Quality Payment
PROGRAM

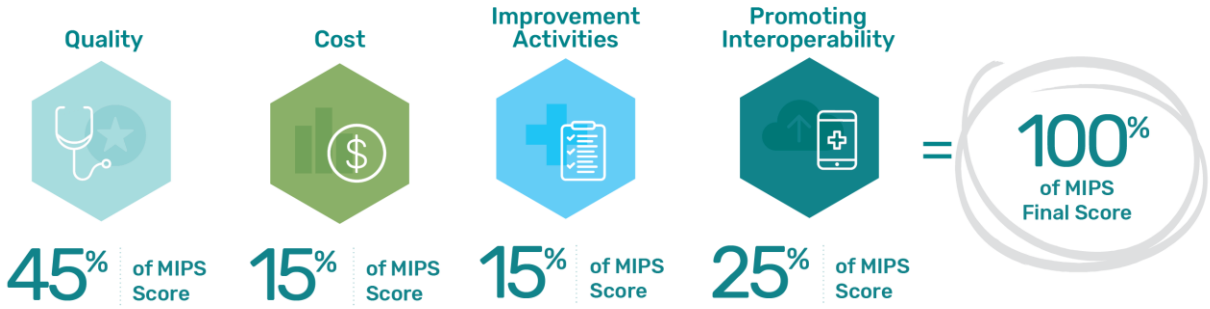
2019 Merit-based Incentive Payment System (MIPS) Cost Performance Category Fact Sheet

What is the Quality Payment Program?

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) ended the Sustainable Growth Rate (SGR) formula, which would have resulted in a significant cut to Medicare payment rates for clinicians. The MACRA advances a forward-looking, coordinated framework for clinicians to successfully participate in the Quality Payment Program (QPP), which rewards value in one of two ways:

Calendar Year (CY) 2019 is the third year (or "Year 3") of the MIPS. The data reported and activities conducted in the 2019 MIPS Performance Period will result in a 2019 MIPS Final Score. 2019 MIPS Final Scores will impact Medicare payments to clinicians in 2021, referred to as the 2021 MIPS payment year.

Under MIPS, there are four performance categories that could affect your future Medicare payments. Each performance category is scored by itself and has a specific weight that is part of the MIPS Final Score. The payment adjustment determined for each MIPS eligible clinician is based on the Final Score. These are the performance category weights for the 2019 MIPS Performance Period.



This fact sheet focuses on the MIPS Cost performance category, which incorporates components of the Value Modifier (VM) program; one of the legacy programs to sunset under MACRA. Please note: MIPS eligible clinicians participating in MIPS APMs who are subject to the APM scoring standard are not assessed on the cost performance category, as noted later.

This fact sheet will:

- Identify the two cost measures that were used to evaluate performance in MIPS Years 1-2 that will continue to be used to evaluate performance in 2019; which are the Total Per Capita Costs for All Attributed Beneficiaries measure (TPCC) and the Medicare Spending Per Beneficiary measure (MSPB)
- Identify the eight new episode-based cost measures that will be used to evaluate performance in 2019 in addition to the TPCC and MSPB measures
- Describe the different groups of episode-based measures and review general concepts and common characteristics that apply to all MIPS episode-based cost measures including:
    - Episode triggers & windows
    - Item & service assignment
    - Exclusions
    - Attribution methodology
    - Risk adjustment variables
- Describe the weights assigned to the cost performance category in previous, current and future MIPS performance periods
- Explain how cost performance is evaluated for MIPS Alternative Payment Models (APMs)
- Review the use of price standardization in evaluating MIPS cost measure performance
- For the TPCC, MSPB and episode-based measures, provide information on:
    - Attribution logic
    - Case minimum
    - Risk adjustment methodology
    - Measure calculation
    - Other adjustment methods applied to the measure
- Describe how the Cost performance category is scored, including the relationship between establishing national cost measure benchmarks and measuring performance
- Review the application of facility-based measurement in the 2019 MIPS performance period
- Describe cost measure field-testing efforts
- Describe provision of Cost performance category feedback

2019 Performance Period Cost Performance Category Measures: TPCC, MSPB, and Eight Episode-Based Cost Measures

Measuring cost is an integral part of measuring value. The measures in the Cost performance category provide MIPS eligible clinicians with the information they need to provide appropriate care to their patients and enhance health outcomes

Two Measures Used in the First Two MIPS Performance Periods

A total of 10 cost measures are used to evaluate performance in the Cost performance category in the 2019 MIPS Performance Period. Two of the ten measures were used to evaluate performance in the 2017 and 2018 MIPS performance periods. These two measures are:

1. The Total Per Capita Costs for All Attributed Beneficiaries measure, or "TPCC," and
2. The Medicare Spending Per Beneficiary measure, or "MSPB."

A TPCC measure was used in the Value Modifier (VM) program beginning in 2015; all groups received feedback illustrating how they performed on this measure in the annual Quality and Resource Use Reports (QRURs) distributed by CMS as part of the VM program. The MSPB measure was used in the VM Program beginning in the 2016 payment adjustment period, and feedback on this measure was provided in annual QRURs beginning in 2014.

Eight New Episode-Based Cost Measures to be Used in the 2019 MIPS Performance Period

Beginning with the 2019 MIPS performance period, eight episode-based measures will also be used to evaluate cost. The eight episode-based measures that are now included in the Cost performance category for the 2019 MIPS performance period are included in the table below.

Episode-Based Measures Finalized for the 2019 MIPS Performance Period

Measure Topic	Measure Type
Elective Outpatient Percutaneous Coronary Intervention (PCI)	Procedural
Knee Arthroplasty	Procedural
Revascularization for Lower Extremity Chronic Critical Limb Ischemia	Procedural
Routine Cataract Removal with Intraocular Lens (IOL) Implantation	Procedural
Screening/Surveillance Colonoscopy	Procedural
Intracranial Hemorrhage or Cerebral Infarction	Acute inpatient medical condition
Simple Pneumonia with Hospitalization	Acute inpatient medical condition
ST-Elevation Myocardial Infarction (STEMI) with Percutaneous Coronary Intervention (PCI)	Acute inpatient medical condition

CMS uses Medicare claims data to calculate cost measure performance which means clinicians **do not have to submit any additional data for this performance category.**

Overview of General Concepts Related to the New Episode-Based Cost Measures

Episode-based measures differ from the TPCC and MSPB measures because episode-based measure specifications only include items and services that are related to the episode of care for a clinical condition or procedure (as defined by procedure and diagnosis codes) as opposed to including all services that are provided to a patient over a given time (such as an entire calendar year or the time immediately before, during, and following an inpatient admission). Episode-based measures assess the cost of the care that is clinically related to their initial treatment of a patient and provided during an episode's time frame. Episode-based measures are calculated using Medicare Parts A & B fee-for-service (FFS) claims data.

