

# Quality Payment PROGRAM

## Merit-based Incentive Payment System (MIPS)

Participating in the Cost Performance  
Category in the 2022 Performance  
Year: Traditional MIPS



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**Purpose:** This detailed resource focuses on performance year 2022 MIPS cost performance category requirements. This resource doesn't address requirements under the Alternative Payment Model (APM) Performance Pathway (APP).





## How to Use This Guide



**Please note:** This guide was prepared for informational purposes only and isn't intended to grant rights or impose obligations. The information provided is only intended to be a general summary. It isn't intended to take the place of the written law, including the regulations. We encourage readers to review the specific statutes, regulations, and other interpretive materials for a full and accurate statement of their contents.

## Table of Contents

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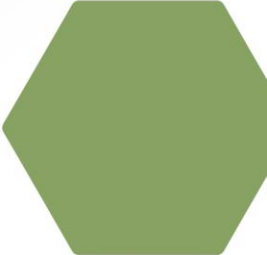
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## Hyperlinks

Hyperlinks to the [Quality Payment Program website](#) are included throughout the guide to direct the reader to more information and resources.



# Overview



## COVID-19 and 2022 Participation

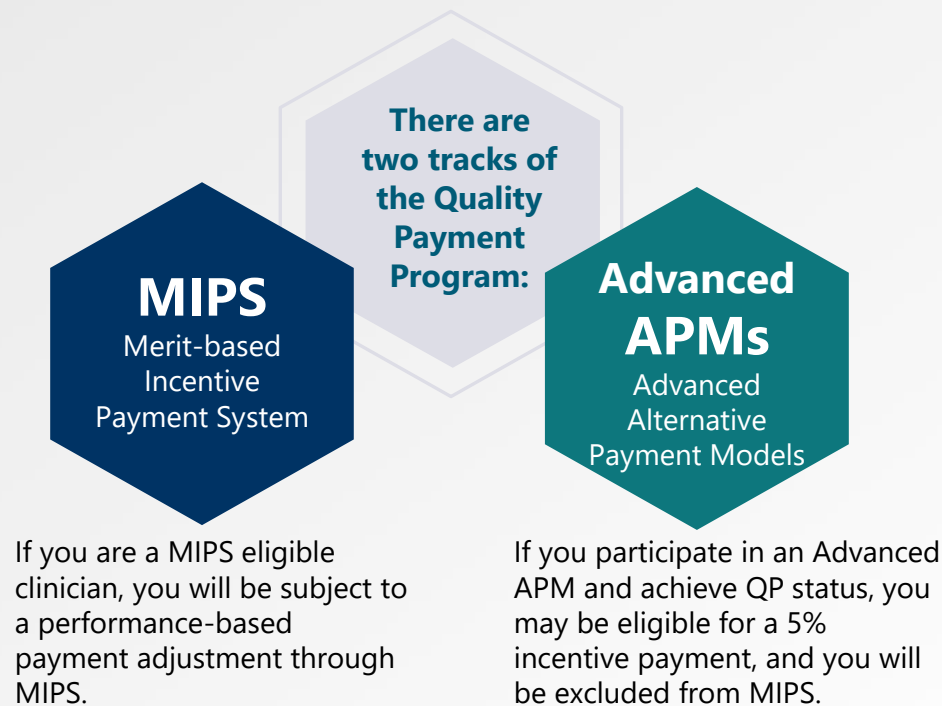
The 2019 Coronavirus (COVID-19) public health emergency continues to impact clinicians across the United States and territories. However, we recognize that not all practices have been impacted by COVID-19 to the same extent. For the 2022 performance year, we'll continue to use our Extreme and Uncontrollable Circumstances policy to allow MIPS eligible clinicians, groups, virtual groups, and APM Entities to [submit an application](#) requesting reweighting of one or more MIPS performance categories to 0% due to the current COVID-19 public health emergency. The application will be available in spring of 2022 along with additional resources.

For more information about the impact of COVID-19 on Quality Payment Program (QPP) participation, see the [QPP COVID-19 Response webpage](#).



## 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. MACRA advances a forward-looking, coordinated framework for clinicians to successfully participate in the QPP, which rewards value in 1 of 2 ways:



**\*Note:** If you participate in an Advanced APM and don't achieve QP or Partial QP status, you will be subject to a performance-based payment adjustment through MIPS unless you are otherwise excluded.

## What is the Merit-based Incentive Payment System?

The Merit-based Incentive Payment System (MIPS) is one way to participate in the Quality Payment Program (QPP), a program authorized by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). The program describes how we reimburse MIPS eligible clinicians for Part B covered professional services and rewards them for improving the quality of patient care and outcomes.

Under MIPS, we evaluate your performance across multiple categories that lead to improved quality and value in our healthcare system.

If you're eligible for MIPS in 2022:

- You generally have to submit data for the [quality](#), [improvement activities](#), and [Promoting Interoperability](#) performance categories. (We collect and calculate data for the [cost](#) performance category for you.)
- Your performance across the MIPS performance categories, each with a specific weight, will result in a MIPS final score of 0 to 100 points.
- Your MIPS final score will determine whether you receive a negative, neutral, or positive MIPS payment adjustment.
- Your MIPS payment adjustment is based on your performance during the 2022 performance year and applied to payments for covered professional services beginning on January 1, 2024.

