Quality Payment
PROGRAM

Merit-based Incentive Payment System (MIPS): Cost Measure Field Testing

Frequently Asked Questions (FAQs)

October 2018 Field Testing

Table of Contents

Acronyms and Abbreviations

Advanced APMs	Advanced Alternative Payment Models
CMS-HCC V22	CMS Hierarchical Condition Category Version 22 (2016)
CY	Calendar Year
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics & Supplies
E&M	Evaluation and Management
EIDM	Enterprise Identity Data Management
ESRD	End Stage Renal Disease
CPT/HCPCS	Current Procedural Terminology/Healthcare Common Procedure Coding System
MACRA	Medicare Access and CHIP Reauthorization Act of 2015
MDC	Major Diagnostic Category
MIPS	Merit-based Incentive Payment System
MS-DRG	Medicare Severity Diagnosis-Related Groups
MSPB	Medicare Spending Per Beneficiary
NPI	National Provider Identifier
QRUR	Quality and Resource Use Reports
TEP	Technical Expert Panel
TIN	Taxpayer Identification Number
TPCC	Total Per Capita Cost

1.0 Policy Context

1.1 What is the Quality Payment Program?

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) established the Quality Payment Program.

Under the Quality Payment Program, clinicians are incentivized to provide high-quality and high value care through Advanced Alternative Payment Models (APMs) or the Merit-based Incentive Payment System (MIPS). MIPS eligible clinicians will receive a performance-based adjustment to their Medicare payments. This payment adjustment is based on a MIPS final score that assesses evidence-based and practice-specific data in the following categories:

1. Quality
2. Cost
3. Improvement activities
4. Promoting Interoperability (formerly Advancing Care Information)

The Quality Payment Program is currently in its second year (2018), and this is the first year the MIPS cost performance category will have an impact on the MIPS final score. For the 2018 performance period, the cost performance category is weighted at 10 percent of the MIPS final score.

The Bipartisan Budget Act of 2018 provided flexibility in establishing the weight of the cost performance category through the fifth year of MIPS. Instead of requiring the cost performance category to have a weight of 30 percent in Year 3 of the program (as originally required in MACRA), the weight is required to be between 10 percent and 30 percent for the third, fourth, and fifth years of the Quality Payment Program. As outlined in the calendar year (CY) 2019 Medicare Physician Fee Schedule Proposed Rule, the Centers for Medicare & Medicaid Services (CMS) is proposing to weigh the cost performance category at 15 percent of the MIPS final score for the 2019 performance period, or Year 3 of the program. A weight will be finalized in the CY 2019 Physician Fee Schedule final rule.

1.2 Do the cost measures being field tested affect my 2018 or 2019 MIPS score?

No. The cost measures being field tested in October 2018 are not part of the MIPS cost performance category, and so do not count towards your MIPS final score. As such, the field testing cost measures do not affect any payment adjustments.

1.3 Which cost measures will be field tested and how do they relate to the Quality Payment Program?

CMS is in the process of developing cost measures, and 13 cost measures will be field tested in October 2018. They can be divided into two groups:

(i) Eleven new episode-based cost measures currently under development; and
(ii) Two cost measures undergoing re-evaluation.

CMS worked with measure development contractor Acumen, LLC (referred to as “Acumen”) to develop these cost measures. Under MACRA, MIPS involves the use of a methodology for analyzing cost, as appropriate, which includes consideration of patient condition groups and care episode groups (referred to as “episode groups”). As a result, 11 episode-based cost

measures are currently under development and will be field tested before consideration of their potential use in MIPS.

The measure developer is developing these 11 measures with extensive input from 10 Clinical Subcommittees and 11 measure-specific workgroups, a technical expert panel (TEP), Person and Family Committee, and the public:

- Acute Kidney Injury Requiring New Inpatient Dialysis
- Elective Primary Hip Arthroplasty
- Femoral or Inguinal Hernia Repair
- Hemodialysis Access Creation
- Inpatient Chronic Obstructive Pulmonary Disease (COPD) Exacerbation
- Lower Gastrointestinal Hemorrhage
- Lumbar Spine Fusion for Degenerative Disease, 1-3 Levels
- Lumpectomy, Partial Mastectomy, Simple Mastectomy
- Non-Emergent Coronary Artery Bypass Graft (CABG)
- Psychoses/Related Conditions
- Renal or Ureteral Stone Surgical Treatment

The second set of measures that will be field tested include two cost measures undergoing re-evaluation, with input from a TEP, an expert workgroup, and public comment:

- Medicare Spending Per Beneficiary (MSPB) clinician[1]
- Total Per Capita Cost (TPCC)[2]

The MSPB clinician and TPCC measures are based on measures that have previously been included in the Quality and Resource Use Reports (QRURs) provided to clinicians and measures that are currently used in the cost performance category of MIPS. The existing MIPS measures currently in use will be used to calculate the Year 2 cost performance category score and will impact the payment adjustment for MIPS eligible clinicians. The existing MIPS versions of these measures that are currently in use are separate from the two cost measures that are undergoing re-evaluation and will be field tested this year, before consideration of their potential use in future years of MIPS.