Episode Groups

The episode-based measures are categorized into "episode groups." Episode groups:

- Represent a clinically-cohesive set of medical services rendered to treat a given medical condition, and
- Aggregate all items and services provided for a defined patient cohort to assess the total cost of care.

As noted in the table above, the episode groups between which the eight measures are categorized are the:

1. Procedural episode group (triggered by performance of a major procedure); and
2. Acute inpatient medical condition group (triggered by evaluation and management claims during hospitalizations with specific Diagnostic Related Groups or DRGs).

Each episode group consists of the following components:

- Episode triggers & windows
- Item and service assignment
- Exclusions
- Attribution methodology
- Risk adjustment variables.

An episode is defined as a specific instance of an episode group for a specific patient and clinician. For example, a clinician might be attributed 20 episodes (in other words, a clinician might be attributed 20 instances of an episode group) from the episode group for heart failure in a given year.

The attribution and risk adjustment methodologies applied to episode-based cost measures are described later in this fact sheet in the section entitled “Measure-Specific Methodology: Eight Episode-Based Cost Measures.”

MIPS Cost Performance Category Weights

The weight in the final score for the Cost performance category for the 2019 MIPS performance period is 15%. The Cost performance category didn’t count towards clinicians’ MIPS Final Scores in the 2017 performance period because it was weighted at 0%. Even though performance feedback on the MSPB & TPCC measures was provided for the 2017 MIPS performance period, the Cost performance category didn’t count towards clinicians’ MIPS Final Scores in the 2017 performance period. In the 2018 MIPS performance period, the weight of the Cost performance category increased to 10% of the MIPS final score. Due to statutory changes made in the Bipartisan Budget Act of 2018, the weight assigned to the Cost performance category must be between 10%-30% in the third, fourth and fifth years of MIPS. The Cost performance category weight is required to be 30% beginning with the 2022 MIPS performance period/2024 MIPS payment year.

The table below shows the weight assigned to the Cost performance category for MIPS Years 1-3.

Cost Performance Category Weights for MIPS Years 1-3

MIPS Year 1: CY 2017/Payment Year 2019	MIPS Year 2: CY 2018/Payment Year 2020	MIPS Years 3, CY 2019/Payment Year 2021
0% Cost performance category weight	10% Cost performance category weight	15% Cost performance category weight .

In all performance years, the Cost performance category is assigned a weight of 0% for MIPS eligible clinicians scored under the APM scoring standard as MIPS APM participants are not measured on cost because already being assessed on cost and utilization via the requirements for participation in the MIPS APM. In the 2019 MIPS performance period, the weighting for all MIPS APMs will be 50% for the Quality performance category, 0% for the Cost performance category, 30% for the Improvement Activities (IA) performance category and 20% for the Promoting Interoperability performance category.

Common Features Among the TPCC, MSPB, and Episode-Based Cost Measures

Certain features apply to all MIPS cost measures. Before describing methodological components that are unique to each cost measure, common aspects are addressed.

Payment Standardization

The payments included in the TPCC, MSPB and eight episode-based measures are payment-standardized.[1]

The allowed amounts[2] for Medicare services can vary across geographic areas due to several factors, such as:

- Regional differences in labor costs and practice expenses
- Differences in the relative price of inputs in local markets where a service is provided
- Extra payments from Medicare in medically under-served regions
- Policy-driven payment adjustments such as those for teaching hospitals.

Because of this, the Medicare allowed amount for the same medical service may be higher in Atlanta, Georgia, than in Lincoln, Nebraska, for example. Payment standardization adjusts the allowed amount for an item or service to facilitate cost comparisons and limit observed differences in costs to those that may result from health care delivery choices. Price standardization also removes any Medicare payment differences due to adjustments for geographic differences in wage levels or policy-driven payment adjustments, such as those for teaching hospitals.

For more information on payment standardization, please consult the document entitled CMS Price (Payment) Standardization- Detailed Methods.

Benchmarks

We will establish a single, national benchmark for each cost measure. These benchmarks are based on data from the performance period, not a historical baseline period[3]. As a result, we can't publish the actual numerical benchmarks for the cost measures before the start of each performance period. For example, the MSPB benchmark used to determine a MIPS eligible clinician's 2019 Cost performance category score will be based on Year 3 (2019) claims data. All MIPS eligible clinicians that meet or exceed the case minimum for a measure are included in the same benchmark. Case minimums for each cost measure are identified below.

[1] Payment standardization is sometimes referred to as price standardization. The terms are equivalent.
[2] Medicare fee-for-service allowed amounts include the amount of the Medicare Trust Fund payment plus any applicable beneficiary deductible and coinsurance amounts. In some cases, beneficiary deductibles and coinsurance amounts may be covered by third party payers other than Medicare.
[3] Certain legacy programs also used performance period benchmarks for scoring cost measures.

Attribution

Calculation of claims-based cost measures requires attribution of beneficiaries and their costs to clinicians. In the VM Program, cost measures were attributed to a TIN (associated with either a group practice or a solo practitioner). Under MIPS, we will attribute cost measures at the individual (TIN-NPI) level. Although cost measures will be attributed to individual clinicians, we will assess cost measure *performance* at either the individual clinician level or group level.

For groups participating in group reporting in other MIPS performance categories, their cost performance category scores will be determined by aggregating the scores of the individual clinicians within the TIN. However, the method used to attribute beneficiary costs to MIPS eligible clinicians at the TIN-NPI level differs for each measure.

