Score?" column indicates whether each measure is included in your TIN's domain score. Only the measures for which your TIN met the minimum case size (number of eligible cases or episodes) were included in your TIN's domain score. For the five per capita cost measures, the minimum case size is 20 eligible cases. For the MSPB measure, the minimum case size is 125 eligible cases.

Cost data for the Per Capita Costs for All Attributed Beneficiaries measure and the four Per Capita Costs for Beneficiaries with Specific Conditions measures are based on Medicare-allowed charges for Medicare Part A and Medicare Part B claims during the period of performance that were submitted by all providers for Medicare beneficiaries attributed to your TIN for these measures. CMS attributes beneficiaries for these measures to a single TIN through a two-step process that takes into account the level of primary care services received (as measured by Medicare allowed charges) and the provider specialties that performed these services. For more information on attribution, please see the document entitled, "Two-step Attribution for Claims-based Quality Outcome Measures and Per Capita Cost Measures Included in the Value Modifier," available at the following URL: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2016-Attribution-Fact-Sheet.pdf.

For the MSPB measure, per episode costs are based on Medicare Part A and Medicare Part B allowed amounts surrounding specified inpatient hospital stays (3 days prior to admission through 30 days post-discharge) for episodes attributed to your TIN for this measure. CMS attributes MSPB episodes to the one TIN responsible for the plurality of Part B services, as measured by Medicare allowed amounts, performed by eligible professionals during the episode's index hospitalization.

All cost measures do not reflect the actual claim payments but instead standardized costs to facilitate more accurate comparisons to peers. Payment standardization removes differences in payments due to geographic location, incentive payments, and other add-on payments that support specific Medicare program goals. CMS also risk adjusts and specialty adjusts the data to account for beneficiary-level risk factors and TIN-level differences in specialty mix that can affect Medicare payments.

1. How can we use this information to improve our performance on cost measures?

Compare your TIN's costs for each measure with the benchmark in the third column to better understand how your TIN performed relative to your TIN's peers, which are all TINs that had at least 20 eligible cases for the total per capita cost measures, or at least 125 eligible cases for the MSPB measure. For example, if your TIN's Per Capita Costs for All Attributed Beneficiaries are higher than your peers, then use the detailed cost information presented in Tables 3A and 3B (discussed in more detail below) to identify the types of costs incurred over

the performance period for the beneficiaries attributed to your TIN. Similarly, if the MSPB costs for your TIN's attributed beneficiaries are higher than your TIN's peers, then you can use the detailed cost information presented in Table 5 to identify opportunities to improve the care for these beneficiaries, as discussed in more detail below.

The information on Per Capita Costs for Beneficiaries with Specific Conditions allows you to determine specific groups of beneficiaries for which your TIN's costs are higher than those of your TIN's peers. For example, if your TIN's Per Capita Costs for Beneficiaries with Diabetes are higher than those of your TIN's peers, then you could refer to Table 4A for more detailed data and consider developing a strategy to improve the efficiency of the care of these beneficiaries, perhaps by adopting care management practices or by educating beneficiaries on self-management techniques.

2. Where can we get more information about our TIN's performance on cost measures?

Refer to Table 2A for a complete list of your TIN's attributed beneficiaries that contributed to your TIN's performance on five of the six claims-based cost measures (excluding MSPB). Table 5B presents analogous information about stays attributed to your TIN for the MSPB measure.

Several tables present additional information about the costs associated with your TIN's attributed beneficiaries and MSPB episodes by different categories of service. This information is displayed both aggregated across all of your TIN's eligible cases and at the beneficiary or episode level. For example, Table 3A displays your TIN's per capita costs by category of service for the Per Capita Costs for All Attributed Beneficiaries measure. Tables 4A through 4D present this information for the Per Capita Costs for Beneficiaries with Specific Conditions measures, while Table 5B presents analogous information for the MSPB measure. By contrast, Table 3B presents the costs associated with each of your TIN's individual attributed beneficiaries by category of service for the Per Capita Costs measures. Table 5C presents the per episode costs for various categories of service for the episodes of care attributed to your TIN for the MSPB measure. Refer to the descriptions of these Tables below for additional tips on how to understand and use the information provided.

C. Background and Purpose of the Tables

The 2016 Annual QRUR Tables supplement the information provided in the Annual QRURs, so that you have a better sense of your TIN's beneficiary population, their use of health care services, and an awareness of the other eligible professionals involved in your TIN's beneficiaries' care. The Table's primary sources of information are the Medicare Part A and Medicare Part B claims from the performance period, submitted by all eligible professionals who treated beneficiaries attributed to your TIN, even if the eligible professionals were not affiliated with your TIN.

Specifically, these tables build on the information in the Annual QRUR and present:

1. Information about the physician and non-physician eligible professionals billing under your TIN.

2. Information about the Medicare beneficiaries attributed to your TIN for the five per capita cost measures and three claims-based quality outcome measures.

3. Data on hospital admissions for your TIN's attributed beneficiaries and MSPB episodes.

4. Data on the Medicare beneficiaries attributed to your TIN for the MSPB measure.

5. Information on your TIN's per capita or per episode costs, by category of service, for the Per Capita Costs for All Attributed Beneficiaries measure, the four Per Capita Costs for Beneficiaries with Specific Conditions measures, and the MSPB measure.

6. Information on individual eligible professional performance on 2016 PQRS measures (if eligible professionals submitted any PQRS measures under your TIN).

The information below suggests ways you can use data from the tables to improve quality of care, streamline resource use, and identify care coordination opportunities for your TIN's beneficiaries. Tables 2, 3, and 6 provide data that you can use to improve care coordination for beneficiaries attributed to your TIN. Table 1 displays data to support your TIN's practice management systems. You can use Tables 3 and 5 to better understand your TIN's performance on the MSPB measure and the Per Capita Costs for All Attributed Beneficiaries measure.

You can download these tables in Microsoft Excel and analyze the data. For Excel analyses using the beneficiary level data, you may remove personally identifiable information by deleting the first three columns of the exhibit and relying instead on the non-personally identifiable "Index" column to link beneficiaries between exhibits.

Table 1: Physicians and Non-physician Eligible Professionals Identified in Your Medicare-Enrolled Taxpayer Identification Number (TIN), Selected Characteristics

Table 1 displays information about the eligible professionals in your TIN in both a summary table and a detailed table listing all eligible professionals in your TIN.