1.4 When will these cost measures be used in MIPS?

Possibly in the 2020 MIPS performance period or beyond. The 11 episode-based measures and the MSPB clinician and TPCC measures undergoing re-evaluation that will be field tested are **not** included in the 2018 or 2019 MIPS performance periods. These measures will be field tested before consideration of their potential use in the MIPS cost performance category in a future year. As part of this field testing, CMS and Acumen will seek stakeholder feedback on the draft measure specifications for the cost measures in their current stage of development, the

[1] The re-evaluated MSPB clinician measure that is being field tested in October 2018 is separate from the reporting of the MIPS MSPB measure for the 2017 and 2018 MIPS performance periods. For clarity, we differentiate the MSPB measure currently in use in MIPS from the MSPB measure currently undergoing re-evaluation by name. “MSPB” alone refers to the measure currently in use and “MSPB clinician” refers to the measure currently undergoing re-evaluation.

[2] The re-evaluated TPCC measure that is being field tested in October 2018 is separate from the reporting of the existing TPCC measure for the 2017 and 2018 MIPS performance periods. The existing TPCC measure is sometimes referred to as “Total Per Capita Cost for All Attributed Beneficiaries.” For clarity in this document, we differentiate the TPCC measure currently in use in MIPS by referring to it as the “existing” or “current” MIPS TPCC measure.

field test report templates, and all accompanying supplemental documentation. This feedback will be considered in refining the measures and for future measure development activities.

CMS will consider stakeholder feedback, public comments, measure refinements, and Measure Applications Partnership recommendations before considering the potential use of these 11 episode-based cost measures and the cost measures undergoing re-evaluation in the MIPS cost performance category for a future year. This would involve proposing the measures for use in MIPS as part of the notice-and-comment rulemaking process.

1.5 Why are these cost measures being field tested now?

Through field testing, CMS and Acumen will seek voluntary feedback on the episode-based cost measures, the cost measures undergoing re-evaluation, and their measure reporting format. CMS will use this feedback to help decide whether these measures should be considered for potential use in the MIPS cost performance category, and how the measures and reporting format can be improved to provide clinicians with actionable information to ensure high quality and high value care. Field testing will also serve as an opportunity for clinicians to learn about and gain experience with these cost measures before they are considered for use in MIPS.

Specifically, we will seek feedback on the following types of questions:

- Does the information presented on the measure in the field test report and accompanying documentation help you identify actionable improvements to patient care and to cost efficiency?
- Are the measure specifications for the eleven episode-based cost measures clinically valid? Measure specifications include episode triggers, attribution, assigned services, episode windows, and risk adjustment.
- Do the measure specifications of the re-evaluated MSPB clinician and TPCC measures represent refinements that are responsive to stakeholder feedback on the existing MIPS version of the measures? In particular, the key measure specifications of relevance here are the attribution methods for both measures and service assignment for the MSPB clinician measure.
- How can we present the information in such a way that it is most useful for meaningful improvement?
- How understandable is the measure documentation provided and how can it be improved?
- Would additional documents or information be useful for clinicians and other stakeholders trying to understand these measures?

2.0 Field Testing

2.1 What is field testing?

Field testing is a voluntary opportunity for clinicians and other stakeholders to provide feedback on the draft measure specifications for the cost measures, the field test report format, and the supplemental documentation. We will be field testing the 13 measures in their current stage of development and re-evaluation to seek clinician and other stakeholder feedback by:

- Posting clinician field test reports for group practices and solo practitioners who meet the minimum number of cases[3] for each measure on the CMS Enterprise Portal.
- Posting mock reports, draft measure specifications, and supplemental documentation on the MACRA Feedback page.[4]

2.2 When is field testing taking place?

Field testing will last from October 3 until October 31, 2018. During this period, stakeholders may submit feedback on the measures, report templates, and other documentation.

2.3 Who will receive a Field Test Report?

Field Test Reports will be available at the clinician group practice and solo practitioner (or clinician) level. Clinicians are identified by a unique Taxpayer Identification Number (TIN) and National Provider Identifier (NPI) combination (TIN-NPI), while clinician groups are identified by their TIN. For clinician group practices, the group practice must meet the minimum number of cases for the measure across all clinicians billing under the group practice TIN. For solo practitioners, the clinician must meet the minimum number of cases by him or herself. For example, for an episode-based cost measure, discussed further below, the group practice would have to be attributed 10 episodes for that measure across all billing clinicians while a solo practitioner would have to be attributed 10 episodes to receive a Field Test Report.

Three types of field test reports will be provided to group practices and solo practitioners as shown in Table 1 below.

[3] A case can be an episode or a beneficiary depending on the measure.
[4] CMS, "Cost Measure Field Testing," *MACRA Feedback Page,* https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-Feedback.html.

Table 1. Types of Field Test Reports

	Newly Developed Measures	Measures Undergoing Re-evaluation	
Field Test Report	**Episode-based Cost Measures**	**MSPB clinician**	**TPCC**
What types of clinicians are likely to receive a Field Test Report?	Clinicians who perform the procedures (for procedural episode groups) or manage hospitalizations (for acute inpatient medical condition episode groups) for the 11 newly developed episode-based cost measures	Clinicians who are part of a TIN that admits patients to the hospital, and who for: • **Medical Medicare Severity Diagnosis Related Groups (MS-DRGs)**, demonstrates management of a patient's condition by meeting or exceeding a particular threshold of evaluation and management (E&M) claims billed • **Surgical MS-DRGs**, bills the core procedure of the stay	Clinicians who deliver primary care services to patients with a pattern indicative of a primary care relationship with a patient
How many cases does a clinician or clinician group need to receive a field test report?	10 episodes for at least one of the 11 episode-based cost measures	35 episodes	20 beneficiaries
What is the measurement period?	January 1, 2017 to December 31, 2017	January 1, 2017 to December 31, 2017	October 1, 2016 to September 30, 2017[5]
What is the format of the report?	One Excel file. If you meet the case minimum for more than one of the 11 episode-based cost measures, each measure will be on a separate tab in one report.	One PDF and one CSV file	One PDF and one CSV file

2.4 Is it possible to receive more than one field test report?

Yes. If you meet the criteria for receiving a field test report for more than one *type* of cost measure (e.g., an episode-based cost measure and the TPCC measure), you may receive more than one report. However, if you meet the criteria for receiving a field test report for more than one of the episode-based cost measures (i.e., the same *type* of cost measure), you will receive one field test report containing information for those measures.