### To learn more about how to participate in MIPS:

- Visit the [How MIPS Eligibility is Determined](#) and [Participation Options Overview](#) webpages on the [Quality Payment Program website](#).
- View [the 2022 MIPS Eligibility and Participation Quick Start Guide \(PDF\)](#).
- Check your current MIPS participation status using the [QPP Participation Status Tool](#).



## What is the Merit-based Incentive Payment System? (Continued)

**Traditional MIPS**, established in the first year of the QPP, is the original framework for collecting and reporting data to MIPS.

Under the traditional MIPS, participants select from 200 quality measures and over 100 improvement activities, in addition to reporting the complete Promoting Interoperability measure set. We collect and calculate data for the cost performance category for you.

In addition to traditional MIPS, 2 other MIPS reporting frameworks, designed to reduce reporting burden, will be available to MIPS eligible clinicians.

- The **APM Performance Pathway (APP)** is a streamlined reporting framework available beginning with the 2021 performance year for MIPS eligible clinicians who participate in a MIPS APM. The APP is designed to reduce reporting burden, create new scoring opportunities for participants in MIPS APMs, and encourage participation in APMs.
- **MIPS Value Pathways (MVPs)** are subsets of measures and activities, established through rulemaking, that can be used to meet MIPS reporting requirements beginning with the 2023 performance year. The MVP framework aims to align and connect measures and activities across the quality, cost, and improvement activities performance categories of MIPS for different specialties or conditions. In addition, MVPs incorporate a foundational layer that leverages Promoting Interoperability measures and a set of administrative claims-based quality measures that focus on population health/public health priorities. **There are currently 7 MVPs that will be available for reporting in the 2023 performance year:**

1. Advancing Rheumatology Patient Care
2. Coordinating Stroke Care to Promote Prevention and Cultivate Positive Outcomes
3. Advancing Care for Heart Disease
4. Optimizing Chronic Disease Management
5. Adopting Best Practices and Promoting Patient Safety within Emergency Medicine
6. Improving Care for Lower Extremity Joint Repair
7. Support of Positive Experiences with Anesthesia

We encourage clinicians interested in reporting an applicable MVP to become familiar with the MVP's requirements in advance of the 2023 performance year. For more information on the finalized MVPs, please refer to the CY 2022 Physician Fee Schedule Final Rule. We'll also be adding more information to [MIPS Value Pathways section of the QPP website](#).

## What is the Merit-based Incentive Payment System? (Continued)

### To learn more about the APP:

- Visit the [APM Performance Pathway \(APP\) webpage](#) on the Quality Payment Program website.
- View the following:
  - [2021 APM Performance Pathway \(APP\) for MIPS APM Participants Fact Sheet \(PDF\)](#);
  - [2021 APM Performance Pathway \(APP\) Infographic \(PDF\)](#);
  - [2021 APM Performance Pathway Quick Start Guide \(PDF\)](#).

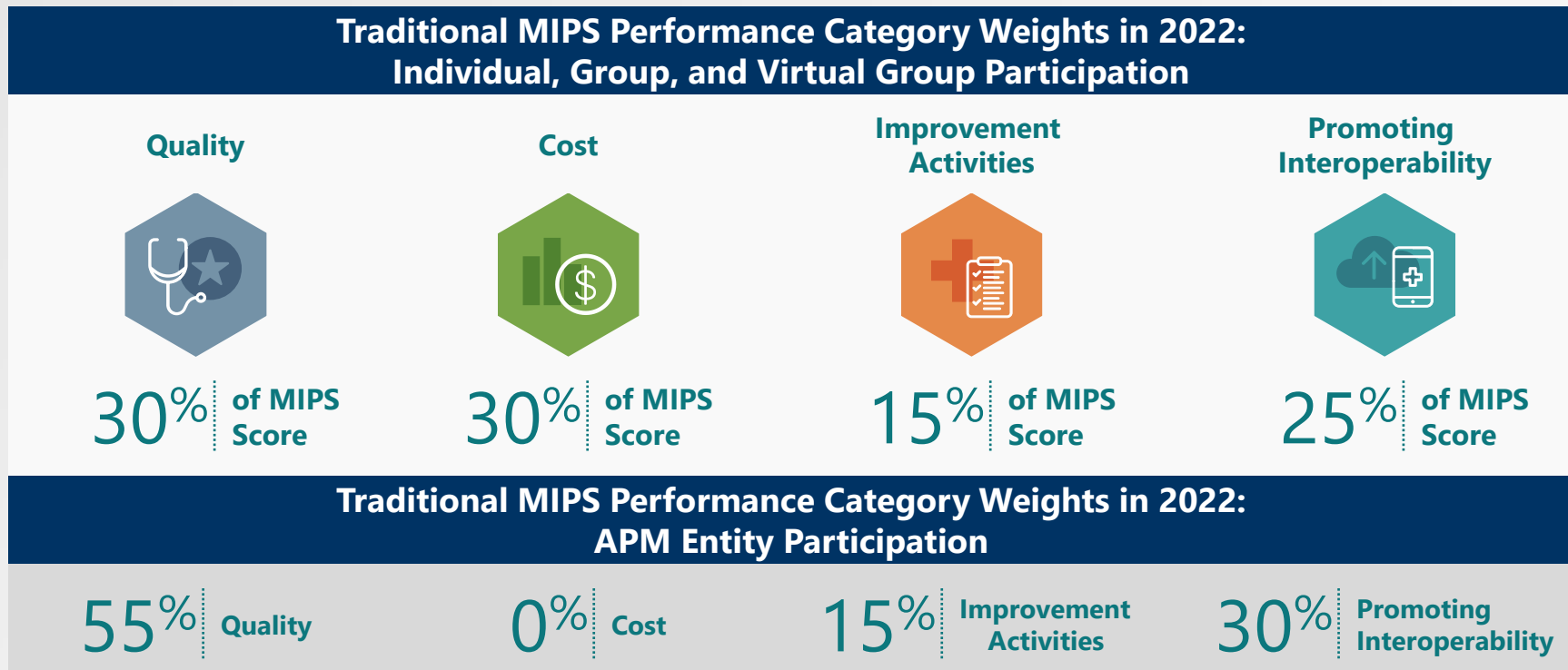
### To learn more about MVPs:

- Visit the [MIPS Value Pathways \(MVPs\) webpage](#) on the Quality Payment Program website.



## What is the Merit-based Incentive Payment System? (Continued)

This guide focuses on the **cost** performance category under traditional MIPS for the 2022 performance year of the QPP.



For information about the cost performance category under the APP, please refer to the [2021 APM Performance Pathway \(APP\) for MIPS APM Participants Fact Sheet \(PDF\)](#) or the [2021 APM Performance Pathway Quick Start Guide \(PDF\)](#). For more information on participating in an APM, visit our [APMs Overview webpage](#) and check out our APM-related resources in the [QPP Resource Library](#).



## **Cost Performance Category Basics**

## Overview

CMS uses Medicare claims data to calculate cost measure performance, which means clinicians don't have to submit any data for this performance category.

**A total of 25 cost measures are available to evaluate cost category performance in the 2022 MIPS performance year**

**23 episode-based measures**

**Total Per Capita Cost (TPCC) measure**

**Medicare Spending Per Beneficiary Clinician (MSPB Clinician) measure**

**5 new measures were finalized for the 2022 performance period and beyond:**

- **Melanoma resection**
- **Colon and rectal resection**
- **Sepsis**
- **Asthma/COPD \***
- **Diabetes \***

\* Represents chronic condition episode-based measures.

## Overview (Continued)

Each measure is payment-standardized and risk-adjusted. All of the cost measures use the standard CMS-Hierarchical Condition Categories (HCC) risk adjustment model as a starting point, and the 23 episode-based cost measures include additional measure-specific risk adjusters informed by clinician expert workgroups that provided recommendations during the development of the measures.

In addition, the TPCC measure is also specialty-adjusted.

Each cost measure is attributed to clinicians according to the measure's unique specifications.

### Two measure specifications documents are available for each cost measure:

1. [A Measure Information Form \(MIF\) Excel file](#), and
2. [A measure codes list Excel file](#).

The MIF describes the methodology used to construct each measure. The measure codes list file contains service codes and clinical logic used in the methodology, including episode triggers, exclusion categories, episode subgroups, assigned items and services, and risk adjusters.

## Overview (Continued)

The following table summarizes the 25 cost measures available in performance year 2022:

Measure Name/Type	Description	Case Minimum	Data Sources
<a href="#"><u>Medicare Spending Per Beneficiary Clinician (MSPB Clinician)</u></a>	This population-based measure assesses the cost of care for services related to qualifying inpatient hospital stay (immediately prior to, during, and after) for a Medicare patient.	35 episodes	Medicare Parts A and B claims data
<a href="#"><u>Total Per Capita Cost (TPCC)</u></a>	This population-based measure assesses the overall cost of care delivered to a Medicare patient with a focus on primary care received.	20 Medicare patients	Medicare Parts A and B claims data
<b>15 procedural episode-based measures</b>	Assess the cost of care that's clinically related to a specific procedure provided during an episode's timeframe.	10 episodes for all procedural episode-based measures <b>except</b> the Colon and Rectal Resection measure which has a case minimum of 20 episodes.	Medicare Parts A and B claims data
<a href="#"><u>6 acute inpatient medical condition episode-based measures</u></a>	Assess the cost of care clinically related to specific acute inpatient medical conditions and provided during an episode's timeframe.	20 episodes for acute inpatient medical condition episode-based measures	Medicare Parts A and B claims data (and also Part D for the Sepsis measure)
<a href="#"><u>2 chronic condition episode-based measures</u></a>	Assess the cost of care clinically related to the care and management of patients' specific chronic conditions provided during a total attribution window divided into episodes.	20 episodes for chronic condition episode-based measures	Medicare Parts A, B and D claims data

In performance year 2021, the TPCC and 18 episode-based cost measures codes lists were updated for telehealth services.



## Cost Basics

Certain features apply to the TPCC, MSPB Clinician, and procedural, acute inpatient medical condition, and chronic condition episode-based measures. These include:

- **Payment Standardization** – Payments included in MIPS cost measures are payment-standardized (sometimes referred to as “price standardized”). Payment standardization is the process of adjusting the allowed charge for a Medicare service to facilitate comparisons of resource use across geographic areas. This allowed charge for a single service, referred to as the Medicare allowed amount, differs to accommodate varying input costs, such as local wages, and to address policy goals, such as add-on payments in underserved geographic areas. CMS uses payment standardization to assign a comparable allowed amount for the same service provided by different providers and/or in different settings to reveal differences in spending that result only from care decisions and resource use. More details about payment standardization are available on [ResDAC's CMS Price \(Payment\) Standardization Overview Page](#).
  - The methodology for incorporation of rebates in Part D standardized amounts in the calculation of MIPS cost measures is described in this [resource](#).