Risk Adjustment

Risk adjustment accounts for patient characteristics that can influence spending and are outside of clinicians' control, such as clinical risk factors. For example, for the elective outpatient PCI episode-based measure, the risk adjustment model may account for a patient's history of heart failure. All measures included in the Cost performance category are adjusted for clinical risk. However, the specific methodology used to risk adjust each measure varies. Methodological detail can be found in each measure's specification documents, linked to below. Risk adjustment should not be confused with the complex patient bonus, which is applied at the final score level and adjusts again for patient clinical complexity as well as some elements of social complexity.

Measure-Specific Methodology: New Episode-Based Cost Measures

Detailed methodology documents, one for each of the eight episode-based cost measures finalized for the 2019 MIPs performance period, are available in this 2019 MIPS Episode-Based Cost Measures Methodology Document zip file. The zip file contains methodology documents for the following measures:

1. Routine Cataract Removal with Intraocular Lens (IOL) Implantation Measure
2. Intracranial Hemorrhage or Cerebral Infarction Measure
3. Knee Arthroplasty Measure
4. Elective Outpatient Percutaneous Coronary Intervention (PCI) Measure
5. Simple Pneumonia with Hospitalization Measure
6. Lower Extremity Chronic Critical Limb Ischemia Measure
7. Screening/Surveillance Colonoscopy Measure
8. ST-Elevation Myocardial Infarction (STEMI) with Percutaneous Coronary Intervention (PCI) Measure

The methodology documents provide a high-level overview of the measure development process, including discussion of the clinical input obtained and details about each logic step involved in constructing the episode groups and calculating the cost measures.

Each episode-based measure has a corresponding measure code list file that contains medical codes used in the measure-specific methodology and used in the specifications, including episode triggers, exclusions, episode sub-groups, assigned items and services, and risk adjustors.

Attribution Logic for Acute Inpatient Medical Condition Episode Group Measures

The three measures included in the acute inpatient medical condition episode group are:

1. The Intracranial Hemorrhage or Cerebral Infarction Measure,
2. The Simple Pneumonia with Hospitalization Measure, and
3. The ST-Elevation Myocardial Infarction (STEMI) with Percutaneous Coronary Intervention (PCI) Measure.

For episodes in the acute inpatient medical condition episode group, episodes are attributed to each MIPS eligible clinician who bills inpatient evaluation and management (E&M) claim lines during a trigger inpatient hospitalization under a TIN that renders at least 30% of the inpatient E&M claim lines in that hospitalization. The 30% threshold for the TIN ensures that the clinician group is collectively measured across all of its clinician who are likely responsible for the oversight of care for the patient during the trigger hospitalization.

A trigger hospitalization is defined as a hospitalization with a particular Medicare Severity Diagnosis Related Group (MS-DRG) identifying the episode group. Relevant MS-DRGs and trigger rules are identified in the measure methodology documents.

The measure score for an individual clinician (TIN-NPI) is based on all of the episodes attributed to that individual. The measure score for a group (TIN) is based on all of the episodes attributed to a clinician in a given group (in other words, to all TIN-NPIs in a given TIN). If a single episode is attributed to multiple TIN-NPIs in a single TIN, the episode is only counted ounce in the TIN's measure score.

Attribution Logic for Procedural Episode Group Measures

The five measures included in the procedural episode group are:

1. The Elective Outpatient Percutaneous Coronary Intervention (PCI) Measure,
2. The Knee Arthroplasty measure,
3. The Revascularization for Lower Extremity Chronic Critical Limb Ischemia measure,
4. The Routine Cataract Removal with Intraocular Lens Implantation measure, and
5. The Screening/Surveillance Colonoscopy measure.

Procedural episodes are attributed to each MIPS eligible clinician who renders a triggering service as identified by Healthcare Common Procedure Coding System (HCPCS)/Current Procedural Terminology (CPT) procedure codes. The clinician rendering the service(s) (or the organization that clinician is billing under for the service(s) provided) is identified by the

information provided in the "provider tax number" and "performing physician" fields on the Part B Physician/Supplier claim.

Assignment of Items & Services to Episodes

Services and their associated costs are assigned to an episode if they are furnished within a patient's episode window and are based on a clinical determination of whether a service is under the influence of the attributed clinician. Assigned services might include diagnostic services, treatment services, and ancillary items and services directly related to treatment (such as anesthesia for a surgical procedure), as well as services following the initial treatment period that may be rendered to patients as follow-up care. Services furnished as a consequence of care, such as complications, readmissions, unplanned care, and emergency department visits may also be included.

These clinical determinations of service assignment, referred to a service assignment rules, are made using common criteria and methods across episode groups. When a given service is clinically related to only one overlapping episode, is it assigned only to that one. When a service is clinically related to two overlapping episodes, it is assigned to both to ensure joint accountability.

The episode group does not include clinically unrelated services, such as care for a chronic condition that occurs in the episode window for a procedure or in the episode window for an acute inpatient medical condition but is not related to the clinical management of the patient relative to the procedure or the condition.

Overlapping Episodes

CMS does not exclude episodes if a patient already qualified for another episode, since allowing for overlapping episodes incentivizes communication and are coordination as a patient progresses through the care continuum. For example, if a patient is re-hospitalized for pneumonia after an initial episode, this would trigger two separate episodes of care for pneumonia.

Minimum Case Volume for Episode-Based Cost Measures

The minimum case volume for procedural episode-based measures is 10, meaning 10 episodes must be attributed to a MIPS eligible clinician or group for the measure to be scored.[4] The minimum case volume for acute inpatient medical condition episode-based measures is 20,

[4] For groups, a total of 10 procedural episode-based episodes must be attributed across all clinicians (including MIPS eligible clinicians AND eligible clinicians) who have re-assigned their billing rights to the group's TIN.

meaning 20 episodes must be attributed to a MIPS eligible clinician or group in order for the measure to be scored.[5]

Risk Adjustment Methodology for Episode-Based Measures

The risk adjustment methods used for the eight episode-based measures across groups adjusts for differences in clinical complexity at the time each episode begins and includes risk adjustors from the CMS- Hierarchical Condition Category (HCC) model and additional measure-specific risk adjustors. Risk adjustors are identified using beneficiaries' Medicare claims history during the period prior to the start of the episode. Claims from the triggering hospitalization or on the triggering Part B Physician/Supplier claim are typically not included. The risk adjustment method used for each episode-based measure is enhanced/customized by the use of risk factors specifically adapted for each episode group.