2.5 How can group practices and solo practitioners access their Field Test Report(s)?

[5] The attributable months in the year-long measurement period are included in the calculation of the TPCC measure. The year-long measurement period is broken up into 13 four-week months.

You or your group's authorized representative can access the Cost Measure Field Test Report(s) at https://portal.cms.gov using an Enterprise Identity Management (EIDM) account with one (1) of the following roles in the **Physician Quality and Value Programs** application:

Groups are identified in the EIDM by their Medicare billing Taxpayer Identification Number (TIN). Users who register with a group-level role will be able to see all TIN- National Provider Identifier (NPI) reports within their TIN, as well as the TIN's overall report, so it is a role that is more appropriate for someone who is in an administrative position at the TIN. A group consists of two or more eligible clinicians (as identified by their NPI that bill under the same TIN), and will receive an Episode-Based Cost Measures Field Test Report, for example, if the TIN is attributed at least 10 episodes among all NPIs billing under the TIN. A group can have either of the following roles:

- Security Official
- Group Representative

The group-level users (i.e., Security Official and Group Representative) have access to the group practice's reports and the individual-level reports for the solo practitioners within the group practice.

An individual eligible clinician (or a solo practitioner) is identified by a single NPI that bills under the TIN, and will receive an Episode-Based Cost Measures Report, for example, if the NPI is attributed at least 10 or more episodes. A solo practitioner can have either of the following roles:

- Individual Practitioner
- Individual Practitioner Representative

Note: Clinicians looking to view only their TIN-NPI report should register as an Individual Practitioner, regardless of whether they are a part of a group practice or whether they practice on their own.

Clinicians can prepare to access their reports by signing up for a new EIDM account using this EIDM user guide,[6] or by making sure existing EIDM accounts have the 'Physician Quality and Value Programs' role using this existing EIDM user guide.[7] For more information on accessing the field test reports, clinicians can also refer to the User Access Guide available on the MACRA Feedback page.

Note: Field test reports are separate from Quality and Resource Use Reports (QRURs), however, the same guides linked above may be used to set up an EIDM account.

2.6 What data were used for the Field Test Reports?

Episodes[8] are constructed and measures are calculated using the following data:

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[6] CMS, "Guide for Obtaining a New EIDM Account with a 'Physician Quality and Value Programs' Role," https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/Guide-for-Obtaining-a-New-User-EIDM-Account-with-a-Physician-Quality-and-Value-Programs-Role.pdf.

[7] CMS, Guide for Obtaining an Existing EIDM Account with a 'Physician Quality and Value Programs' Role," https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/Guide-for-Obtaining-Physician-Quality-and-Value-Programs-Role-for-Existing-EIDM-User.pdf.

[8] For the re-evaluated TPCC measure, an episode is a 4-week interval or partial interval associated with a beneficiary that is attributable to a clinician or clinician group based on overlap with a risk window.

- Medicare Parts A and B claims data from the Common Working File
- Enrollment Data Base
- Long Term Care Minimum Data Set
- Provider Enrollment, Chain and Ownership System

The measurement period for the Field Test Reports for the episode-based cost measures and the MSPB clinician measure is January 1, 2017 through December 31, 2017. For the TPCC measure, the measurement period is October 1, 2016 through September 30, 2017.

2.7 How can group practices and solo practitioners use the information in their Field Test Report(s)?

Group practices and solo practitioners may use the data in their Field Test Report(s) to understand what contributes to the costs of their patients' care and identify areas to improve efficiency and care coordination.

The reports for all episode-based cost measures and the measures undergoing re-evaluation present information intended to:

- Illustrate the types of services that comprise a large or small share of episode costs
- Show the variation in clinician cost measure performance across different types of services or Medicare settings (claim types)

Specifically:

- The episode-based cost measures report presents information intended to show which other Medicare clinicians account for patient costs during the episode.
- The MSPB clinician measure report presents information intended to show the variation in clinician cost measure performance according to the clinical reasons for the inpatient stay, as determined by the Major Diagnostic Category (MDC). The report also shows the national distribution of clinician cost performance and how individual clinical group performance compares to the state and national averages.
- The TPCC measure report presents information intended to show a breakdown of spending by categories of services. The TIN level version of the report also shows the variation in clinician cost performance by specialty (within a clinician group).

For the episode-based cost measures, please reference the "Understanding Your Report" tab of the field test report for more information about how to use and interpret the report. For the MSPB clinician and TPCC measures undergoing re-evaluation, please refer to the Glossary for information on how to interpret the report.

2.8 How can my group or I get help to interpret my cost measure score?

For assistance in interpreting your cost measure score, the field test reports will contain sections to provide context for interpreting your measure score.

Should you have further questions or want more information, please contact the Quality Payment Program Service Center via telephone at 1-866-288-8292 or via email at qpp@cms.hhs.gov. The Help Desk is available Monday – Friday; 8:00 A.M. – 8:00 P.M. Eastern Time Zone.