The Table 1 Summary displays the number of eligible professionals (including physicians, non-physician eligible professionals subject to the Value Modifier, and non-physician eligible professionals not subject to the Value Modifier) in your TIN as indicated by two separate counts: (1) the number of eligible professionals identified in PECOS that re-assigned their billing rights to your TIN identified as of July 16, 2016, and (2) the number of eligible professionals submitting claims to Medicare under your TIN between January 1, 2016 and December 31, 2016. CMS uses the lower of these two numbers to determine the size of your TIN for the purposes of the Value Modifier. Because the magnitude and direction of the Value Modifier is based, in some circumstances, on the size of the TIN, you may review this summary table to understand how the number of physician and non-physician eligible professionals was determined in calculating the Value Modifier for your TIN.

Table 1 provides further details about the eligible professionals identified as a part of your TIN in PECOS or Medicare claims during the performance period. This table lists each eligible professional, the National Provider Identifier (NPI) number and name, whether the eligible professional is a physician, non-physician eligible professional subject to the Value Modifier, or non-physician eligible professional not subject to the Value Modifier, the specialty designation, whether the provider was identified as part of the TIN through PECOS and/or Medicare billing over the performance period, and the date of the last claim billed under the TIN. Use these data to verify information about eligible professionals in your TIN and to understand how CMS determined that these eligible professionals are associated with your TIN. If you believe information on your specialty is incorrect, you may need to update the information in PECOS; if this information is correct, then you may wish to contact your Medicare Administrative Contractor.

1. What should we do if some of the specialties for the eligible professionals in our TIN are listed incorrectly in the table?

The methodology used to define eligible professionals' specialties for the purposes of the QRUR can, at times, produce results that are different from what a TIN or eligible professional might expect. For the QRURs and Value Modifier, CMS in most instances assigns an eligible professional's specialty based on the specialty attached to the eligible professional's Medicare Part B claims by your Medicare Administrative Contractor. These specialty designations are derived from PECOS.

Eligible professionals may check and update their self-designated specialties in PECOS at https://pecos.cms.hhs.gov/pecos/login.do. If the information is correct, but the specialty designation in your QRUR is different from what you expect, then you may wish to contact your Medicare Administrative Contractor.

2. What should we do if eligible professionals identified through PECOS no longer belong to our TIN?

You should alert any eligible professionals who have reassigned their billing rights to your TIN in PECOS, but who no longer belong to your TIN, to update their PECOS record at https://pecos.cms.hhs.gov/pecos/login.do.

3. What should we do if an eligible professional identified through billings no longer belongs to our TIN?

If this information appears inaccurate, review the eligible professional's record in PECOS at https://pecos.cms.hhs.gov/pecos/login.do to ensure the individual's billing rights are no longer assigned to your TIN.

4. There is a difference between the number of eligible professionals in my TIN identified through PECOS and those identified through billings. How did this difference arise?

Eligible professionals may be identified through PECOS but not billings if they were registered to your TIN in PECOS as of July 16, 2016, but did not bill under your TIN during the performance period. Alternatively, eligible professionals may be identified through billings, but

not PECOS if they billed under your TIN during the performance period, but their record in PECOS as of July 16, 2016 did not indicate that they were associated with your TIN. To determine your TIN's group size for the purposes of the Value Modifier, CMS uses the smaller of the two eligible professional counts.

Table 2A: Beneficiaries Attributed to Your TIN for the Cost Measures (except Medicare Spending Per Beneficiary) and Claims-Based Quality Outcome Measures, and the Care that Your TIN and Other TINs Provided

Table 2A displays information about your TIN's attributed beneficiaries in both a summary table and beneficiary-level table.

The Table 2A Summary shows the number of Medicare FFS beneficiaries who are attributed to your TIN based on primary care services provided. This attribution method is used for the Per Capita Costs for All Attributed Beneficiaries measure, the four Per Capita Costs for Beneficiaries with Specific Conditions measures, and the three claims-based quality outcome measures included in the Annual QRUR. For these measures, Medicare beneficiaries are attributed to a TIN using a two-step methodology:

- Step 1: A beneficiary is attributed to a TIN in the first step if the beneficiary received more primary care services from primary care physicians (PCPs), NPs, PAs, and CNSs in that TIN than from those in any other TIN. Primary care services include evaluation and management services provided in office and other non-inpatient and non–emergency-room settings, as well as initial Medicare visits and annual wellness visits. If two TINs tie for the largest share of a beneficiary's primary care services, then the beneficiary is assigned to the TIN that provided primary care services most recently.

- Step 2: If a beneficiary did not receive a primary care service from any PCP, NP, PA, or CNS during the performance period, then the beneficiary is attributed to a TIN in the second step if the beneficiary received more primary care services from specialist physicians within the TIN than in any other TIN.

The second and third rows of the summary table display the number of beneficiaries who were attributed to your TIN in the first and second steps of attribution, respectively, so that you may review the proportion of beneficiaries attributed to your TIN during each step.

Table 2A provides additional details about the Medicare beneficiaries attributed to your TIN for the five per capita cost and three claims-based quality outcome measures. The table is divided into sections that describe beneficiary characteristics, specific Medicare claims data, the eligible professionals who billed the most services for the beneficiary, the date of the last hospital admission, and whether the beneficiary had one or more of four chronic conditions requiring more integrative care. You can use these data as a starting point for examining systematic ways to improve and maintain delivery of high-quality and efficient care to beneficiaries.

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[4] Primary care physicians are physicians with a general practice, family practice, internal medicine, or geriatric medicine designation

1. How can I use the listing of beneficiaries attributed to me?

You can use the data to confirm that your TIN furnished services to these beneficiaries. You can also identify the eligible professionals within your TIN and outside of your TIN who provided the largest shares of primary care services and non–primary care services to your beneficiaries. Check the information in the column titled "Date of Service on Last Claim" to make sure that CMS captured this information correctly. The Health Insurance Claim (HIC) number will allow you to match the listed beneficiary with your TIN's practice management system's records. You may wish to use this listing of beneficiaries attributed to your TIN to better understand your TIN's performance on the Hospital Admissions for ACSCs Acute and Chronic Conditions Composites, 30-day All-Cause Hospital Readmission, Per Capita Costs for All Attributed Beneficiaries, and Per Capita Costs for Beneficiaries with Specific Conditions measures, or to focus your care management efforts.