Measure-Specific Methodology: MSPB

MSPB Measure Overview

The MSPB measure assesses total Medicare Parts A & B costs incurred by a single beneficiary immediately prior to, during, and 30 days following a qualifying inpatient hospital stay and compares these observed costs to expected costs. Expected costs of an MSPB episode are based on the clinical condition or procedure that triggers the episode along with other factors that may influence cost but are not directly related to patient care.

More specifically, an MSPB episode includes all Medicare Parts A & B claims with start dates within the episode window. The episode window is defined as the period of time beginning three days prior to a beneficiary's hospital index admission[6] through 30 days after the beneficiary is discharged.

[5] For groups, a total of 20 acute inpatient medical condition episode-based measures must be attributed across all clinicians (including MIPS eligible clinicians AND eligible clinicians) who have re-assigned their billing rights to the group's TIN.

[6] An index admission is the admission with a principal diagnosis of a specified condition that meets the inclusion and exclusion criteria for the measure.

All Medicare Parts A & B claims for items and services provided to the beneficiary during the episode window are included in an MSPB episode, including the following claim types:

- Inpatient hospital
- Outpatient
- Skilled nursing facility
- Home health
- Hospice
- Durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS)
- Non-institutional physician/supplier claims (Medicare Part B Carrier claims)

MSPB Attribution Logic

Each beneficiary MSPB episode is attributed to a single TIN-NPI. The episode is attributed to the MIPS eligible clinician who billed the plurality[7] of Medicare Part B claims, measured by allowed charges, during the period between the index admission date and the discharge date. To determine who is responsible for the plurality of Part B physician/supplier services, the following Part B services billed by MIPS eligible clinicians are considered:

- Part B services provided on the admission date and in a hospital setting with place of service (POS) restricted to hospital inpatient (POS code 21), outpatient8, or emergency room (POS code 23).
- Part B services provided during the index hospital stay, regardless of POS
- Part B services provided on the discharge date with a POS restricted to inpatient hospital

Each beneficiary MSPB episode is attributed to a single clinician (TIN-NPI). If two TIN-NPIs tie for the plurality of services provided to a beneficiary, the episode is attributed to the TIN-NPI with the most Part B services bill lines during an episode's index hospitalization. If more than one TIN-NPI has the same count of service bill lines, the episode is randomly attributed to one TIN-NPI.

Beneficiaries are excluded from the measure (and their hospital stay costs are not attributed to a clinician) for any one of the following reasons:

- The beneficiary was not continuously enrolled in both Medicare Parts A & B during the following time frame: 93 days prior to the index admission through 30 days after discharge. This time frame includes an additional 90-day period (referred to as the "90-day look-back period") because this period is used to identify a beneficiary's comorbidities for use in risk-adjustment
- The beneficiary died during the episode
- The beneficiary was enrolled in Medicare Advantage (MA) or Medicare was the beneficiary's secondary payer at any time during the episode window or the 90-day look-back period. If Medicaid was the beneficiary's primary payer during an episode because of exhaustion of Part A benefits, these episodes are not excluded and are attributed to a TIN-NPI

[7] In this context, plurality refers to the largest amount of allowed charges.
[8] On-campus outpatient hospital (POS code 22) , Off campus-outpatient hospital (POS code 19)

- The beneficiary's index admission did not occur in a "subsection (d) hospital[9] " paid under the Inpatient Prospective Payment System (IPPS) or an acute hospital in Maryland
- The beneficiary was discharged for the index admission in the last 30 days of the performance period
- The beneficiary's index admission for the episode was involved in an acute-to-acute hospital transfer[10]
- A beneficiary's index admission occurred within the 30-day post discharge period of another MSPB episode for the same beneficiary[11]

MSPB Minimum Case Volume

The minimum case volume for the MSPB measure is 35, meaning 35 MSPB episodes must be attributed to a MIPS eligible clinician or group[12] for the measure to be scored.

MSPB Risk-Adjustment Methodology

The MSPB measure is risk adjusted to account for beneficiary age and illness severity. A beneficiary's illness severity is determined by using the following indicators:

- 79 Hierarchical Condition Category (HCC) indicators13 from a beneficiary's claims during the 90-day period before the start of the episode
- Recent long-term care status
- End stage renal disease (ESRD) status
- The Medicare Severity Diagnosis-Related Group (MS-DRG) code of the index hospital admission14

The MSPB risk adjustment method accounts for a beneficiary's comorbidities (the presence of more than one simultaneous clinical condition) by including interactions between HCC variables and enrollment status variables—the same method used in the MA risk adjustment model. Interaction terms are included in the methodology because the presence of certain

[9] Subsection (d) hospitals do not include: psychiatric hospitals, rehabilitation hospitals, children's hospitals, long-term care hospitals, and hospitals involved extensively in the treatment for or research on cancer.
[10] If an acute-to-acute hospital transfer and/or hospitalization in an IPPS-exempt hospital occurs during the 30 days following discharge from an index admission, then these post-discharge costs are included in the MSPB episode.
[11] In this case, the second hospital admission is considered a readmission and its costs are still included in the initial MSPB episode; the readmission does not trigger a new MSPB episode.
[12] For groups, a total of 35 MSPB episodes must be attributed across all clinicians (including MIPS eligible clinicians AND eligible clinicians) who have re-assigned their billing rights to the group's TIN.
[13] The 79 HCC indicators are in Version 22 of the CMS-HCC model
[14] In the MSPB risk adjustment methodology, a separate risk adjustment model is used to calculate the risk-adjusted, expected MSPB episode cost for each major diagnostic category (MDC). MDCs are determined by the MS-DRG of the index hospital admission.

comorbidities increases costs more for some beneficiaries than is predicted by HCC indicators alone.

The MSPB risk adjustment methodology also accounts for the reason a beneficiary qualified for Medicare, referred to as a beneficiary's entitlement category. The risk adjustment methodology model for the MSPB measure accounts for disease interactions that are included in the MA risk adjustment model. This measure is not adjusted to account for beneficiary sex, beneficiary race, nor provider specialty. As noted above, the MSPB measure is adjusted based on the index admission diagnosis-related group which likely differs based on the specialty of the clinician attributed to the measure.

