

Quality Payment PROGRAM

2018 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 made major cuts to Medicare payment rates for clinicians. MACRA requires us to implement the Quality Payment Program and gives eligible clinicians 2 ways to participate:



Under MIPS, there are 4 performance categories that 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 applied for MIPS eligible clinicians is based on the Final Score. These are the performance category weights for the 2018 performance period.

MIPS Performance Categories for Year 2 (2018)



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

This fact sheet will:

- Identify the two cost measures used to evaluate performance in 2018 and describe connections to the legacy VM program
- 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 use of price standardization in evaluating MIPS cost measure performance
- For each cost measure, provide measure-specific 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

MIPS Cost Measures: TPCC & MSPB

Two cost measures are used to evaluate performance in the Cost performance category in the 2018 MIPS performance period. The first measure is referred to as the Total Per Capita Costs for All Attributed Beneficiaries measure, or “TPCC.” The second measure is called the Medicare Spending Per Beneficiary measure, or “MSPB.” A TPCC measure was used in the 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. A similar version of the MSPB measure is currently used in the Hospital Value-Based Purchasing Program. Both the MSPB and TPCC measures are reliable when calculated for individuals and groups. As illustrated below, the MIPS Cost performance category draws on standards for patient attribution, risk adjustment, payment standardization and measure reliability from the VM.

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

MIPS Cost Performance Category Weights

For the 2017 transition year, the Cost performance category didn't count towards clinicians' MIPS Final Scores. In the 2018 MIPS performance period (the second year of the program) the weight of the Cost performance category increases to 10% of the total MIPS score. The table below shows the weight assigned to the Cost performance category for each year of the program:

MIPS Year 1: CY 2017/Payment Year 2019	MIPS Year 2: CY 2018/Payment Year 2020	MIPS Years 3,4 & 5: CYs 2019, 2020 & 2021/ Payment Years 2021, 2022 & 2023
0% Cost performance category weight	10% Cost performance category weight	CMS will establish the weight in future rulemaking. 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.

In all performance years, the Cost performance category is assigned a weight of 0% for MIPS eligible clinicians scored under the MIPS APM scoring standard as MIPS APM participants are not measured on cost. In the 2018 MIPS performance period, the weighting for all MIPS APMs will be 50% for the Quality performance category, 0% for the Cost performance category, 20% for the Improvement Activities (IA) performance category and 30% for the Promoting Interoperability performance category.

Common Features Among the TPCC and MSPB Measures


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

Payment Standardization

The allowed amounts¹ 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-related adjustments due to performance in quality programs such as the Value-based payment (VBP) modifier

¹ Medicare 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.



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 assigns a comparable allowed amount for the same service provided in different settings to reveal differences in spending that result only from care decisions and resource use.

The payments included in both the TPCC and MSPB measures are payment-standardized² to preserve differences that result from health care delivery choices, exclude geographic differences, and exclude payment adjustments from special Medicare programs. For more information, please consult the document entitled [CMS Price \(Payment\) Standardization-Detailed Methods](#).

Benchmarks

CMS will establish a single, national benchmark for each cost measure. These benchmarks are based on the performance period, not a historical baseline period³. As a result, CMS 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 2018 Cost performance category score will be based on CY 2018 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.

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, CMS will attribute cost measures at the TIN-NPI level. Although cost measures will be attributed to individual clinicians, cost measure *performance* can be assessed by CMS 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 between the two measures.

Measure-Specific Methodology: MSPB

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

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 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.

² Payment standardization is sometimes referred to as price standardization. The terms are equivalent.

³ Certain legacy programs also used performance period benchmarks for scoring cost measures.

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 admission⁴ through 30 days after the beneficiary is discharged.



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)

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 plurality⁵ 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, outpatient, or emergency room
- 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

⁴ An index admission is the admission that meets the inclusion and exclusion criteria for the measure.

⁵ In this context, plurality refers to the largest amount of allowed charges.