2. How should we interpret and use the Hierarchical Conditions Categories (HCC) Percentile Ranking?

Use this column to help identify beneficiaries attributed to your TIN who are at higher or lower risk of requiring high-cost care, compared to all Medicare beneficiaries. CMS generates HCC scores based on beneficiary characteristics (such as age) and prior health conditions identified on previous Medicare claims. The percentile ranking shows how that beneficiary's risk score compares to all other FFS beneficiaries nationwide, with 1 being low and 100 being high (for example, a percentile ranking of 83 means that 83 percent of beneficiaries nationwide had lower risk scores). Higher percentile rankings tend to be associated with more serious health conditions, including multiple chronic conditions. These beneficiaries may benefit from more intensive efforts from your TIN to manage their care, including closer monitoring of the beneficiary's condition, actively coordinating care with other providers, and supporting beneficiaries' self-management. Such efforts may reduce unnecessary costs and improve the quality and outcomes of care.[5] You may also look for opportunities to help beneficiaries at lower risk avoid the need for high-cost services (for example, outpatient emergency services).

You can sort data by HCC percentile ranking, in descending order, to see the high and low-risk beneficiaries to whom your TIN provides care. You can then link beneficiaries of interest to the data in Table 3B using the "Index" identifier to examine their total costs by service category and to identify opportunities for more coordinated care.

3. How should I interpret the "Basis for Attribution" column?

For the five per capita cost measures and for the three claims-based quality outcome measures, beneficiaries are attributed to your TIN using a two-step attribution process. A beneficiary is attributed to a TIN in the first step if the beneficiary received more primary care services from PCPs, NPs, PAs, and CNSs in that TIN than from those in any other TIN. If a beneficiary did not receive a primary care service from any PCP, NP, PA, or CNS during the

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[5] Bodenheimer, T., E. Wagner, K. Grumbach. "Improving Primary Care for Patients with Chronic Illness: The Chronic Care Model, Part 2." *Journal of the American Medical Association*, vol. 288, no. 15, 2002, pp. 1909-1914.

Coleman, K., B. Austin, C. Brach, E. Wagner. "Evidence on the Chronic Care Model in the New Millennium." *Health Affairs*, vol. 28, no. 1, 2009, pp. 75-85.

performance period, then the beneficiary is attributed to a TIN in the second step if the beneficiary received more primary care services from specialist physicians within the TIN than from those in any other TIN. This column indicates the step of attribution in which each beneficiary was attributed to your TIN.

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4. How can we use the data in the "Percent of Total Primary Care Charges" column?

Sort the data in the "Percent of Total Primary Care Charges" column in ascending order to identify the beneficiaries attributed to your TIN who received most of their primary care services outside your TIN. This will allow you to see which services were received outside your TIN's care and to identify cases where a high percentage of evaluation and management services were provided outside your TIN. For these beneficiaries, review the data in the "Eligible Professional Outside of Your TIN Who Billed Most Primary Care Services" column to identify which eligible professionals outside your TIN provided this care. You may use this information to improve care coordination for your TIN's attributed beneficiaries.

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5. How can we learn about the services that our TIN and health care professionals outside of our TIN provided to the beneficiaries attributed to us?

Table 2A displays the eligible professionals both inside and outside your TIN who billed the most primary care services and non-primary care services for each beneficiary. Use the information on the eligible professionals within your TIN who billed the most primary care services and non-primary care services to each beneficiary to help you identify the eligible professionals in your TIN who could be best positioned to understand and improve the care of your attributed beneficiaries. You may also check the information in the column titled "Date of Service on Last Claim" to make sure that CMS captured this information correctly.

Use the information on the eligible professionals outside of your TIN who billed the most primary care and non-primary care services to each beneficiary to make you aware of other key eligible professionals who provide care to your TIN's beneficiaries. This information may point to opportunities to speak with your beneficiaries to better understand their full range of health care needs and the additional services they receive.

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6. How can we use the data in the "Date of Last Hospital Admission" column?

Compare values in the "Date of Last Hospital Admission" column with values in the "Date of Service on Last Claim" column to identify beneficiaries who did not have a visit with any eligible professional in your TIN following inpatient care. This process allows you to examine why the beneficiaries attributed to your TIN did not receive follow-up care from your TIN.

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7. How can we use the information on the four chronic condition subgroups to improve how we care for our beneficiaries?

Table 2A displays whether a beneficiary had one or more of the following chronic conditions: diabetes, CAD, COPD, and heart failure. These four subgroups reflect chronic conditions that are widespread among Medicare beneficiaries and for which improved

management may improve beneficiary outcomes as well as efficiency of care.[6] Table 2A shows which beneficiaries were in each of these groups. You can use this information to identify individual beneficiaries with these conditions who may benefit from improved chronic illness management. For example, a beneficiary with congestive heart failure and relatively high costs attributable to inpatient stays (indicated in Table 3B) represents an opportunity to re-examine how you manage such beneficiaries. You may decide to update or change beneficiaries' preventive care, self-management support, monitoring, or medical treatment plans. These beneficiaries may also benefit from greater efforts at care coordination across providers.

In general, it may be helpful to sort the data in the column labeled "Chronic Condition Subgroup," and the associated sub columns (Diabetes, CAD, Chronic COPD, and Heart Failure), to identify beneficiaries with one or more of the four conditions. For each condition, consider linking beneficiary data by "Index" to Table 3B to use the data in the "Total Costs by Category of Services Furnished by All Providers" to assess whether a specific beneficiary's pattern of utilization suggests an opportunity for improved care.

8. How can I identify beneficiaries included in the Per Capita Costs for Beneficiaries with Specific Conditions measures?

The chronic conditions subgroups displayed in Table 2A (Diabetes, CAD, COPD, and Heart Failure), correspond to the four conditions included in the Per Capita Costs for Beneficiaries with Specific Conditions measures. Beneficiaries identified in Table 2A as having one or more of the corresponding chronic conditions are included in the corresponding condition-specific total per capita cost measure.