2.9 How can I give feedback?

All stakeholders can provide feedback on the measures, documentation, and report presentation through this online survey during field testing.[9] Field testing will take place from October 3, 2018 through October 31, 2018. Stakeholders can attach a PDF or Word document with their comments. Comments may be submitted anonymously if preferred.

2.10 Can I still provide feedback on the measures even if I didn't receive a report?

Yes! We encourage all stakeholders to review publicly available field testing materials and provide feedback by completing this online survey[10] starting October 3, 2018, when they become available on the MACRA Feedback page:[11]

- Draft Cost Measure Specifications for each measure
- Mock Field Test Reports
- Fact Sheet
- Frequently Asked Questions

The survey will be open from October 3, 2018 until 11:59 PM ET on October 31, 2018.

[9] The field testing online survey will be open beginning the first week of October 2018 at this link: https://www.surveymonkey.com/r/2018-macra-cost-measures-field-testing.
[10] The field testing online survey will be open beginning the first week of October 2018 at this link: https://www.surveymonkey.com/r/2018-macra-cost-measures-field-testing.
[11] CMS, "Cost Measure Field Testing", *MACRA Feedback Page,* https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html.

3.0 Episode-Based Cost Measures

3.1 What are episode-based cost measures?

Episode-based cost measures represent the cost to Medicare for the items and services furnished to a patient during an episode of care ("episode"). Episode-based cost measures inform clinicians about the cost of the care they are responsible for providing to a beneficiary during the episode's timeframe. In the field test reports and their supplemental documentation, the term "cost" generally means the Medicare allowed amount, which includes both Medicare and trust fund payments and any applicable beneficiary deductible and coinsurance amounts on traditional, fee-for-service claims.

Episode-based cost measures are calculated with Medicare Parts A and B fee-for-service claims data and are based on *episode groups*. Episode groups:

- Represent a clinically cohesive set of medical services rendered to treat a given medical condition.
- Aggregate all items and services provided for a defined patient cohort to assess the total cost of care.
- Are defined around treatment for a condition (i.e., acute inpatient or chronic) or performance of a procedure.

Services in the episode group could be treatment services, diagnostic services, and ancillary items and services directly related to treatment (such as anesthesia for a surgical procedure). They can also be services that happen after the initial treatment period that may be given to patients as follow-up care or to treat complications resulting from the treatment.

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

To make sure there is a more accurate comparison of cost across clinicians, episode costs are payment standardized and risk adjusted.

- **Payment standardization** adjusts the allowed amount for a Medicare service to facilitate cost comparisons and limit observed differences in costs to those that may result from health care delivery choices. Payment standardized costs remove the effect of differences in Medicare payment among health care providers that are the result of differences in regional health care provider expenses measured by hospital wage indexes and geographic price cost indexes (GPCIs) or other payment adjustments such as those for teaching hospitals.
- **Risk adjustment** accounts for patient characteristics that can influence spending and are outside of clinician control. For example, for the Renal or Ureteral Stone Surgical Treatment episode-based cost measure, the risk adjustment model may account for patients with a history of end stage renal disease (ESRD).

3.2 What are the types of episode groups?

Cost measures can be based on three types of episode groups:

- **Procedural** episode groups focus on procedures of a defined purpose or type, such as surgeries. Of the 11 measures in field testing, **eight** are based on procedural episode groups: Acute Kidney Injury Requiring New Inpatient Dialysis; Elective Primary Hip

Arthroplasty; Femoral or Inguinal Hernia Repair; Hemodialysis Access Creation; Lumbar Spine Fusion for Degenerative Disease, 1-3 Levels; Lumpectomy, Partial Mastectomy, Simple Mastectomy; Non-Emergent CABG; and Renal or Ureteral Stone Surgical Treatment; .

- **Acute inpatient medical condition** episode groups represent treatment for self-limited acute illness or treatment for flares or an exacerbation of a condition that requires a hospital stay. Of the 11 measures in field testing, **three** are based on acute inpatient medical condition episode groups: Inpatient COPD Exacerbation; Lower Gastrointestinal Hemorrhage; and Psychoses/Related Conditions.

- **Chronic condition** episode groups account for the patient's clinical history at the time of a medical visit and the patient's current health status. An example of a chronic condition episode group is an episode group for the ongoing management of a disease, such as diabetes.

We did not include chronic conditions when we developed this year's episode-based cost measures because there are unique challenges in creating rules for attribution and episode windows for conditions that need ongoing management. As the measure developer, Acumen plans to convene a future TEP focused on chronic condition episode groups. This TEP will give guidance on developing chronic condition episode groups.

3.3 How were the conditions and procedures for the 11 episode-based cost measures in field testing chosen?

The measure development process, including selection of the 11 episode-based cost measures, involved extensive stakeholder input. Acumen convened Clinical Subcommittees composed of clinicians with experience in relevant clinical areas to select and provide detailed input on these measures.