The allowed charge for a single Medicare service can vary across geographic areas due to several factors, such as:

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

The Medicare “allowed charge,” which is also referred to as the “allowed amount,” includes Medicare trust fund payments, payments from third-party payers, and patient deductibles and coinsurance.



## Cost Basics (Continued)

- **Benchmarks** – CMS calculates a single, national benchmark for each cost measure. These benchmarks are based on the performance year, not a historical baseline period. All MIPS eligible clinicians that meet or exceed the case minimum for a measure are included in the same benchmark. CMS will publish these benchmarks in summer 2023 once final performance feedback is available. For example, see the [2018 and 2019 MIPS Cost Measure Benchmarks \(ZIP file\)](#). Please note: We reweighted the cost performance category from 15% to 0% for the 2020 performance year. As a result, no 2020 cost measure performance period benchmark data was published.

**For Example:** The MSPB Clinician benchmark used to determine MIPS eligible clinicians' 2022 cost performance category score will be based on 2022 claims data.

- **Attribution** – calculation of claims-based measures requires the attribution (or assignment) of patients' treatment costs to clinicians so that those costs can be evaluated through a specific measure. Each measure employs its own attribution method, described in detail in the [2022 Cost Measure Information Forms \(ZIP file\)](#) for each measure.
- **Risk Adjustment** – accounts for differences in patient characteristics (such as clinical risk factors) that aren't directly related to patient care but may influence the cost of care provided. All measures included in the cost performance category are adjusted for clinical risk. CMS uses a 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 over 9,500 ICD-10-CM codes that map to one or more of the 79 HCC codes included in the CMS-HCC V22 model. However, the risk factors used in addition to the CMS-HCC risk adjustment model for each measure's risk adjustment method vary.

Risk adjustment shouldn't 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. CMS uses an HCC risk adjustment model to calculate risk scores.

**TIP:** The risk adjustment model includes variables from the CMS-HCC V22 2016 Risk Adjustment Model, as well as other standard risk adjusters (e.g., patient age) and variables for clinical factors that may be outside the attributed clinician's reasonable influence. A full list of risk adjustment variables can be found in the "RA" and the "RA\_Details" tabs of the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#).





# Cost Measures



## Medicare Spending Per Beneficiary Clinician (MSPB Clinician) Overview

**This section of the document describes the major components of the MSPB Clinician measure. For additional detail, please refer to the 2022 MSPB Clinician MIF and the associated measure codes list file.**

The MSPB Clinician attribution method distinguishes between surgical episodes and medical episodes. MSPB Clinician episodes are identified as surgical or medical by the Medicare Severity Diagnosis Related Group (MS-DRG) of the inpatient hospital admission (referred to as the “index admission.”)

- **Medical MSPB Clinician episodes are attributed to clinicians in 2 steps:**

1. The episode is first attributed to the Taxpayer Identification Number (TIN) that billed at least 30% of the inpatient evaluation & management (E&M) services listed on Part B physician/supplier claims during the inpatient stay, which includes the time period beginning on the day of admission through the day of discharge. The time period used for this step of episode attribution doesn't include the 3 days prior to the index admission, the 90-day lookback period, or 30 days after discharge. This step is referred to in the codes list file documentation as the “30% E&M Threshold” attribution rule and/or the “E&M attribution rule.”

**TIP:** To see which Current Procedural Terminology (CPT)/ Healthcare Common Procedure Coding System (HCPCS) codes qualify as E&M services used for this purpose, refer to the “Med\_Attribution\_E&M” tab in the 2022 PY MSPB Clinician Codes List Excel in the [2022 MIPS Cost Measure Codes Lists \(ZIP\)](#).

2. The episode is then attributed to any clinician in the TIN who billed at least one inpatient E&M service that was used to attribute the episode to the TIN.

- **Surgical MSPB Clinician episodes are defined as episodes in which the index admission has a surgical MS-DRG.** These episodes are attributed to any clinician(s) who performed related surgical procedures during the inpatient stay and to the TIN under which the clinician(s) billed for the procedure. This step is referred to in the codes list file documentation as the “Major CPT/HCPCS attribution rule” and/or the “relevant CPT/HCPCS attribution rule.”

**TIP:** To see which CPT/HCPCS codes are used to attribute episodes with surgical MS-DRGs to a clinician or group through the relevant CPT/HCPCS attribution rule, see the “Surg\_Attribution\_CPT\_HCPCS” tab of the MSPB Clinician Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP\)](#).

**TIP:** Refer to the “Attribution Rule” tab of the MSPB Clinician Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#) to view which attribution rule is used for episodes, categorized by the Base DRG of the episodes' index admission. A Base DRG combines all levels of severity for a particular condition (represented by MS-DRGs) into a single category.

## Medicare Spending Per Beneficiary Clinician (MSPB Clinician) Overview (Continued)

Costs that are unlikely to be influenced by clinicians' care decisions are removed from the MSPB Clinician measure using service exclusions. The specific services excluded from measurement depend on the Major Diagnostic Category (MDC) of the episode's index admission. The MDC of the index admission is determined by the MS-DRG of the index admission.

**TIP:** See the "SE\_General\_Rules" tab of the MSPB Clinician Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP\)](#) to find the general service exclusion rules that apply to all episodes. For example, all home health services provided 3 days prior to the index admission and during the index admission are excluded from medical and surgical MSPB clinician episodes. As another example, all hospice services provided 3 days prior to the index admission, during the index admission, and 30 days post discharge are excluded.