Table 2B: Admitting Hospitals: Beneficiaries Attributed to Your TIN for the Cost Measures (except Medicare Spending Per Beneficiary) and Claims-Based Quality Outcome Measures

Table 2B identifies the hospitals that provided at least 5 percent of your TIN's attributed beneficiaries' inpatient stays over the performance period for this report. This exhibit includes only the beneficiaries attributed to your TIN for the three claims-based quality outcome measures and for five of the six cost measures. (Table 5A addresses hospitalization episodes included in the MSPB measure.) It provides the hospital name, CMS Certification Number (CCN), and location of the hospital. Information about the efficiency and quality of care at these hospitals can be found on the Hospital Compare website (www.medicare.gov/hospitalcompare). Use the data presented in the last column to better understand which hospitals most frequently admitted your TIN's attributed beneficiaries. This information can help you target care coordination efforts most appropriately. Review Table 2C for information on each beneficiary's hospital admissions.

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[6] Bodenheimer, T., E. Wagner, K. Grumbach. "Improving Primary Care for Patients with Chronic Illness: The Chronic Care Model, Part 2." *Journal of the American Medical Association*, vol. 288, no. 15, 2002, pp. 1909-1914.

Coleman, K., B. Austin, C. Brach, E. Wagner. "Evidence on the Chronic Care Model in the New Millennium." *Health Affairs*, vol. 28, no. 1, 2009, pp. 75-85.

Table 2C: Hospital Admissions for Any Cause: Beneficiaries Attributed to Your TIN for the Cost Measures (except Medicare Spending Per Beneficiary) and Claims-Based Quality Outcome Measures:

Table 2C provides details about hospitalizations over the performance period (if applicable) for beneficiaries attributed to your TIN for five per capita cost and three claims-based quality outcome measures. The beneficiaries in Table 2C will be a subset of all beneficiaries attributed to your TIN (as shown in Table 2A). Data are broken down by beneficiary and the admitting hospital, along with the principal diagnosis associated with the admission, the date of discharge, and the subsequent care environment. Table 2C also shows whether the hospital admission was the result of an emergency department evaluation, an ambulatory care-sensitive condition, or a readmission within 30 days of prior admission.

Note: This table does **not** display hospitalizations for attributed beneficiaries with a primary diagnosis of alcohol and substance abuse. However, the costs associated with such hospitalizations are still included in your TIN's per capita cost measure calculations.

You can use these data as a starting point, along with your medical records, to examine systematic ways to improve or maintain the delivery of high-quality and efficient care to beneficiaries attributed to your TIN. You can also link the data in Table 2C with data in Table 3B using the "Index" column to understand better the overall scope of services that a beneficiary admitted to the hospital has been receiving. Furthermore, you can study this combination to see how to better align and coordinate these services, how information may have been shared across the continuum of care, and how beneficiaries may become better engaged in their care—all of which might have worked to prevent the hospitalization.

1. How can the data in the "Admitting Hospital" and "Principal Diagnosis" columns help us care for beneficiaries attributed to us?

These data allow you to determine which hospitals are providing inpatient services to your TIN's Medicare beneficiaries, as well as the principal diagnoses for these admitted beneficiaries. By assessing both the frequency of hospitalization to different facilities and the types of conditions accounting for these admissions, you can identify the hospitals where you might focus specific efforts at management of care transitions, or the types of hospitalizations for chronic illnesses that you might aim to avoid through targeted care management efforts. You may also use this information to verify the data presented in Table 2B.

Sorting data in the "Principal Diagnosis" column allows you to more closely examine the conditions that are drivers of your TIN's beneficiaries' hospitalizations. This exercise may be particularly beneficial for primary care providers and groups of eligible professionals that treat a broad range of diseases. If certain diagnoses seem to appear frequently, you may find it useful to pay additional attention to how you manage that set of beneficiaries.

2. How can we identify preventable hospital admissions using the data provided in this table?

Table 2C has three key categories related to admissions: ACSC admissions, admissions via the emergency department, and 30-day readmissions. Each category represents an opportunity for you to identify and take another look at beneficiaries with potentially preventable admissions.

- *ACSC admissions*: Effective coordinated care has been shown to prevent hospitalizations and other resource use for beneficiaries with conditions in this category, including asthma, COPD, heart failure, diabetes mellitus, and hypertension. Therefore, this is an important group of beneficiaries to focus on. Use the column "ACSC Admission" to identify beneficiaries attributed to your TIN who were admitted for one of the diagnoses in this category. For this group of beneficiaries, improved access to care, care coordination, appropriate preventive services, beneficiary self-management support, and proactive monitoring of beneficiary conditions may lead to fewer instances of worsening illness, less emergency care, and fewer hospital admissions.

- *Admissions via the emergency department (ED)*: Sort the column "Admission Via the ED" to identify beneficiaries who were admitted to the hospital as the result of an ED visit. This can help you identify beneficiaries who had more urgent health concerns leading to inpatient hospital care. You can also view the total payment-standardized Medicare FFS costs that came from emergency department use not included in a hospital admission from the "Total Costs by Category of Services Furnished by All Providers" column in Table 3B. Beneficiaries who disproportionately use the emergency department for their medical care may benefit from enhanced primary care, including improved access for urgent concerns and better care coordination. If many of your TIN's attributed beneficiaries are admitted via the ED, these beneficiaries may be at higher risk for acute deterioration and hospitalization. However, it is also possible your beneficiaries are not accessing needed advice or care until it is too late to avert an otherwise avoidable hospitalization. You can get an idea of the relative severity of illness of your attributed beneficiaries by linking this table to Table 2A using the HIC column and viewing their HCC Percentile Ranking (higher percentile rankings indicate higher risk).

- *Readmissions*: Filter the data in the column titled "Followed by Unplanned All-Cause Readmission within 30 Days of Discharge" to focus on beneficiaries readmitted to the hospital for any reason within 30 days of discharge (excluding those whose readmissions were planned). You can use these data to study how your TIN's care pathways and collaboration with the hospital might be improved to identify and follow up with beneficiaries discharged from the hospital, to reduce readmissions.