As a starting point, Clinical Subcommittee members used the draft list of episode groups and episode trigger codes that was posted for public comment, as required by MACRA, in December 2016.[12] The Subcommittee members considered the following criteria, based on stakeholder feedback, to recommend 11 conditions and procedures for cost measure development:

(i) Potential impact on Medicare spending (e.g., number of beneficiaries impacted by the condition or procedure, number of clinicians and clinician groups attributed)
(ii) Clinical coherence (i.e., the degree to which a measure's patient population has a similar stage and severity of a particular illness or condition)
(iii) The measure's opportunity for improvement
(iv) The measure's opportunity for alignment with established quality indicators

3.4 How are episodes attributed to a clinician?

After episodes begin, or are triggered, clinicians are identified using the TIN field, along with NPI information in the "rendering provider" field on Part B Physician/Supplier (PB) claims. The method of attribution varies by episode type:

[12] CMS, "Draft List of MACRA Episode Groups and Trigger Codes", *MACRA Feedback Page,* https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/draft-list-of-care-episode-and-patient-condition-groups-and-codes.zip

- For procedural episode groups, episodes are attributed to the clinician(s) or clinician group(s) rendering the trigger services as identified by Current Procedural Terminology/Healthcare Common Procedure Coding System (CPT/HCPCS) procedure codes.
    - For example, an orthopedic surgeon billing CPT/HCPCS code 27130 would be attributed an Elective Primary Hip Arthroplasty episode. Additional conditions to trigger an episode may apply, for instance if occurring concurrent to an inpatient hospitalization.
- For acute inpatient medical condition episode groups, an episode is attributed to a clinician group rendering at least 30 percent of inpatient E&M services during an inpatient hospitalization with an MS-DRG for the episode group, and to clinicians who bill at least one inpatient E&M claim line under a TIN that meets the 30 percent threshold.
    - For example, for an internist to be attributed an episode for the Inpatient COPD Exacerbation measure:
        - The internist must bill at least one inpatient E&M PB claim line during the trigger inpatient hospitalization.
        - The PB claim line must be concurrent to an inpatient hospitalization with MS-DRG code 190 and must be accompanied by a relevant diagnosis as specified by the Clinical Subcommittee.
        - The internist must be part of a TIN that bills 30 percent of inpatient E&M codes on PB claim lines for that inpatient hospitalization.

3.5 What services are included in an episode?

After episodes are attributed to one or more clinicians, service assignment rules indicate which services will be used to calculate episode costs. Clinical Subcommittee members provided input on the services that should be included in episode costs based upon the clinical relevance of the services to the episode group and services that the attributed clinician could reasonably influence. All assigned services are either assigned:

(i) Because the service makes up the trigger event, or
(ii) Because of a service assignment rule.

For services that are assigned because the service makes up the trigger event (listed as (i) above), the following describes how the rules are applied for each type of episode group:

- For procedural episode groups, services are generally assigned if:
    - They are the triggering service on the trigger claim.
        - For example, if a Femoral or Inguinal Hernia Repair episode is triggered by CPT/HCPCS code 49505, this service will also be assigned to the episode.
    - They make up the trigger event.
        - For some procedural episode groups, this refers to both the triggering service on the trigger claim as well as the concurrent inpatient stay, if applicable, and its associated PB and Durable Medical Equipment, Prosthetics, Orthotics & Supplies (DMEPOS) services.
        - For example, if an Elective Primary Hip Arthroplasty episode is triggered by CPT/HCPCS code 27130, this service and the concurrent IP stay and its associated PB and DMEPOS services will be assigned to the episode.

- For acute inpatient medical condition episode groups, services are generally assigned if they make up the episode trigger.
    - Services such as the inpatient E&M services and inpatient stay comprising the episode trigger as well as any other concurrent PB and DMEPOS services during the stay).

For services that are assigned because of a service assignment rule (listed as (ii) above), services are assigned to the episode based on the episode group's service assignment rules. These rules were developed with consideration of detailed clinical input through the Clinical Subcommittee workgroups.

3.6 What is the purpose of risk adjustment?

We calculate risk-adjusted costs for each episode to try to get a more accurate cost comparison across clinicians by taking into account factors clinicians cannot control but that can affect cost. For example, risk adjustment takes into account factors like a beneficiary's:

- Illness severity
- Age
- Comorbidities

When we adjust for risk, we aim to isolate the variation in clinicians' costs to Medicare to those that clinicians can reasonably control. Accounting for these factors is one way to make sure the cost measures are valid and avoid unintended consequences. In other words, risk adjustment helps facilitate more accurate comparisons across clinicians by accounting for differences in factors outside of a clinician's control (such as the clinical complexity of their patients).

3.7 What risk adjustment methodology was used?

Risk-adjusted costs for each episode are calculated using two types of risk adjustors:

- Standard risk adjustors used commonly in risk adjustment for all of the episode-based cost measures. These standard risk adjustors include:
    - Factors included in the CMS Hierarchical Condition Category Version 22 2016 (CMS-HCC V22 2016) Risk Adjustment Model,[13] and
    - Additional standard variables, such as beneficiary age and original reason for enrollment in Medicare.
- Other risk adjustors recommended by each of the Clinical Subcommittee workgroups to include in each cost measure's risk adjustment model.

Detailed specifications (i.e., codes specifying each risk adjustment variable) can be found in each measure-specific Draft Measure Codes List file, which will be available on the MACRA Feedback Page at the start of field testing.[14]

[13] CMS uses a Hierarchical Condition Category (HCC) risk adjustment model to calculate risk scores. The HCC model ranks diagnoses into categories that represent conditions with similar cost patterns. Higher categories represent higher predicted healthcare costs, resulting in higher risk scores. There are 79 HCC codes included in the CMS-HCC V22 model. Some examples include Morbid Obesity, Dialysis Status, and Schizophrenia. For more information about this risk adjustment model, please refer to: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html.

[14] CMS, "Cost Measure Field Testing," *MACRA Feedback Page,* https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-Feedback.html.