The MSPB Clinician measure assesses Medicare Parts A and B costs incurred by a single patient during an episode window, which is the period of time beginning **3 days before an index admission through 30 days after hospital discharge**.



**TIP:** Additional service exclusion rules are applied to MSPB Clinician episodes based on the MDC of the episodes' index admission. Specifically, certain services provided during the post-trigger period of the episode window are excluded. The post-trigger period includes the inpatient stay and 30 days post-discharge. These services are grouped into the following categories (each with a dedicated tab in the codes list file):

- Inpatient surgical services
- Inpatient medical services
- Outpatient facility and clinician services
- Durable medical equipment, prosthetics, orthotics and supplies (DMEPOS)

For example, the "SE\_Post\_IP\_Surg" tab of the MSPB Clinician codes list file presents the services excluded from episodes for the IP - Surgical service category during the post-trigger period of the episode window.

## MSPB Clinician Beneficiary Exclusion Criteria

### A patient is excluded from the population measured if they:

- Weren't enrolled in Medicare Parts A and B during the 93-day period prior to the index admission through 30 days after discharge.
  - This time frame includes an additional 90-days (referred to as the "90-day lookback period") because this period is used to identify a patient's comorbidities used in risk adjustment
- Were enrolled in a private Medicare health plan (such as a Medicare Advantage or a Medicare private fee-for-service plan) at any time during the episode window or the 90-day lookback period.
- Resided outside the United States (including territories) during any month of the performance year.

### Episodes are also excluded if the **index admission**:

- Didn't occur in a "subsection (d) hospital<sup>1</sup>" paid under the Inpatient Prospective Payment System (IPPS) or an acute care hospital in Maryland.
- Was involved in an acute-to-acute hospital transfer<sup>2</sup>.

<sup>1</sup> Subsection (d) hospitals don't include: psychiatric hospitals, rehabilitation hospitals, children's hospitals, long-term care hospitals, and hospitals involved extensively in the treatment for or research on cancer.

<sup>2</sup> 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 clinician episode.



## MSPB Clinician Case Minimum

The case minimum for the MSPB Clinician measure is 35, meaning 35 total MSPB Clinician episodes (surgical and/or medical) must be attributed to a MIPS eligible clinician or group for the measure to be scored. For groups, a total of 35 MSPB Clinician episodes must be attributed across all MIPS eligible clinicians who have re-assigned their billing rights to the group's TIN.

A clinician participating in MIPS as an individual won't receive an MSPB Clinician measure score if the clinician doesn't bill Medicare for Part B physician/supplier services furnished to patients during hospital stays and therefore doesn't meet the case minimum.

## MSPB Clinician Risk Adjustment

The MSPB Clinician measure is risk-adjusted to account for patient age, comorbidities, disability, and illness severity.

A separate risk adjustment model is estimated for MSPB Clinician episodes within each MDC (determined by the MS-DRG of the index admission). This allows for more accurate comparisons of predicted episode spending between clinicians treating patients with similar characteristics. Pre-existing patient characteristics are identified using Parts A and B claims that end in the episode's 90-day lookback period.

A patient's illness severity is determined by the following indicators:

- 79 HCC indicators<sup>3</sup> from a patient's claims during the 90-day period before the start of the episode
- Recent long-term care status
- End-stage renal disease (ESRD) status
- Prior acute hospital admission
- Comorbidities (the presence of more than one simultaneous clinical condition) by including interactions between HCC variables and enrollment status variables
- The reason a patient qualified for Medicare—referred to as "entitlement category"
- Disease interactions that are included in the Medicare Advantage (MA) risk adjustment model

**NOTE:** The MSPB measure isn't adjusted to account for sex, race, nor provider specialty.

**TIP:** Refer to the "RA\_Vars" tab of the MSPB Clinician codes list file for the variables used in the risk adjustment model for this measure.



## MSPB Clinician Calculation

The MSPB Clinician measure is calculated through the following steps:

- **Step 1:** Define the population of index admissions
- **Step 2:** Attribute the episode to a clinician group/clinician
- **Step 3:** Exclude clinically unrelated services and calculate the episode observed costs
- **Step 4:** Exclude episodes
- **Step 5:** Calculate expected episode costs through risk adjustment
- **Step 6:** Calculate the measure score

The MSPB Clinician measure is calculated for each clinician (TIN-National Provider Identifier (NPI)) or group (TIN) by first calculating the ratio of standardized observed episode costs to final expected episode costs and then multiplying the average cost ratio across episodes for each TIN or TIN-NPI by the national average standardized episode cost. Multiplying the resulting ratio by the national average cost per episode converts the ratio into a more meaningful dollar amount. This dollar amount is then converted into points by comparing the score to a performance period benchmark. The points contribute to an overall cost performance category score.

$$\text{Individuals} = \frac{\text{Sum of Ratios}^* \times \text{National Average}}{\text{Total \# of MSPB Episodes}^{**}}$$

\*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

$$\text{Groups} = \frac{\text{Sum of Ratios}^* \times \text{National Average}}{\text{Total \# of MSPB Episodes}^{**}}$$

\*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

**TIP:** For more detailed information, see the 2022 MIPS MSPB Clinician MIF in the [2022 MIPS Cost Measure Information Forms \(ZIP file\)](#).