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
- The beneficiary's index admission did not occur in a "subsection (d) hospital⁶" 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 transfer⁷
- A beneficiary's index admission occurred within the 30-day post discharge period of another MSPB episode for the same beneficiary⁸

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 group⁹ 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:

⁶ 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.

⁷ 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.

⁸ 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.

⁹ 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.

- 79 Hierarchical Condition Category (HCC) indicators¹⁰ 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 admission¹¹

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 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.

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

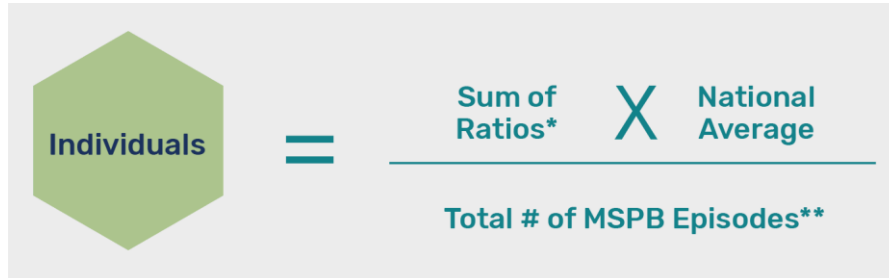
Step 5: Attribute episodes to individual clinicians

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

¹⁰ The 79 HCC indicators are in Version 22 of the CMS-HCC model

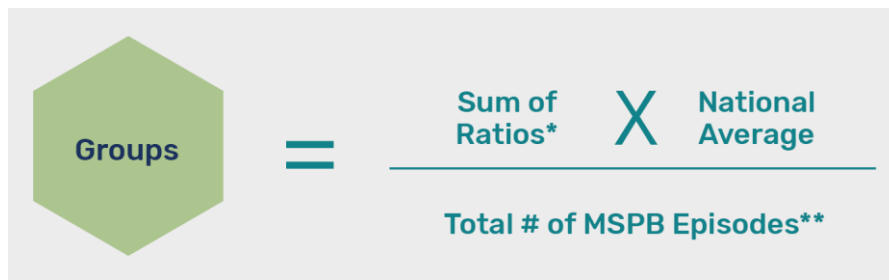
¹¹ In the MSPB risk adjustment methodology, a separate risk adjustment model is used to calculate the risk-adjusted, expected MSPB episode cost for each major diagnostic category (MDC). MDCs are determined by the MS-DRG of the index hospital admission.

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

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.

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.

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.

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.

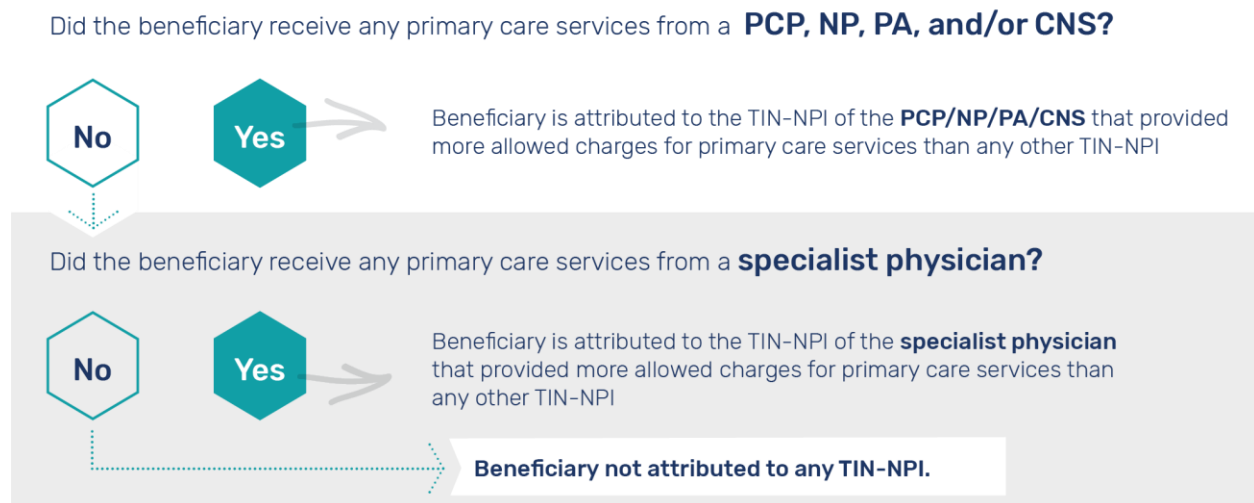
Please note: if a beneficiary is attributed to an FQHC or RHC's CCN, then that beneficiary and the beneficiary's costs are not included in the TPCC measure calculated for an individual MIPS eligible clinician or group and the beneficiary is excluded from risk adjustment.