3.8 How are the Episode-Based Cost Measures calculated?

To calculate the measures, we perform the following steps using all episodes in an episode group that are attributed to a clinician or clinician group:

Step 1: Determine observed costs for each episode by aggregating standardized allowed amounts for services determined to be clinically related to a given condition or procedure that occur within the episode window.

Step 2: Determine expected costs for each episode through risk adjustment by taking into account factors that are included in the CMS-HCC V22 2016 Risk Adjustment Model as well as additional risk adjustors recommended by Clinical Subcommittee workgroups for each episode group. If a measure has sub-groups, this includes only episodes within the same sub-group nationally.

Step 3: Divide the observed cost for each episode by the expected cost to obtain the observed/expected ratio for each episode.

Step 4*:* Sum the observed/expected ratios for all the episodes across the entire episode group (i.e., across all sub-groups) for the TIN or TIN-NPI.

Step 5*:* Divide by the total number of episodes attributed to the TIN or TIN-NPI across the episode group to obtain the average observed/expected ratio for all episodes.

- This average ratio's standing relative to 1 is what indicates whether a clinician's episodes cost more or less than expected on average.

Step 6: Multiply the result by the national average observed episode cost for all episodes across all sub-groups to obtain the cost measure score.

- This is done to convert the average ratio into a figure that is more meaningful from a cost perspective by having the clinician's average cost measure score represented as a dollar amount rather than a ratio.

4.0 Re-evaluated Measures

Medicare Spending Per Beneficiary (MSPB) Clinician Measure

4.1 What is the MSPB clinician measure?[15]

The re-evaluated MSPB clinician measure assesses the cost performance of clinicians who furnish inpatient care services to Medicare beneficiaries. The measure includes Medicare Parts A and B costs occurring during the episode window, removing certain services identified as unlikely to be influenced by the clinician's care decisions. As background, the current MSPB measure has been part of the MIPS cost performance category since the 2017 MIPS performance period. Prior to its current use in MIPS, CMS used a version of the MSPB measure in the Value Modifier Program and reported it in annual QRURs until MACRA ended the Value Modifier program. The measure that has been used in MIPS since the 2017 performance period assesses total Medicare Parts A and 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.

As part of measure maintenance and re-evaluation, the MSPB clinician measure has been refined through stakeholder input and is now being field tested. The MSPB clinician measure has been re-evaluated with substantial stakeholder feedback and represents a refinement of the MSPB measure that is in use for MIPS. This re-evaluated measure will be field tested in October 2018 and will not affect payment adjustments. It is separate from the reporting of the MIPS MSPB measure for the 2017 and 2018 MIPS performance periods.

4.2 Why is the MSPB measure being re-evaluated?

This measure is undergoing re-evaluation as a part of the standard measure maintenance process described in the CMS Measures Management System Blueprint.[16]

Refinements to MSPB clinician have focused on ensuring attributed clinicians are responsible for a patient's care during an episode and on removing certain services identified as unlikely to be influenced by the clinician's care decisions. These refinements were informed by stakeholder feedback on the MIPS version of the measure during prior public comment periods.

To address the stakeholder feedback received on this measure, Acumen gathered more targeted input through a TEP and an MSPB Service Refinement Workgroup. The TEP's role is to provide high level guidance on measure refinements, and discussed the measure at two in-person meetings in August 2017 and May 2018. The MSPB Service Refinement Workgroup's role is to provide detailed clinical input on service assignment rules and met twice in the summer of 2018.

The MSPB clinician measure shares similar concepts to the MSPB Hospital measure used in the Value Based Purchasing (VBP) program, but importantly, assesses the resource use of clinicians rather than hospitals. To account for the more limited yet focused sphere of influence

[15] For clarity, we differentiate the MSPB measure currently in use in MIPS and the MSPB measure currently undergoing re-evaluation by name. "MSPB" alone refers to the measure currently in use and "MSPB clinician" refers to the measure currently undergoing re-evaluation.
[16] CMS, "CMS Measures Management System Blueprint (Blueprint v 14.0)", https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/Downloads/BlueprintVer14.pdf.

of clinicians as opposed to hospitals, the re-evaluated MSPB clinician measure excludes certain services as informed through expert stakeholder input.

4.3 How is the re-evaluated MSPB clinician measure different from the MSPB measure currently used in MIPS?

The re-evaluated MSPB clinician measure shares the overall purpose of the current MIPS measure, which is to assess the cost performance of clinicians providing care to patients in the inpatient setting. The re-evaluated measure differs from the MIPS measure in two broad ways. First, the attribution method involves a new way to attribute medical and surgical episodes at the TIN level instead of the TIN-NPI level. Second, service assignment involves the removal of certain services identified as unlikely to be influenced by the clinician's care decisions.

4.4 How is the re-evaluated MSPB clinician measure attributed to a clinician?

The re-evaluated measure uses separate attribution methods for medical and surgical episodes to identify the clinician(s) responsible for providing these different types of care. Medical episodes are attributed to a clinician group that rendered at least 30 percent of E&M services during the period between the index admission date and the discharge date for a hospitalization with a medical MS-DRG, and to any clinician that billed at least one E&M service under a clinician group that meets the 30 percent threshold. Surgical episodes are attributed to the clinician and clinician group that rendered the main procedure of the stay as identified by the CPT/HCPCS code found on the PB claim concurrent to the surgical MS-DRG. The current MSPB measure attributes each episode to the clinician billing the plurality of costs for Medicare PB services rendered during an index admission.