Table 3A: Per Capita Costs, by Categories of Service, for the Per Capita Costs for All Attributed Beneficiaries Measures

Table 3A displays your TIN's attributed beneficiaries' costs for various categories of services performed by providers both within and outside your TIN. The categories of service are the same as in Table 3B but include additional subcategories. The table shows for each category (1) the percentage of your TIN's attributed beneficiaries using services in that category; (2) the percentage of your TIN's payment-standardized, risk-adjusted and specialty-adjusted total per capita costs attributable to the category; and (3) the difference between your TIN's per capita costs and the per capita costs of your TIN's peers for that category. (Your TIN's peers are all TINs with at least 20 eligible cases for the Per Capita Costs for All Attributed Beneficiaries measure.) Review this exhibit to identify patterns of care that are contributing to your attributed beneficiaries' total per capita costs.

1. **How should we use the "Number of Attributed Beneficiaries Using any Service in this Category" and the "Percentage of Beneficiaries Using any Service in this Category" columns?**

   The data presented in these columns may be used to identify patterns of utilization among your TIN's attributed beneficiaries to help you better understand the care that your TIN's beneficiaries receive. If a large share of your TIN's beneficiaries received evaluation and management services from other TINs, for example, you may find increased care coordination helpful. Alternatively, if your TIN performed major procedures or ambulatory/minor procedures for a large percentage of your TIN's attributed beneficiaries over the performance period, consider reviewing clinical guidelines concerning when particular procedures are indicated.

2. **How should we interpret and use the data in the "Per Capita Costs for Attributed Beneficiaries" column?**

   Use the data presented in this column to identify the types of services that contribute most to the total costs of your TIN's attributed beneficiaries and to determine opportunities to improve the efficiency of the care your TIN provides. For example, if per capita costs for emergency services are high, consider investing in care management resources, such as enhanced access for urgent concerns or care coordination. Or, if per capita skilled nursing facility expenses for your TIN's attributed beneficiaries are high, perhaps consider options for arranging needed support at home or other venues (for example, assisted living). Table 3B may be useful in identifying the particular beneficiaries who used a service in each given category.

   However, please note that CMS computes the per capita costs for each category of service relative to all beneficiaries attributed to your TIN, not simply those who received services in that category. Therefore, if your per capita costs for the category were lower than other TINs, this may be either because a smaller proportion of your TIN's attributed beneficiaries received services in that category, or because your TIN's attributed beneficiaries who did receive services in that category had lower levels of utilization, or both.

3. **How should we use the benchmark cost columns ("Benchmark (National Mean) Per Capita Costs" and "How Much Higher or (Lower) Your TIN's Costs Were than TINs in Peer Group") to improve care for the beneficiaries we manage?**

   The benchmark cost columns display for each category of service the average amount contributed by that category to your peers' payment-standardized, risk-adjusted and specialty-adjusted total per capita costs. (Your peers are all TINs with at least 20 eligible cases for the Per Capita Costs for All Attributed Beneficiaries measure.) Use the data in the "How Much Higher or (Lower) Your TIN's Costs Were than TINs in Peer Group" to discern the categories for which your TIN's category-specific per capita costs exceed those of your TIN's peers. As noted above, differences may be driven by either the number of your TIN's attributed beneficiaries receiving services in these categories, the general intensity of services received, or both. These categories may be ideal starting points for efforts at improving care efficiency.

Table 3B: Costs of Services Provided by Your TIN and Other TINs: Beneficiaries Attributed to Your TIN for the Cost Measures (except Medicare Spending Per Beneficiary) and Claims-Based Quality Outcome Measures

Table 3B provides information about the costs of the care provided to the Medicare beneficiaries attributed to your TIN (as shown in Table 2A). It provides both the beneficiary's total payment-standardized Medicare FFS costs and the distribution of these standardized costs across categories of service. You can use this information (as well as the information in Table 2C about the hospitals admitting your TIN's attributed beneficiaries) to learn general information about the types of services used by specific beneficiaries. By reviewing your TIN's own records and the records of hospitalizations, you can determine, for specific beneficiaries, the services provided by eligible professionals who billed under your TIN, and the categories of services billed by eligible professionals outside your TIN. If you discover unexpected patterns of service use for beneficiaries attributed to your TIN, you may want to ask other eligible professionals for additional medical records to aid efforts in coordinating care.

1. How should we use the "Included in Per Capita Costs for All Attributed Beneficiaries Measure" column?

To better understand your performance on the Per Capita Costs for All Attributed Beneficiaries measure, sort by this column to identify those beneficiaries who represented an eligible case for the measure. Beneficiaries excluded from this measure did not meet the criteria to be considered an eligible case. (More information is included in the document entitled, "2016 Measure Information about the Per Capita Costs for All Attributed Beneficiaries Measure, Calculated for the 2018 Value-Based Payment Modifier Program," available at the following URL: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2016-TPCC-MIF.pdf.

2. How can we interpret and use the data in the "Total Payment-Standardized Medicare FFS Costs" column?

This column displays the total standardized Medicare FFS costs associated with the care of each beneficiary over the performance period. Unlike the costs included in the total per capita cost measures in the QRURs and the 2018 Value Modifier, the beneficiary-level costs in this column are neither risk adjusted nor specialty adjusted because risk and specialty adjustment are applied at the TIN level. Risk adjustment accounts for differences among beneficiaries (such as age or severity of illness) that could be expected to make their costs higher or lower than average, regardless of the quality and efficiency of their care. Payment standardization removes differences in payments due to geographic location, incentive payments, and other add-on payments that support specific Medicare program goals. It allows for a more equitable comparison of Medicare payments across the nation.

Sort the column in descending order to determine the beneficiaries who are responsible for the highest costs. The data in the "Total Costs by Category of Services Furnished by All Providers" columns can help you better understand the sources of these costs and determine if any of the high-cost beneficiaries are strong candidates for enhanced care coordination or follow-up. Beneficiaries with high payment-standardized Medicare FFS costs and for whom emergency services represent a large share of these costs may benefit most from care coordination services.

3. How can we use the data in the "Total Costs by Category of Services Furnished by All Providers" columns to improve care for the beneficiaries we manage?

This section displays the distribution of total payment standardized Medicare FFS costs for your TIN's Medicare beneficiaries for the performance period. Use these columns to identify patterns in service use among beneficiaries attributed to your TIN. Some patterns of use may present opportunities for you to improve care coordination. For example, if you contributed relatively low primary care services costs for a beneficiary with substantial costs devoted to procedures, ancillary services, or hospital services, there may be opportunities for you to further engage this beneficiary in care management and coordination. Similarly, beneficiaries who have relatively high costs for emergency services may benefit from outreach to improve their use of primary care for urgent concerns, as well as additional efforts at care coordination. Beneficiaries who had substantial costs in post-acute care may benefit from closer monitoring. You can sort data in descending order in each column to identify high costs for specific service categories utilized by your TIN's beneficiaries.