MSPB Measure Calculation

The MSPB measure is calculated through the following steps (for more information please refer to the 2018 MIPS MSPB Measure Information Form):

Step 1: Define the population of index admissions

Step 2: Calculate payment-standardized MSPB episode spending

Step 3: Calculate the expected, risk-adjusted MSPB episode spending

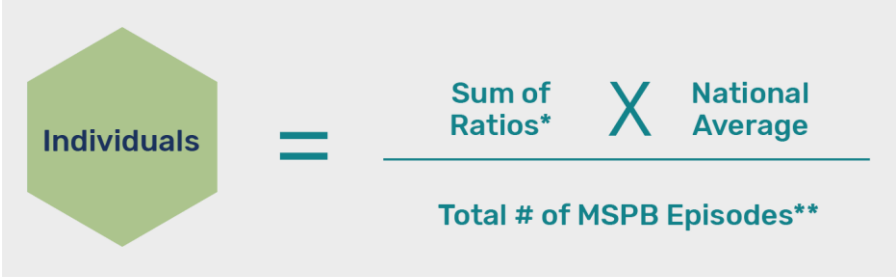
- Expected episode spending represents the relationship between independent variables (like age, enrollment status, comorbidities, HCCs) and the standardized episode cost. It's calculated using a model based on beneficiary age and severity of illness, as described in the risk adjustment methodology section above. The risk-adjusted measure reflects a TIN-NPI's average ratio of observed to expected episode spending across all episodes attributed to the TIN-NPI

Step 4: Exclude outliers

Step 5: Attribute episodes to individual clinicians

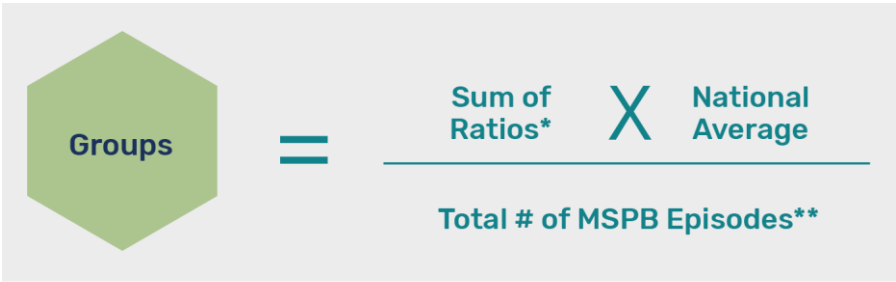
Step 6: Calculate and report the MSPB measure for each TIN-NPI or TIN

The numerator for the measure is the sum of the ratio of payment-standardized observed to expected MSPB episode costs for all MSPB episodes attributed to an individual MIPS eligible clinician's TIN-NPI (for groups: the numerator is the sum of the ratios of payment-standardized observed to expected MSPB episode costs for all MSPB episodes attributed to all individual eligible clinicians' TIN-NPIs under the group's TIN). The sum of ratios is then multiplied by the national average payment-standardized observed episode cost, to convert the ratio to a dollar amount. This value is divided by the denominator, which is the total number of MSPB episodes attributed to an individual MIPS eligible clinician's TIN-NPI (for groups: the denominator is the total number of MSPB episodes attributed to all individual eligible clinicians' TIN-NPIs under the group's TIN). The graphics below explain the calculations and differences between individuals and groups.



*The sum of the ratios of payment-standardized observed to expected MSPB episode costs for all MSPB episodes attributed to an individual clinician's TIN-NPI

**Total number of MSPB episodes attributed to an individual MIPS eligible clinician's TIN-NPI



*Sum of the ratios of payment-standardized observed to expected MSPB episode costs for all MSPB episodes attributed to all individual eligible clinicians' TIN-NPIs under the group's TIN

**Total number of MSPB episodes attributed to all individual eligible clinicians' TIN-NPIs under the group's TIN

Measure-Specific Methodology: TPCC

TPCC Measure Summary

The TPCC measure assesses total Medicare Parts A & B costs for a beneficiary during the performance period by calculating the risk-adjusted, per capita costs for beneficiaries attributed to an individual clinician or group of clinicians. The measure is calculated and expressed by CMS at the TIN or TIN-NPI level. The numerator is the sum of the annualized, risk-adjusted, specialty-adjusted Medicare Parts A & B costs incurred by all beneficiaries attributed to an individual MIPS eligible clinician (TIN-NPI) or all individual eligible clinicians in a group that is participating in MIPS as a group (TIN). The denominator is the number of Medicare beneficiaries who are attributed to an individual MIPS eligible clinician's TIN-NPI (if participating in MIPS as an individual) or the number of all Medicare beneficiaries who are attributed to a group of individual eligible clinicians participating in MIPS as a group (TIN) during the performance period.

TPCC Measure Calculation

The TPCC measure is calculated through the following steps:

1. Attribute beneficiaries to TIN-NPIs
2. Calculate payment-standardized per capita costs
3. Annualize costs for partial year-enrolled Medicare beneficiaries included in the measure
4. Risk-adjust costs
5. Specialty-adjust costs
6. Calculate the TPCC measure for the TIN-NPI or TIN, and
7. Report/express the TPCC measure for the TIN-NPI or TIN.

TPCC Attribution Logic

Beneficiaries are attributed to a single TIN-NPI based on the amount of primary care services a beneficiary received, and the clinician specialties that performed those services, during the performance period. The TPCC measure uses a primary care attribution method in which specialist would not be attributed a patient unless the patient did not see a primary care clinician (based on Medicare specialty) during the year. For some patients who don't' see a primary care clinician in a year, a specialist may serve as a primary care clinician for that patient due to an underlying disease or condition with the specialist focuses on.

Only beneficiaries who received a primary care service during the performance period can be attributed to a TIN-NPI. A beneficiary is attributed to a single TIN-NPI or to a single entity's CMS Certification Number (CCN) assigned to either a Federally-Qualified Health Center (FQHC) or Rural Health Clinic (RHC) in one of two steps, described below.

Note: If a beneficiary is attributed to an FQHC or RHC's CCN, then that beneficiary and the beneficiary's costs are not included in the TPCC measure calculated for an individual MIPS eligible clinician or group and the beneficiary is excluded from risk adjustment.