4.5 What is the purpose of risk adjustment?

We calculate risk-adjusted costs for each episode to try to get a more accurate cost comparison across clinicians by taking into account factors clinicians cannot control but that can affect spending. For example, risk adjustment takes into account factors like a beneficiary's:

- Illness severity
- Age
- Comorbidities

When we adjust for risk, we aim to isolate the variation in clinicians' costs to Medicare to those that clinicians can reasonably control. Accounting for these factors is one way to make sure the cost measures are valid and avoid unintended consequences. In other words, risk adjustment helps facilitate more accurate comparisons across clinicians by accounting for differences in factors outside of a clinician's control (such as the clinical complexity of their patients).

4.6 What risk adjustment methodology was used?

Expected costs for each episode are calculated using a model based on the CMS-HCC V22 2016 Risk Adjustment Model for the Medicare Advantage program. There are additional modifications to the CMS-HCC V22 Risk Adjustment model that are specific to the MSPB clinician measure:

- A separate risk adjustment model is estimated for episodes within each MDC. The MDC is determined by the MS-DRG of the index hospital stay.

- The MSPB methodology does not adjust for sex, and includes 12 age categorical variables.
- The MSPB methodology includes individual indicator variables for history of ESRD, long-term care status, prior admission to an acute care hospital, and whether the beneficiary qualifies for Medicare through disability or age.

4.7 How is the re-evaluated MSPB clinician measure calculated?

The re-evaluated MSPB clinician measure is calculated through the steps below:

Step 1: Determine the observed costs for each episode by aggregating Medicare Parts A and Part B standardized allowed amounts for services that occur within the episode window, excluding certain services identified as unrelated to the reason for the index inpatient stay.

Step 2: Determine expected costs for each episode using a risk adjustment model based on the CMS-HCC V22 2016 Risk Adjustment model with additional modifications specific to the re-evaluated MSPB clinician measure as described above.

Step 3: Sum the ratio of payment-standardized observed cost (from Step 1) to expected cost (from Step 2) for all the MSPB episodes that are attributed to the TIN.

Step 4: Multiply the sum of ratios by the national average payment-standardized observed episode cost.

Step 5: Divide the result of Step 4 by the total number of MSPB episodes attributed to a given TIN.

Steps 3 through 5 together calculate an average ratio of observed to expected costs across episodes and multiply this ratio by a national average observed episode cost. This is done to convert the final figure (the cost measure score) into a figure that is more meaningful from a cost perspective.

Although steps 3 through 5 refer to measure calculation for the attributed TIN, analogous steps apply for calculation of TIN-NPI level cost measure score.

Total Per Capita Cost (TPCC) Measure

4.8 What is the TPCC Measure?

The re-evaluated TPCC measure assesses the cost performance of clinicians providing primary care management of Medicare beneficiaries. As background, the current TPCC measure has been part of the MIPS cost performance category since the 2017 MIPS performance period. Prior to its use in MIPS, CMS used a version of the TPCC measure in the Value Modifier Program and reported it in annual QRURs until MACRA ended the Value Modifier program. The measure currently used in MIPS is a payment-standardized, risk-adjusted, and specialty-adjusted cost measure focused on clinicians/clinician groups performing primary care services. Specifically, the measure is an average of per capita costs across all attributed beneficiaries, and includes all Medicare Parts A and B costs across all attributed beneficiaries.

As part of measure maintenance and re-evaluation, the TPCC measure has been refined through substantial stakeholder feedback and is now being field tested. The TPCC measure has been re-evaluated with substantial stakeholder feedback and represents a refinement of the TPCC measure that is in use for MIPS. This re-evaluated measure will be field tested in October 2018 and will not affect payment adjustments. It is separate from the reporting of the MIPS TPCC measure for the 2017 and 2018 MIPS performance periods.

4.9 Why is TPCC being re-evaluated?

This measure is undergoing re-evaluation as a part of the standard measure maintenance process described in the CMS Measures Management System Blueprint.[17]

Refinements to the TPCC measure have focused on attribution, to identify the clinicians responsible for the primary care management of patients during the measurement period. In particular, these refinements aim to account for the timing and pattern of care delivery in identifying a primary care relationship and allowing multiple clinicians and clinician groups to be attributed responsibility for a patient's primary care management. These refinements were informed by stakeholder feedback on the current MIPS version of the measure during prior public comment periods. The goal of these changes is to convey more actionable information to clinicians.

To address the stakeholder feedback received on this measure and to gather expert input, Acumen gathered more targeted input through a TEP. The TEP's role is to provide high level guidance on measure refinements, and discussed the measure at two in-person meetings in August 2017 and May 2018.

4.10 How is the re-evaluated TPCC measure different from the current MIPS TPCC measure?

The re-evaluated measure shares the purpose of the current MIPS measure, which is to assess the cost performance of clinicians providing primary care management to Medicare patients. The re-evaluated TPCC measure uses a refined attribution method intended to identify better the existence of a primary care relationship between clinicians and patients. In the attribution method for the current MIPS measure, beneficiaries are attributed to a single clinician in a two-

[17] CMS, "CMS Measures Management System Blueprint (Blueprint v 14.0)", https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/Downloads/BlueprintVer14.pdf.

step process that takes into account the level of primary care services received (as measured by the total number of primary care E&M services rendered during the measurement period) and the types of clinicians that performed these services. Additionally, the current MIPS measure is calculated by attributing to one clinician the costs from all Medicare Parts A and Part B claims for services provided to a given patient during the measurement period.