Tables 4A - 4D: Per Capita Costs, by Categories of Service, for Beneficiaries with Specific Conditions

Tables 4A-4D mirror Table 3A, providing information on the various types of services performed by providers both within and outside your TIN for the beneficiaries included in the Per Capita Costs for Beneficiaries with Specific Conditions measures. For these subgroups of attributed beneficiaries, each table shows for each category of service (1) the percentage of attributed beneficiaries using services in that category; (2) the percentage of your TIN's payment-standardized, risk-adjusted, and specialty-adjusted total per capita costs attributable to the category; and (3) the difference between your TIN's per capita costs and the per capita costs of your peers for that category. (Your peers are defined for each cost category as all TINs with at least 20 eligible cases for the given measure.) Use these tables in the same manner as described above for Table 3A to identify opportunities to improve the quality and reduce the costs of the care provided to beneficiaries with diabetes (Table 4A), COPD (Table 4B), CAD (Table 4C), and heart failure (Table 4D). In particular, consider using these tables to learn more about the care that is provided outside of your TIN and to determine the categories of services that contributed most to your TIN's per capita costs for each measure.

Table 5A: Admitting Hospitals: Episodes of Care Attributed to Your TIN for the Medicare Spending per Beneficiary (MSPB) Measure

Table 5A identifies the hospitals that were associated with at least 5 percent of the episodes of care attributed to your TIN for the MSPB measure over the performance period for this report. Like Table 2B, this exhibit provides the hospital name, CCN, and location of the hospital. Information about the efficiency and quality of care at these hospitals can be found on Hospital Compare (www.medicare.gov/hospitalcompare). The data presented in the last column enables you to identify the hospitals that were most frequently associated with your attributed MSPB episodes of care. This information may help you in prioritizing care coordination efforts.

Table 5B: Beneficiaries and Episodes Attributed to Your TIN for the Medicare Spending per Beneficiary (MSPB) Measure

Table 5B displays information about the beneficiaries and episodes attributed to your TIN for the MSPB measure in both a summary table and an episode-level table.

The Table 5B Summary provides information on the total hospitalization episodes attributed to your TIN for the MSPB measure, as well as the number of unique beneficiaries associated with these attributed episodes. An MSPB episode includes all Medicare Part A and Medicare Part B claims with a start date falling between 3 days prior to an Inpatient Prospective Payment System (IPPS) hospital admission (also known as the "index admission" for the episode) through 30 days following hospital discharge. A hospitalization episode is attributed to a TIN if, during the hospitalization, the TIN provided more Medicare Part B-covered services, as measured by Medicare-allowed charges, than any other TIN. Please note that any single beneficiary may have multiple MSPB episodes attributed to your TIN, so the total number of episodes may be higher than the number of unique beneficiaries. These beneficiaries, in particular, may benefit from enhanced care management support.

Table 5B displays information on the beneficiaries attributed to your TIN for the MSPB measure. Data are presented at the beneficiary-episode level; if a beneficiary has more than one episode that was eligible for the MSPB measure, he or she will appear in the exhibit for each episode. The table is organized into four sections: beneficiary characteristics, the apparent lead eligible professional, characteristics of the hospital admission, and discharge disposition. For each episode, the total payment-standardized episode cost is also displayed. You may also link the data in Table 5B to Table 5D using the "Index" column to identify additional information about the payment-standardized episode costs by category of service. Unlike the costs included in the MSPB measure in the QRURs and the 2018 Value Modifier, the beneficiary-episode-level costs in this column are neither risk-adjusted nor specialty-adjusted because risk- and specialty-adjustment are applied at the TIN level.

Note: This table does **not** display hospitalizations for attributed episodes with a primary diagnosis of alcohol and substance abuse. However, the costs associated with such hospitalizations are still included in your TIN's MSPB measure calculations.

1. **How should we interpret the data in the "Apparent Lead Eligible Professional" sub-columns?**

For each hospitalization episode included in the MSPB measure, the eligible professional associated with the largest share of the episode's Medicare Part B costs is designated the apparent lead eligible professional.

2. **How should we interpret and use the data in the "Total Payment-Standardized Episode Cost" column?**

The data presented in the "Total Payment-Standardized Episode Cost" column displays the total of Part A and Part B billings from all TINs over the period starting three days before the episode's index admission through 30 days after discharge from the index admission. By sorting the data in this column in descending order, you will be able to identify the most costly hospitalization episodes. Reviewing the principal diagnoses associated with these high-cost

episodes may help you to identify the types of beneficiaries for whom efforts to reduce unnecessary hospitalizations may result in the greatest cost savings. Additionally, patterns you observe among the hospitals associated with the highest total payment-standardized episode costs may suggest opportunities to improve efficiency in the care of your TIN's beneficiaries. Approaches might include examining your TIN's care of beneficiaries with these conditions, as well as reviewing the relative costs of hospitals and post-acute care options in your region, and the quality of transitional care services offered by the hospitals to which your TIN's beneficiaries are regularly admitted.

Table 5C: Costs per Episode, by Categories of Service, for the Medicare Spending per Beneficiary (MSPB) Measure

Table 5C displays the per episode costs for various categories of services for the episodes of care attributed to your TIN for the MSPB measure. The categories of service are the same as in Table 5D but include additional subcategories. The table shows for each category (1) the percentage of your TIN's attributed episodes using services in that category; (2) the part of your TIN's payment-standardized, risk-adjusted, and specialty-adjusted total per episode costs attributable to the category; and (3) the difference between your TIN's per episode costs and the per episode costs of your peers for that category. (Your TIN's peers are all TINs with at least 125 eligible cases for the MSPB measure.) Review this table to identify those services and procedures that are contributing most to the cost per episode.

1. How should we use the "Number of Episodes with Costs in this Category" and the "Percentage of Episodes with Costs in this Category" columns?