## Total Per Capita Cost (TPCC)

**This section of the document describes the major components of the TPCC measure. For additional detail, please refer to the PY 2022 TPCC MIF and the associated measure codes list file.**

The TPCC measure is intended to assess the impact of primary care management on health care costs.

The measure is attributed to clinicians using 4 steps:

### Step 1: Identify Candidate Events

- A candidate event indicates the start of a primary care relationship between a clinician and patient. Each candidate event is composed of 2 parts:
  1. An initial "E&M primary care service" HCPCS/CPT code (there are 49 of them) billed on a Part B physician/supplier (aka "carrier") claim **AND**
  2. **EITHER** another primary care service (which doesn't have to be from the list of 49 "E&M primary care services") from any TIN occurring within 3 days prior or 3 days after the initial qualifying E&M primary care service **OR** a second E&M primary care service or another primary care service from the same TIN within 90 days after the initial E&M primary care service. Candidate events (in the form of beneficiary-months) are then attributed to TIN-NPIs based on their involvement in the candidate event.

**TIP:** See the "E&M\_Prim\_Care" tab in the TPCC Measure Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#) for the list of E&M primary care services codes used to identify the first part of a candidate event. Some examples include codes for "New patient office or other outpatient visit, typically 60 minutes," and "Physician telephone patient service, 11-20 minutes of medical discussion." See the "Prim\_Care\_Services" tab for a list of CPT/HCPCS codes for primary care services used to identify the second part of a candidate event.



## Total Per Capita Cost (TPCC) (Continued)

### Step 2: Apply Service Category & Specialty Exclusions

- A TIN-NPI and their candidate events are removed from attribution if a clinician meets any of the following 4 service category thresholds for the same patient:
  - At least 15% of the clinician's candidate events are comprised of 10-day or 90-day global surgery services.
  - At least 5% of the clinician's candidate events are comprised of anesthesia services.
  - At least 5% of the clinician's candidate events are comprised of therapeutic radiation services.
  - At least 10% of the clinician's candidate events are comprised of chemotherapy services.
- Clinicians who are identified by one or more of the following 56 Health Care Finance Administration (HCFA) Specialty designation codes are excluded from TPCC measure attribution. The HCFA specialty codes used for this purpose are found on Medicare Part B physician/supplier claims and are assigned by Medicare Administrative Contractors (MACs) when processing payment, based on the corresponding provider identification numbers. HCFA specialty codes aren't sourced from the [Medicare Provider Enrollment, Chain, and Ownership System \(PECOS\)](#) database. Part B Physician/Supplier claims from up to one year prior to the start of the performance period to the end of performance period are used to identify HCFA specialty codes.

**TIP:** The CPT/HCPCS codes used for each of the service category exclusions are located in the tabs of the TPCC Measure Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#) labeled: "HCPCS\_Surgery," "HCPCS\_Anesthesia," "HCPCS\_Ther\_Rad," and "HCPCS\_Chemo."

## Total Per Capita Cost (TPCC) (Continued)

HCFA Code	HCFA Code Description
04	Otolaryngology
05	Anesthesiology
07	Dermatology
09	Interventional Pain Management
13	Neurology
14	Neurosurgery
15	Speech Language Pathologists
18	Ophthalmology
19	Oral Surgery (dentists only)
20	Orthopedic Surgery
21	Cardiac Electrophysiology
22	Pathology
23	Sports Medicine
24	Plastic and Reconstructive Surgery
25	Physical Medicine and Rehabilitation
26	Psychiatry
27	Geriatric Psychiatry
28	Colorectal Surgery (formerly proctology)
30	Diagnostic Radiology
33	Thoracic Surgery
34	Urology
35	Chiropractic
36	Nuclear Medicine
37	Pediatric Medicine
40	Hand Surgery
41	Optometry
42	Certified Nurse Midwife (effective July 1, 1988)
43	Certified Registered Nurse Anesthetist (CRNA)
48	Podiatry
64	Audiologist (Billing Independently)

## Total Per Capita Cost (TPCC) (Complete)

HCFA Code	HCFA Code Description
65	Physical Therapist in Private Practice
67	Occupational Therapist in Private Practice
68	Clinical Psychologist
71	Registered Dietician/Nutrition Professional
72	Pain Management
76	Peripheral Vascular Disease
77	Vascular Surgery
78	Cardiac Surgery
79	Addiction Medicine
80	Licensed Clinical Social Worker
81	Critical Care (Intensivists)
85	Maxillofacial Surgery
86	Neuropsychiatry
91	Surgical Oncology
92	Radiation Oncology
93	Emergency Medicine
94	Interventional Radiology
C0	Sleep Medicine
C3	Interventional Cardiology
C5	Dentist
C6	Hospitalist
C8	Medical Toxicology
C9	Hematopoietic Cell Transplantation and Cellular Therapy
D3	Medical Genetics and Genomics
D4	Undersea and Hyperbaric Medicine
65	Physical Therapist in Private Practice
67	Occupational Therapist in Private Practice
68	Clinical Psychologist
71	Registered Dietician/Nutrition Professional
72	Pain Management

**TIP:** The list of HCFA Specialty codes identifying clinicians that are included or excluded from TPCC measure attribution is found on the "Eligible\_Clinicians" tab of the TPCC Measure Codes List in the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#).

## Total Per Capita Cost (TPCC) (Complete)

### Step 3: Construct Risk Windows

- A risk window begins on the date of the initial E&M primary care service of a candidate event (in other words, candidate events “initiate” risk windows). A risk window is a 12-month period.
- As a result, a risk window could span multiple performance periods. For example, a risk window could begin on July 1, 2022 and end on July 1, 2023. Only the 2022 performance period beneficiary months that overlap with the risk window (July, August, September, October, November, and December of 2022) are attributable to a clinician or group.