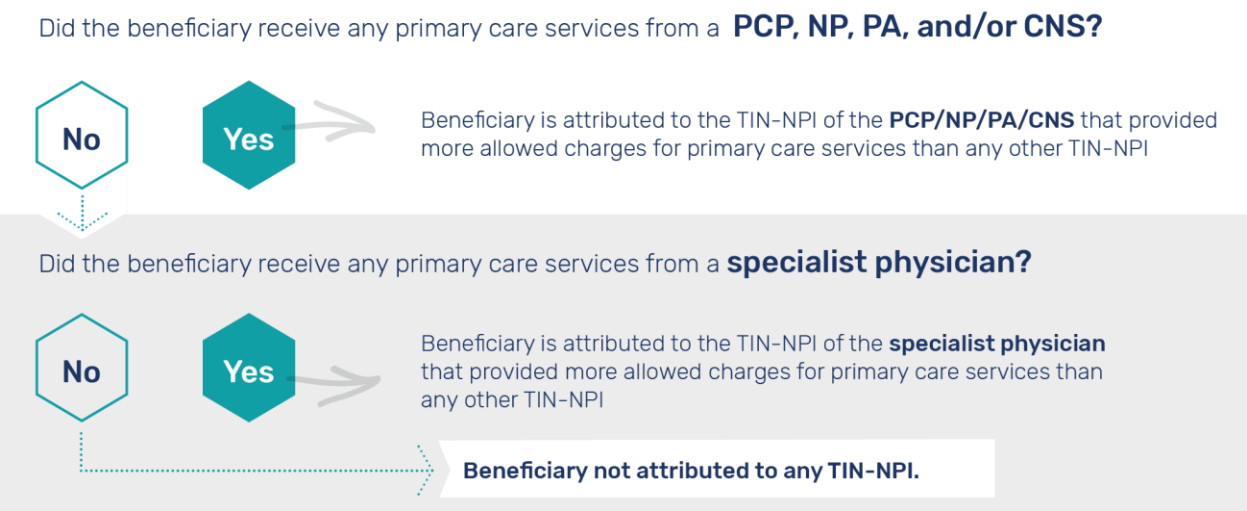
Step 1: If a beneficiary received more primary care services from an individual TIN-NPI that is classified as either a primary care physician (PCP), nurse practitioner (NP), physician assistant (PA) or clinical nurse specialist (CNS) than from any other TIN-NPI during the performance period, then the beneficiary is attributed to that TIN-NPI. If, during the performance period, a beneficiary received more primary care services from an entity's CCN than from any other TIN-NPI, then the beneficiary is attributed to the CCN. If a beneficiary is attributed to a TIN-NPI/CCN in this step, then the beneficiary was assigned in "Step 1" to a "Step 1 Professional."

Step 2: If a beneficiary did not receive a primary care service from a TIN-NPI classified as either a PCP, NP, PA or CNS during the performance period, then the beneficiary may be assigned to a TIN-NPI in "Step 2." If a beneficiary received more primary care services from a specialist physician's TIN-NPI than from any other provider's TIN-NPI during the performance period, then the beneficiary is assigned to the specialist physician's TIN-NPI, referred to as a "Step 2 Professional."

For a list of medical specialties included in Step 2, please refer to Table 4 of the 2018 MIPS TPCC Measure Information Form. The same table is included in this fact sheet as **Appendix A**

for your convenience. For a list HCPCS codes that identify primary care services, please refer to Table 2 of the same document. The same table is included in this fact sheet as **Appendix B** for convenience.

For a list of medical specialties included in Step 2, please refer to Table 4 of the 2018 MIPS TPCC Measure Information Form. For a list of Healthcare Common Procedure Coding System (HCPCS) codes that identify primary care services, please refer to Table 2 of the same document.



A beneficiary is excluded from the population measured if:

- The beneficiary was not enrolled in both Medicare Parts A & B for every month of the performance period
- The beneficiary was enrolled in a private Medicare health plan during any month of the performance period
- The beneficiary resides outside the United States (including territories) during any month of the performance period.

If a beneficiary was enrolled in Medicare Parts A & B for a partial year because he/she newly-enrolled in Medicare or he/she died during the performance period, then the beneficiary is included in the measure.

TPCC Minimum Case Volume

The case minimum for the TPCC measure is 20. For a MIPS eligible clinician participating in MIPS as an individual, 20 beneficiaries must be assigned to the individual MIPS eligible clinician's TIN-NPI for this measure to be scored. For groups of clinicians participating in MIPS

as a group, a total of 20 beneficiaries must be assigned to TIN-NPIs across the TIN-NPIs under the group's TIN for the measure to be calculated and expressed by CMS for the group.

TPCC Risk Adjustment Methodology

Two measures of risk are used in the TPCC risk adjustment methodology: beneficiaries' CMS-HCC risk scores and ESRD status. To ensure that the model measures the influence of health status (as measured by diagnoses) on the treatment provided (i.e. costs incurred), rather than capturing the influence of treatment on a beneficiary's health status, the risk adjustment model uses prior year (2018) risk factors to predict current year (2019) total per capita costs. The CMS-HCC model generates a risk score for each beneficiary that summarizes each beneficiary's expected cost of care relative to other beneficiaries. Separate CMS-HCC models exist for new enrollees and continuing enrollees.

- New Enrollee Model:

The new enrollee model accounts for each beneficiary's age, sex, disability status, original reason for Medicare entitlement (age or disability), and Medicaid eligibility, and is used when a beneficiary has less than 12 months of medical history.

- Community Model:

The community model is used when a beneficiary has at least 12 months of medical history. The community model includes the same demographic information as the new enrollee model, but it also accounts for clinical conditions as measured by HCCs.

Specialty adjustment is also applied to the TPCC measure. Specialty adjustment is different from risk adjustment because risk adjustment is performed at the beneficiary level while specialty adjustment is performed at the provider level. We adjust the TPCC measure based on the specialty of the individual MIPS eligible clinician (for those participating in MIPS as an individual) or the specialty composition of a group of clinicians participating in MIPS as a group under a specific TIN. An individual clinician's specialty is identified based on the CMS specialty code listed most frequently on Medicare Part B claims for services provided by the clinician during the performance year.