The data presented in these columns may be used to improve the quality and efficiency of your care. If a large number of your TIN's attributed episodes is associated with inpatient readmissions, for example, enhancing your care coordination supports may improve your performance on this measure. Similarly, if a large percentage of your attributed episodes include costs for emergency room services, you may wish to encourage increased use of primary care services or to enhance care coordination for beneficiaries post-hospitalization to improve future performance.

2. How should we interpret and use the data in the "Costs per Attributed Episode" column?

Use the data presented in this column to better understand the data presented in QRUR Exhibit 7-AAB, to identify the types of services that contribute most to the total costs of your TIN's attributed episodes, and to determine opportunities to improve the efficiency of the care your TIN provides. Episode costs reflect care furnished by all providers, so you may also wish to use this column to better understand how care provided outside of your TIN, such as in skilled nursing facilities or by home health agencies, contributes to your beneficiaries' total episode costs. If per episode costs are high in a particular category, refer to Table 5D to identify the specific episodes associated with this type of service. Review these identified cases to determine if opportunities exist for improving efficiency.

3. **How should we use the benchmark cost columns ("Benchmark (National Mean) Costs per Episode" and "How Much Higher or (Lower) Your TIN's Costs Were than TINs in Peer Group") to improve care for the patients we manage?**

The benchmark cost columns display for each category of service the average amount contributed by that category to your peers' payment-standardized, risk-adjusted and specialty-adjusted total per episode costs for the MSPB measure. (Your peers are all TINs with at least 125 eligible cases for the MSPB measure.) Use the data in the "How Much Higher or (Lower) Your TIN's Costs Were than TINs in Peer Group" to discern the categories for which your TIN's category-specific per episode costs exceed those of your peers. These categories may be ideal starting points for efforts at improving care efficiency. For example, if your total per capita costs for Imaging Services or Laboratory, Pathology, and Other Tests exceed those of your peers, you may wish to review available records to identify possible patterns of duplicative scans or tests associated with your MSPB episodes.

Table 5D: Medicare Spending per Beneficiary (MSPB) Costs, by Episode and Service Category

Table 5D displays information on the costs per MSPB episode by category of service for beneficiaries attributed to your TIN for the MSPB measure. Like Table 5B, data are presented at the beneficiary-episode level; if a beneficiary has more than one episode that was eligible for the MSPB measure, he or she will appear in the exhibit for each episode. These service categories align with the categories in Table 5C, though it includes fewer subcategories. You may also link Table 5D to Table 5B using the "Index" column to get additional information about the beneficiaries and episodes attributed to your TIN.

Note: This table does **not** display hospitalizations for attributed episodes with a primary diagnosis of alcohol and substance abuse. However, the costs associated with such hospitalizations are still included in your TIN's MSPB measure calculations.

1. **How should we use the "Medicare Spending per Beneficiary, by Category of Service Furnished by All Providers" columns?**

The data presented in these columns help you understand the distribution of costs associated with your TIN's beneficiaries' hospitalizations. High costs in some of the cost categories presented in Table 5D may suggest ways to improve care management for your TIN's attributed beneficiaries and, consequently, your TIN's performance on the MSPB measure. For instance, high spending for costs associated with emergency department visits or hospital readmissions might be minimized through care coordination strategies to reduce unnecessary emergency department visits or prevent avoidable readmissions post-discharge.

Table 6A: Hospital Admissions for Any Cause: Beneficiaries Attributed to Your TIN for the Cost Measures (except Medicare Spending Per Beneficiary) - Shared Savings Program ACO TINs Only

Table 6A is analogous to Table 2C, but only applies to TINs that participated in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS. Like Table 2C, this table provides details about hospitalizations over the performance period (if applicable) for beneficiaries attributed to your TIN for the five total per capita cost and three claims-based

quality outcome measures. The beneficiaries in Table 6A will be a subset of all beneficiaries attributed to your TIN (as shown in Table 2A). In particular, the table only includes beneficiaries who were both attributed to your TIN and assigned to your ACO, who were hospitalized during the performance period, and who did not have a primary diagnosis of alcohol or substance abuse. Data are broken down by beneficiary and the admitting hospital, along with the principal diagnosis associated with the admission, the date of discharge, and the subsequent care environment. Unlike Table 2C, Table 6A does not show whether the hospital admission was the result of an emergency department evaluation, an ambulatory care-sensitive condition, or a readmission within 30 days of prior admission; these data are not available for Shared Savings Program ACOs.

Note: This table does **not** display hospitalizations for attributed beneficiaries with a primary diagnosis of alcohol and substance abuse. However, the costs associated with such hospitalizations are still included in your TIN's per capita cost measure calculations.

You can use these data as a starting point, along with your medical records, to examine systematic ways to improve or maintain the delivery of high-quality and efficient care to beneficiaries attributed to your TIN. You can also link the data in Table 6A with data in Table 6B using the "Index" column to understand better the overall scope of services that a beneficiary admitted to the hospital has been receiving. Furthermore, you can study this combination to see how to better align and coordinate these services, how information may have been shared across the continuum of care, and how beneficiaries may become better engaged in their care—all of which might have worked to prevent the hospitalization.

1. **How can the data in the "Admitting Hospital" and "Principal Diagnosis" columns help us care for beneficiaries attributed to us?**

These data allow you to determine which hospitals are providing inpatient services to your TIN's Medicare beneficiaries, as well as the principal diagnoses for these admitted beneficiaries. By assessing both the frequency of hospitalization to different facilities and the types of conditions accounting for these admissions, you can identify the hospitals on which you might focus specific efforts at management of care transitions, or the types of hospitalizations for chronic illnesses that you might aim to avoid through targeted care management efforts. You may also use this information to verify the data presented in Table 6B.

Sorting data in the "Principal Diagnosis" column allows you to more closely examine the conditions that are drivers of your TIN's beneficiaries' hospitalizations. This exercise may be particularly beneficial for PCPs and groups of eligible professionals that treat a broad range of diseases. If certain diagnoses seem to appear frequently, you may find it useful to pay additional attention to how you manage that set of beneficiaries.