### Step 4: Attribute Beneficiary Months to TINs and TIN-NPIs

For purposes of calculating the TPCC measure, the performance period (which is the static 2022 calendar year) is divided into 13, four-week blocks called beneficiary months.

- Only the beneficiary months that occur during a risk window **and** the performance period are attributable (i.e., count towards a clinician or group’s measure score).
- These beneficiary months are attributed to the TIN billing the initial E&M “primary care” service. For TIN-NPI-level attribution, only the TIN-NPI responsible for the plurality (largest share) of candidate events provided to the patient within the TIN is attributed the beneficiary months.
- **What other rules are used to attribute patient costs to clinicians and groups for the TPCC measure?**
  - If 2 different clinician groups each initiate risk windows for the same patient, the 2 risk windows will occur concurrently and will be attributed to their respective TINs. Within an attributed TIN, the beneficiary months will be attributed to the TIN-NPI combination that performed the highest number of candidate events for the patient.
  - Multiple TINs may be attributed beneficiary months for the same patient during a performance period.
  - Clinicians billing under different TINs may be attributed beneficiary months during the same performance period for the same patient.
  - The same clinician can be attributed beneficiary months for the same patient, spanning multiple performance periods, if multiple candidate events open multiple risk windows.

## TPCC Beneficiary Exclusion Criteria

### A patient is excluded from the population measured if they:

- Weren't enrolled in both Medicare Parts A and B for every month of the performance year.
- Were enrolled in a private Medicare health plan (such as a Medicare Advantage or a Medicare private fee-for-service (FFS) plan) during any month of the performance year.
- Resided outside the United States (including territories) during any month of the performance year.
- Are covered by the Railroad Retirement Board.

If a patient was enrolled in Medicare Parts A and B for a partial year because they were newly enrolled in Medicare or they died during the performance year, then the patient is included in the measure.

## TPCC Case Minimum

Clinicians and groups will only be scored on the measure if they're attributed beneficiary months across at least 20 patients.

## TPCC Risk Adjustment

To account for patient risk factors that can affect medical costs, patients' monthly costs are risk adjusted via the following steps:

- A risk score is generated for each beneficiary month using diagnostic data from the 12 months immediately preceding each beneficiary month. For example, to determine the risk score for a beneficiary month of August 2022, diagnostic data from August 2021 to July 2022 will be used. A patient's risk score summarizes their expected cost of care relative to other patients.

**TIP:** The "HCC\_Risk\_Adjust" tab in the TPCC codes list file contains the variables included in the CMS-HCC V22 2016 Risk Adjustment model and in the CMS-ESRD Version 21 (CMS-ESRD V21) 2016 Risk Adjustment model that are used for new enrollees, continuously enrolled beneficiaries, beneficiaries in a long-term institutional setting, as well as enrollees with ESRD, respectively. Risk adjustors for dual-eligibility and sex are included in the revised TPCC measure.

## TPCC Specialty Adjustment

Specialty adjustment is applied to the TPCC measure to account for the fact that costs vary across specialties and across TINs with differing specialty compositions. As noted earlier, specialty adjustment differs from risk adjustment because it's performed at the provider level rather than the patient level.

**TIP:** See Appendix E of the 2022 TPCC MIF for an example of how specialty adjustment is applied to the TPCC measure.

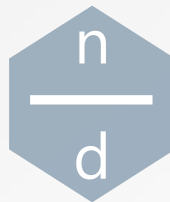
## TPCC Measure Calculation

After the 4-step attribution process, the TPCC measure is calculated through the following steps:



**NOTE:** The TPCC measure score is expressed as a dollar amount. It's calculated by dividing each TIN and TIN-NPI's average, risk-adjusted monthly cost by their specialty adjustment factor, resulting in a ratio. This ratio is then multiplied by the average, non-risk-adjusted, winsorized, observed cost across the total population of attributed beneficiary months to convert the ratio into a dollar figure.

**REMEMBER:** Your TPCC measure score (expressed as a dollar amount) will be compared to the 2022 benchmark to determine how many achievement points the measure will receive (between 1 - 10).



**Numerator** = Sum of the risk-adjusted, payment-standardized and specialty-adjusted Medicare Parts A and B costs across all beneficiary months attributed to a TIN or TIN-NPI during the measurement period.

**Denominator** = Number of beneficiary months attributed to a TIN or TIN-NPI during the measurement period.

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics

**This section of the document reviews the fundamental components of procedural and acute inpatient medical condition episode-based measures. For additional detail, please refer to the 2022 PY episode-based measure MIFs and the associated measure codes list files.**

Episode-based measures are intended to assess and compare clinicians on the costs of care clinically related to their initial treatment of a patient, care provided during a specific time frame, and/or costs related to the treatment and management of a chronic condition. Episode-based measures differ from the TPCC and MSPB Clinician measures because they 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 provided to a patient over a given timeframe.

**Did you know?** Cost is defined as the standardized allowed amounts on Medicare claims, which includes both Medicare trust fund payments and any applicable patient deductible and coinsurance amounts.

**Procedural and acute inpatient medical condition episode-based measures are generally calculated via the following 6 steps:**

**1. Trigger and define an episode:** Episodes are defined by billing codes that trigger an episode, and episodes may be placed into mutually exclusive and exhaustive sub-groups for meaningful clinical comparison.