For information on how specialty adjustment was implemented in the 2016 VM Program, please refer this 2016 VM Program fact sheet.

Scoring the Cost Performance Category

For a cost measure to be scored, an individual MIPS eligible clinician or group must have enough attributed cases to meet or exceed the case minimum for that cost measure. If only one measure can be scored, that measure's score will serve as the performance category score. If, for example, seven out of the 10 cost measures are scored, the *Cost performance category score is the equally-weighted average of the seven scored measures.* For an example, please refer to the table below entitled "2019 Cost Performance Category Scoring Example."

If none of the ten measures can be scored, the MIPS eligible clinician/group will not be scored on cost and the performance categories would generally be reweighted as follows: Quality

performance category will be reweighted to 60% of their 2019 MIPS Final Score, the Improvement Activities (IA) performance category will be reweighted to 15% and the Promoting Interoperability (PI) performance category will be reweighted to 25%.

To calculate a 2019 MIPS performance period Cost performance category score, we will assign 1 to 10 achievement points to each scored measure based on the individual or group's performance on the measure compared to the performance period benchmark. As a result, the achievement points assigned for each measure depends on which decile range the MIPS eligible clinician or group's performance on the measure is in between. The Cost performance category percent score will not take into account improvement scoring until the 2022 MIPS performance period/2024 MIPS payment year.

2019 Cost Performance Category Scoring Example

Measure	Measure Achievement Points Earned by the Group	Total Possible Measure Achievement Points Available
TPCC Measure	8.2	10
MSPB Measure	6.4	10
Elective Outpatient PCI Measure	Not scored	N/A-not scored
Knee Arthroplasty Measure	7	10
Revascularization for Lower Extremity Chronic Critical Limb Ischemia Measure	5.5	10
Routine Cataract Removal with IOL Implantation Measure	9	10
Screening/Surveillance Colonoscopy Measure	Not scored	N/A-not scored
Intracranial Hemorrhage or Cerebral Infarction Measure	4.8	10
Simple Pneumonia with Hospitalization Measure	6.7	10
STEMI with PCI Measure	Not scored	N/A-not scored
TOTAL	47.6	70

In the example above, the group's Cost performance category is score is (47.6/70=0.68) which is equal to a Cost performance category percent score of 68%. Because the Cost performance category is worth 15 points in the MIPS final score, this group would earn 10.2 points towards their final score (68 x .15=10.2)

Reweighting the Cost Performance Category

We will determine whether to reweight the Quality, Cost and Improvement Activities performance categories based on a request submitted by a MIPS eligible clinician, group, or virtual group that was subject to extreme and uncontrollable circumstances. We will automatically reweight the Cost performance category for MIPS eligible clinicians who are located in a CMS-designated region or locale that has been affected by extreme and uncontrollable circumstances. If a MIPS eligible clinician is located in an affected area, we will assume the clinician does not have sufficient cost measures applicable and will assign a weight of zero to the cost performance category in the final score even if we receive administrative claims data that would enable us to calculate cost measures for that clinician.

In general, when the Quality performance category is weighted at zero percent for a MIPS eligible clinician, group, or virtual group, the Promoting Interoperability category will be reweighted to 45%, the Improvement Activities performance category will be reweighted to 40%, and the Cost performance category will be weighted at 15%. The Cost performance category will always be weighted at either 15% or 0%, we will not redistribute weight to the Cost performance category for the 2019 MIPS performance period.

The Quality, Cost, Improvement Activities and Promoting Interoperability performance categories will be reweighted to zero percent for MIPS eligible clinicians who join an existing practice (existing TIN) during the final 3 months of the performance period year that is not participating in MIPS as a group, or a practice that is newly formed (new TIN) during the final 3 months of the performance period year regardless of whether the clinicians in the practice report for purposes of MIPS as individuals or as a group. The table below outlines all relevant performance category redistribution/reweighting scenarios.

Performance Category Redistribution Policies for the 2019 MIPS Performance Period/2021 MIPS Payment Year

Reweighting Scenario	Quality	Cost	Improvement Activities	Promoting Interoperability
No Reweighting Needed				
Scores for all four performance categories	45%	15%	15%	25%
Reweight One Performance Category				
No Cost	60%	0%	15%	25%
No Promoting Interoperability	70%	15%	15%	0%
No Quality	0%	15%	40%	45%
No Improvement Activities	60%	15%	0%	25%

Reweight Two Performance Categories				
No Cost and no Promoting Interoperability	85%	0%	15%	0%
No Cost and no Quality	0%	0%	50%	50%
No Cost and no Improvement Activities	75%	0%	0%	25%
No Promoting Interoperability and no Quality	0%	15%	85%	0%
No Promoting Interoperability and no Improvement Activities	85%	15%	0%	0%
No Quality and no Improvement Activities	0%	15%	0%	85%

Application of the Facility-Based Measurement Option in the 2019 MIPS Performance Period

Purpose & General Overview of Facility-Based Measurement

The facility-based measurement and scoring option will reduce administrative burden by streamlining reporting and allowing clinicians to focus on quality improvement. The scoring methodology developed for facility-based measurement translates scores in the Hospital Value-Based Purchasing (VBP) Program to scores in the Quality and Cost performance category. For facility-based scoring, the measure set for the fiscal year Hospital VBP program that begins during the applicable MIPS performance period will be used for facility-based clinicians (FY 2020 for the calendar year 2019 performance period).

Applicability of Facility-Based Measurement for Individuals and Groups

CMS will automatically apply facility-based measurement to MIPS eligible clinicians and groups who both are eligible for facility-based measurement and have a higher combined quality and cost performance category score. To determine eligibility for facility-based measurement for 2021 MIPS payment adjustments (i.e., the 2019 MIPS performance period), CMS will use claims data from the 12-month segment beginning on October 1, 2017 and ending on September 30, 2018, plus a 30-day claims run out.