Key elements of attribution for the re-evaluated TPCC measure are distinct from the current MIPS measure. First, rather than using a provision of the highest amount of primary care services as the basis for attribution, the re-evaluated measure accounts for the overall pattern of primary care service delivery to identify the existence of a primary care relationship. Specifically, rather than treating all primary care E&M services as indicative of primary care, the revised measure only considers a subset of E&M services that are associated with a specific set of primary care services, or another E&M service rendered by the same TIN, to be potentially indicative of a primary care relationship. Second, the re-evaluated measure recognizes that some beneficiaries have primary care relationships with multiple TINs and TIN-NPIs and therefore allows attribution of a beneficiary's costs to multiple TINs and TIN-NPIs during the measurement period.

4.11 How is the re-evaluated TPCC measure attributed to a clinician?

As described above, the re-evaluated measure only attributes events (defined as primary care E&M services) that meet specified criteria. For example, the event will only be considered for attribution if the event is accompanied by another E&M or primary care service. Under the revised measure, each attributable event initiates a one-year risk window during which a beneficiary's costs may be attributable to a clinician. The portion of a beneficiary's costs billed within months (i.e., episodes)[18] that overlap both the measurement period and an open risk window with a clinician are attributed to that clinician. In cases where a beneficiary has multiple overlapping episodes associated with different clinicians in a single month, the beneficiary's costs for that month are attributed to each clinician associated with an episode that overlaps that month. However, a beneficiary's costs are only assigned to one clinician within a given clinician group, based on which clinician provided the most qualifying primary care events, or in the case of a tie, the clinician that provided the earliest qualifying primary care event.

4.12 What is the purpose of risk adjustment?

We calculate risk-adjusted costs for each episode to try to get a more accurate cost comparison across clinicians by taking into account factors clinicians cannot control but that can affect spending. For example, risk adjustment takes into account factors like a beneficiary's:

- Illness severity
- Age
- Comorbidities

When we adjust for risk, we aim to isolate the variation in clinicians' costs to Medicare to those that clinicians can reasonably control. Accounting for these factors is one way to make sure the cost measures are valid and avoid unintended consequences. In other words, risk adjustment helps facilitate more accurate comparisons across clinicians by accounting for differences in factors outside of a clinician's control (such as the clinical complexity of their beneficiaries).

[18] For the re-evaluated TPCC measure, an episode is a 4-week interval or partial interval associated with a beneficiary during the measurement period that is attributable to a clinician or clinician group based on overlap with a risk window.

4.13 What risk adjustment methodology was used?

The re-evaluated TPCC measure risk adjusts for beneficiary risk, as measured by the beneficiary's CMS-HCC V22 risk score.

The CMS-HCC model generates a risk score for each episode, which summarizes each beneficiary's expected cost of care relative to other beneficiaries in a given four-week period. There are a few notable points about the risk adjustment model used for TPCC:

- Separate CMS-HCC models exist for new enrollees, continuing enrollees, and enrollees in long-term institutional settings. 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 for beneficiaries with less than 12 months of Medicare medical history.
- The community model is used for beneficiaries with at least 12 months of Medicare 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.
- The institutional model is used for beneficiaries in long-term institutional settings. The institutional model includes demographic variables, clinical conditions as measured by HCCs, and various interaction terms.
- The calculated risk score is normalized by dividing by the national average risk score for all beneficiary months. A normalized CMS-HCC risk score of 1 indicates risk associated with expenditures for the average beneficiary nationwide. A normalized beneficiary risk score greater than 1 indicates above average risk, and a normalized risk score less than 1 indicates below average risk.
- There is an additional adjustment to normalize monthly costs for the number of TINs that a beneficiary sees during a month.

4.14 How is the re-evaluated TPCC measure calculated?

The TPCC measure is calculated through the steps below:

Step 1: Determine observed costs for each episode in the measurement period by aggregating Parts A and Part B standardized allowed amounts for services that occur within the episode.

Step 2: Determine risk-adjusted costs for each episode in the measurement period by dividing the observed costs by the normalized CMS-HCC risk score described above. For episodes with partial coverage, risk-adjusted costs are pro-rated according to the portion of the period during which the TIN or TIN-NPI was attributed to the beneficiary.

Step 3: Trim outliers by assigning the 99th percentile of monthly costs to all episodes in the measurement period with costs at or above the 99th percentile of costs.

Step 4: Normalize risk-adjusted, trimmed costs by applying an adjustment factor to account for differences in expected monthly costs related to the number of clinician groups a beneficiary sees in a given month.[19]

Step 5*:* Sum normalized, risk-adjusted monthly costs for all episodes attributed to the TIN or TIN-NPI.

[19] Specifically, monthly costs are divided by the cube root of the number of clinician groups to which a beneficiary is attributed for a month.

***Step 6**:* Divide by the total number of episodes attributed to the TIN or TIN-NPI to obtain the average risk-adjusted, normalized cost for all episodes.

Measure calculation for a TIN or TIN-NPI is completed with the calculation of Step 6 above. The measure constructed via the above steps can be conceptualized as the sum of risk-adjusted total monthly costs across all attributed episodes for a TIN or TIN-NPI, divided by the number of attributed episodes for the TIN or TIN-NPI.

Where can I get more information?

Should you have further questions, please contact the Quality Payment Program Service Center via telephone at 1-866-288-8292 or via email at qpp@cms.hhs.gov. The Help Desk is available Monday – Friday, 8:00 A.M. – 8:00 P.M. Eastern Time Zone.