Table 6B: Hospital Admissions for Any Cause: Beneficiaries Assigned to Your ACO for the All-Cause Hospital Readmission Measure and Attributed to Your TIN for the Cost Measures - Shared Savings Program ACO TINs Only

For TINs that participated in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS, Table 6B provides details about hospitalizations over the performance period (if applicable) for beneficiaries who are both attributed to your ACO and who are either attributed to your TIN based on the two-step attribution rule or are associated with

MSPB episodes attributed to your TIN. Like Table 6A, data are broken down by beneficiary and the admitting hospital, along with the principal diagnosis associated with the admission, the date of discharge, and the subsequent care environment. The exhibit also shows whether the hospital admission was a readmission within 30 days of prior admission.

Note: This table does **not** include hospitalizations with a primary diagnosis of alcohol and substance abuse.

You can use these data to better understand the hospitalizations experienced by beneficiaries attributed to your ACO and treated by your TIN, as well as to help you to identify patterns in principal diagnoses or discharge dispositions that are associated with frequent readmissions.

1. How do the hospitalizations in Table 6B differ from the hospitalizations in Table 6A?

Table 6B displays the hospitalizations over the performance period for the beneficiaries both attributed to your TIN's ACO for the All-Cause Hospital Readmission measure and attributed to your TIN based on the two-step attribution rule or associated with MSPB episodes attributed to your TIN. Table 6A provides details about your TIN's attributed beneficiaries' hospitalizations during the performance period for the beneficiaries attributed to your TIN for the per capita cost measures included in the Annual QRUR.

2. How can we use data in the "Principal Diagnosis" column?

Sorting data in the "Principal Diagnosis" column allows you to more closely examine the conditions that are drivers of the hospitalizations experienced by beneficiaries attributed to your ACO. If certain diagnoses seem to appear frequently, your ACO may find it useful to introduce quality improvement efforts focused on managing the care of patients with those conditions.

3. How can we identify hospital readmissions using the data provided in this table?

Filter the data in the column titled "Followed by Unplanned All-Cause Readmission within 30 Days of Discharge" to focus on patients readmitted, for unplanned causes, to the hospital within 30 days of discharge. You can use these data to study how your ACO's care pathways might be improved to identify and follow up with patients discharged from the hospital and support your efforts to reduce readmissions.

4. How can we use the information on hospital discharge status to improve the care that we provide?

Use the hospital discharge information in Table 6B similarly to the corresponding data in Table 6A. Sort data in the "Discharge Status" column to identify beneficiaries discharged to home, home care, or post-acute care, in order to gain a better understanding of the environments into which your ACO's attributed beneficiaries are frequently discharged. With this information, you may be better able to target resources to improve outcomes for future beneficiaries discharged to these settings.

Table 7: Individual Eligible Professional Performance on the 2016 PQRS Measures

Table 7 provides information about the performance of eligible professionals in the TIN who participated in PQRS as individuals. This allows a TIN to determine (1) whether 50 percent of more of individual eligible professionals under the TIN avoided the PQRS payment adjustment, and (2) for TINs that were evaluated on the basis of individual eligible professional PQRS data, measure-level performance rates for the individual eligible professionals reporting PQRS or non-PQRS QCDR measures.

The Table 7 Summary details whether 50 percent of eligible professionals in your TIN avoided the PQRS payment adjustment as individuals. This is the criterion for avoiding the automatic downward payment adjustment under the 2018 Value Modifier for TINs not meeting the criteria to avoid the PQRS payment adjustment via GPRO reporting. Use this information to identify the numerator and denominator used in this calculation, which determines whether your TIN avoided an automatic downward payment adjustment under the Value Modifier. This table is not shown for TINs who avoided the automatic downward payment adjustment based on PQRS data submitted under GPRO reporting.

Table 7 also displays NPI-level performance on PQRS and Qualified Clinical Data Registry (QCDR) measures for each eligible professional who participated in PQRS as an individual under your TIN in 2016. This information includes the PQRS or QCDR measures reported, each measure's Value Modifier quality domain, the reporting mechanism(s) used by each eligible professional, and the number of eligible cases for each measure. It also displays whether each eligible professional avoided the 2018 PQRS payment adjustment, according to PQRS program rules. This table is only shown for TINs that were evaluated on the basis of individual eligible professional PQRS data.

1. **How should we use information regarding which of our TIN's eligible professionals avoided the 2018 PQRS payment adjustment?**

If your TIN either did not register for GPRO or did not avoid the PQRS payment adjustment via GPRO, but 50 percent or more of the eligible professionals under your TIN avoided the PQRS payment adjustment as individuals, the aggregate PQRS performance of the individual eligible professionals under your TIN determines the TIN-level performance shown in QRUR Exhibit 4. Since only the data submitted by eligible professionals who avoided the PQRS payment adjustment is used to compute the TIN-level performance displayed in Exhibit 4, use the information on which eligible professionals avoided the PQRS payment adjustment to understand which eligible professionals' PQRS submissions factored into your TIN-level quality performance results. Note that this table does not apply to TINs that avoided the 2018 PQRS payment adjustment by reporting quality data to the PQRS through GPRO. It also does not apply to TINs that participated in a Shared Savings Program ACO that successfully reported ACO quality data to the PQRS in 2016.

2. **How should we use the "Performance Rate" and "Benchmark (National Mean)" columns?**

You may use these columns to identify areas for improvement for care settings and medical teams that support individual eligible professionals billing under your TIN. For example, for each eligible professional identified in Table 7, compare the "Performance Rate" column to the

"Benchmark (National Mean)" column to identify measures for which the given eligible professional least frequently performs the recommended quality action, relative to all TINs reporting the measure with at least 20 eligible cases. Measures with low performance rates could suggest areas for your TIN to target quality improvement efforts. An eligible professional's performance rate that is much lower than the associated benchmark may be an important indicator of an opportunity for improvement in the care for the beneficiaries captured in the measure. (Note that for a small number of measures, designated by one asterisk in Table 7, a lower performance rate indicates better quality; for these measures, select areas for improvement by identifying the measures with the highest performance rate or for which the performance rate is much higher than the benchmark.)

FEEDBACK FOR CMS

You can contact CMS at the Physician Value Help Desk at 1-888-734-6433 (select option 3) or by email at pvhelpdesk@cms.hhs.gov to share your thoughts about the content and format of these reports. We value your input and feedback to help make these reports meaningful.

1. How can we share other ways we have used these data?

We are interested in learning how you and your colleagues have used the report data in ways not mentioned in this document. Share your tips by contacting the Physician Value Help Desk.