An individual MIPS eligible clinician is eligible for facility-based measurement if:

- The clinician furnishes 75 percent or more of his/her covered professional services in sites of services identified by the POS codes used in the HIPPAA standard transaction as an inpatient hospital (POS 21), emergency room (POS 23) and/or on-campus outpatient hospital (POS code 22);

- The clinician billed at least a single service with POS codes for inpatient hospital or the emergency room during the first segment of the MIPS determination period; and
- Can be attributed, using a methodology detailed in the final rule, to a facility with a value-based purchasing score for the applicable period (i.e., a FY 2020 Total Performance Score on the Hospital VPB program).

A facility-based group is a group in which 75 percent or more of its eligible clinician NPIs billing under the group's TIN meet the facility-based individual determination. MIPS eligible clinician is eligible for facility-based measurement under MIPS if they are determined to be facility-based as part of a group.

Attribution of Clinicians or Groups to a Hospital for Purposes of Applying Facility-Based Measurement

CMS must be able to attribute a clinician to a hospital that has a value-based purchasing score to meet eligibility for facility-based measurement and to assign a facility-based score. A facility-based clinician is attributed to the hospital at which they provide services to the most Medicare patients; this determination is made using the same time period and claims used to identify whether the clinician is eligible for facility-based scoring for the year. If there is an equal number of Medicare beneficiaries treated at more than one facility, the value-based purchasing score for the highest scoring facility is used.

A facility-based group is attributed to the hospital at which a plurality of its facility-based clinicians are attributed.

If CMS is unable to identify a facility with a Hospital VBP Program score to attribute a clinician's or a group's performance, that clinician or group is not eligible for facility-based measurement and will have to participate in MIPS via other methods.

Facility-Based Measurement Election & Submission Requirements

There are no separate data submission requirements for the Quality and Cost performance categories for individual clinicians who are eligible for facility-based measurement. A group must submit data in the Improvement Activities or Promoting Interoperability performance categories in order to be measured under facility-based measurement.

Use of Benchmarks in Facility-Based Measurement

Benchmarks for facility-based measurement are those that are adopted under the Hospital VBP program of the facility for the year specified.

Assigning MIPS Category Scores under Facility-Based Measurement

The Quality performance category score and Cost performance category score for facility-based measurement are reached by determining the percentile performance of the facility in the Hospital VBP program for the specified year (i.e., the percentile rank of the Total Performance

Score for the facility) and awarding a MIPS score associated with that same percentile performance in the MIPS Quality and Cost performance category scores for those clinicians who are not scored using facility-based measurement.

Some hospitals do not receive a Total Performance Score in a given year in the Hospital VBP Program, whether due to insufficient quality measure data, failure to meet requirements under the Hospital IQR Program, or other reasons. In these cases, we will be unable to calculate a facility-based score based on the hospital's performance, and facility-based clinicians will be required to participate in MIPS via another method.

Cost Performance Category Performance Feedback

Performance feedback on 2019 MIPS performance period Cost performance category will be provided in the Summer of 2020. In July 2018, we provided feedback on TPCC and MSPB cost measure performance to MIPS eligible clinicians and groups even though the Cost performance category did not count towards 2017 MIPS Final Scores nor will it affect 2019 payments.

2018 Cost Measure Field Testing

Field testing is one part of an ongoing, annual process to update cost measures. For more information, please refer to the MACRCA Cost Measures Field Testing Webinar.

Between October 3, 2018 through October 31, 2018, we conducted field testing of 11 newly developed episode-based cost measures and two re-evaluated measures before deciding whether to use them in MIPS. The two re-evaluated measures, Medicare Spending Per Beneficiary (MSPB) clinician and Total Per Capita Cost (TPCC), are being refined to address stakeholder input. These are different than the versions of the measures being used for the MIPS 2017 and 2018 performance periods. Please refer to the 2018 Field Testing Feedback Summary Report for more information.

Additional Resources

2018 MIPS Cost Measures

How Do I Get Help or More Information?

You can reach the Quality Payment Program at 1-866-288-8292 (TTY 1-877-715- 6222), Monday through Friday, 8:00 AM-8:00 PM ET or by e-mail at: QPP@cms.hhs.gov.

Technical Assistance

We provide flexible options and free technical support to help you successfully participate in the Quality Payment Program. You can find more about these resources and support on the Quality Payment Program website.

Appendix A

Medical Specialists, Surgeons and Other Physicians Included in the Second Step of TPCC Measure Attribution

Specialty Descriptions (CMS Specialty Code)	
Media Specialists	**Other Physicians**
Addiction Medicine (79)	Anesthesiology (05)
Allergy/Immunology (03)	Chiropractic (35)
Cardia Electrophysiology (21)	Diagnostic Radiology (30)
Cardiology (06)	Emergency Medicine (93)
Critical Care (Intensivists) (81)	Interventional Radiology (94)
Dermatology (07)	Nuclear Medicine (36)
Dentist (C5)	Optometry (41)
Endocrinology (46)	Pain Management (72)
Gastroenterology (10)	Pathology (22)
Geriatric Psychology (27)	Pediatric Medicine (37)
Hematology (82)	Podiatry (48)
Hematology/Oncology (83)	Radiation Oncology (92)
Hospice and Palliative Care (17)	Single or Multispecialty Clinic or Group Practice (70)
Infectious Disease (44)	Sports Medicine (23)
Interventional Cardiology (C3)	Unknown Physician Specialty (99)
Interventional Pain Management (09)	
Medical Oncology (90)	
Nephrology (39)	
Neurology (13)	

Appendix B

HCPCS Primary Care Service Codes

HCPCS Codes	Brief Description
99201-99205	New patient, office, or other outpatient visit
99211-99215	Established patient, office, or other outpatient visit
99304-99306	New patient, nursing facility care
99307-99310	Established patient, nursing facility care
99315-99316	Established patient, discharge day management service
99318	New or established patient, other nursing facility service
99324-99328	New patient, domiciliary or rest home visit
99334-99337	Established patient, domiciliary or rest home visit
99339-99340	Established patient, physician supervision of patient (patient not present) in home, domiciliary, or rest home
99341-99345	New patient, home visit
99347-99350	Established patient, home visit
99487, 99489	Complex chronic care management
99495-99496	Transitional care management
99490	Chronic care management
G0402	Initial Medicare visit
G0438	Annual wellness visit, initial
G0439	Annual wellness visit, subsequent
G0463	Hospital outpatient clinic visit (Electing Teaching Amendment hospitals only)