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. 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.

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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.

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.

Risk Adjustment Methodology

Two measures of risk are used in the TPCC risk adjustment methodology: beneficiaries' CMS-HCC risk scores derived from the CMS-HCC model for continuing beneficiaries and ESRD status. The CMS-HCC community model for continuing enrollees accounts for beneficiary demographics such as age, sex, disability status, original reason for Medicare entitlement, Medicaid eligibility, and clinical conditions measured by hierarchical condition categories (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. CMS adjusts 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 2018 VM Program, please refer this 2018 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 both cost measures are scored, the Cost performance category score is the equally-weighted average of the scored measures. If neither measure can be scored, the MIPS eligible clinician/group will not be scored on cost and the Quality performance category will be reweighted to 60% of their 2018 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 2018 MIPS performance period Cost performance category score, CMS 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.

Measure	Measure achievement points earned by the group	Total Possible Measure Achievement Points
TPCC measure	8.2	10
MSPB measure	6.4	10
TOTAL	14.6	20

In the example above, the group's cost performance category is $(14.6/20=0.73)$ which is equal to a cost performance category percent score of 73%. Because the cost performance category is worth 10 points in the final score, this group would earn 7.3 points towards their final score $(73 \times .10=7.3)$

Cost Performance Category Feedback

In July 2018, CMS 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. Please note that beneficiary level data is not available for the cost measures in 2017 MIPS performance feedback and CMS is currently unable to provide it. Feedback on 2018 MIPS performance period cost measure performance will be available in Summer 2019 and CMS is looking to incorporate beneficiary-level data, if technically feasible.

Episode-Based Cost Measures

For the 2017 MIPS performance period, CMS adopted 10 episode-based measures that had previously been included in the Supplemental Quality and Resource Use Reports (QRURs) and assigned a weight of zero to the Cost performance category. Episode-based measures differ from the TPCC and MSPB measures because their specifications only include items and services that are related to the episode of care for a clinical condition or procedure (defined by procedure and diagnosis codes), as opposed to including all items and services that are provided to a patient over a given period of time.

For the 2018 MIPS performance period, CMS will not include the 10 episode-based measures in the Cost performance category and like the 2017 performance period will assign the adopted measures a weight of zero in 2018.

In October 2017, CMS field tested eight episode-based cost measures to get stakeholder feedback on:

- The draft measure specifications for the eight measures in their current stage of development.
- The Field Test Report template.
- All accompanying documentation.

Feedback collected will be used to refine the measures and to develop future measures.

For more information, please reference the following documents:

- [MIPS Episode-Based Cost Measure Field Test Reports FAQs, October 2017](#)

- [MIPS Episode-Based Cost Measure Field Test Reports Fact Sheet](#)

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.

Additional Resources

- [2018 MIPS Cost Measures](#)
- [CY 2017 Quality Payment Program Final Rule](#)
- [CY 2018 Quality Payment Program Final Rule with comment](#)
- [The Quality Payment Program Resource Library](#)