**Procedural episodes** are triggered or opened by CPT/HCPCS codes on Part B physician/supplier (A.K.A. "carrier") claims indicating that a procedure has been performed. The episode window is defined around the trigger and may include a period before the trigger to capture pre-procedure care.

AND

**Acute inpatient medical condition episodes** are defined by MS-DRG codes that open, or trigger, an episode.

CMS has posted [detailed methodology documents](#) for the 23 episode-based measures in use for 2022.

Each episode-based measure has a corresponding measure codes list in the [2022 MIPS Cost Measure Codes Lists \(ZIP file\)](#) that contains service codes and clinical logic used in the methodology including episode triggers, exclusions, subgroups, assigned items and services, and risk adjustors.

**TIP:** Refer to the "Triggers" and "Triggers\_Detail" tab(s), if applicable, in a measure's codes list file. For example, consider the Inpatient Chronic Obstructive Pulmonary Disease COPD Exacerbation measure. Patients receiving care with MS-DRG codes for pulmonary edema and respiratory failure (189), COPD (190, 191, 192), and/or respiratory system diagnosis with ventilator support <96 hours (208) are eligible for inclusion in the measure. However, an episode for this measure is only "triggered" when the MS-DRG is also accompanied by a specific, relevant diagnosis code.



## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

**2. Attribute episodes to a clinician:** Additional codes are used together with episode triggers to attribute episode costs to a clinician.

**Procedural episodes** are attributed to any clinician who bills a trigger code for the episode group, and episodes are attributed to clinician groups by aggregating all episodes attributed to clinicians that bill to the clinician group.

AND

**Acute inpatient medical condition episodes** are attributed to clinician groups (TINs) that bill at least 30% of the inpatient E&M claim lines during the trigger inpatient stay, and to clinicians (TIN-NPI) who bill at least one inpatient E&M claim line under a TIN that met the 30% threshold. For some episode groups, additional codes aid in determining the attributed clinician. See [slide 40](#) for more information about episode-based cost measure attribution.

**3. Assign costs to an episode and calculate total observed episode costs:** Clinically related services occurring during the episode window are assigned to the episode. The cost of these services is summed to determine each episode's standardized observed cost.

### TIPS:

- See the "Service\_Assignment" tab in an acute inpatient medical condition/procedural episode-based measure's codes list file. Each row in the service assignment tab is a possible instance of when a service could be assigned. Each row should be read from left to right to determine the rules for assignment for that particular service.
- To illustrate how to use a codes list file to interpret service assignment rules, look at Row 1104/Initial Sort Order 1097 in the "Service\_Assignment" Tab for the Elective Outpatient Percutaneous Coronary Intervention (PCI) measure:
  - A service assignment rule applies to any time during the post-trigger period (columns C/D) for Clinical Classifications Software (CCS<sup>4</sup>) category 178: CT Scan Chest (columns E-G). If a rule is determined at the CCS category level and applies to all CPT/HCPCS codes within that CCS, then columns J and K will be blank; if a rule only applies to certain CPT/HCPCS codes within that CCS, then columns J-K would be filled in with specific codes in each relevant row. In this example, these columns are blank, which means all CPT/HCPCS codes within CCS 178 will be assigned depending on the decision in Column H. The decision is to assign depending on diagnosis. This means that additional information, in further right columns, is required to determine whether a given CPT/HCPCS within CCS 178 should be assigned.
  - Scrolling right, columns M-O and Q-S provide more information about diagnoses. Columns N-O list I21: Acute Myocardial Infarction as the parent/3-Digit diagnosis code, and column P indicates to assign for all services with the diagnosis. This means that no further columns to the right are needed to determine the full service assignment rule. Based on all the information to the left in this row, the full service assignment rule is:
    - Assign all CPT/HCPCS within CCS 178 if the CPT/HCPCS occurs with 3-digit diagnosis code I21: Acute Myocardial Infarction, when you see the CPT/HCPCS code plus the diagnosis code billed together any time in the post-trigger period.

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

**4. Exclude episodes:** Measure-specific exclusions remove unique groups of patients from the measure in cases where it may be impractical or unfair to compare the costs of caring for these patients to the costs of caring for the measure cohort as a whole.

**TIP:** See the “Exclusions” and “Exclusions\_Details” tab, if applicable, in a measure’s codes list file and the “Exclude Episodes” section in Appendix A of the MIF. For example, consider the Inpatient COPD Exacerbation measure. Costs related to the following overarching clinical characteristics/events are excluded:

- COPD exacerbation after lung resection
- Inpatient COPD exacerbation in a lung transplant patient
- Leaving against medical advice
- Non-invasive positive pressure ventilation for more than 96 hours
- Patients receiving active treatment for lung cancer

**TIP:** The following exclusion rules apply to **all** acute inpatient medical condition episode-based measures (each measure also has measure-specific exclusions). Acute inpatient medical condition episodes are excluded if:

- The patient was enrolled in a private Medicare health plan (such as MA or a Medicare private fee-for-service plan) at any time during the episode window or 120-day lookback period prior to the trigger day.
- The patient wasn’t enrolled in Medicare Parts A and B for the entire lookback period plus episode window.
- No TIN is attributed to the episode.
- The patient’s date of birth is missing from data sources.
- The patient died before the episode ended.
- The trigger IP stay has the same admission date as another IP stay.
- The IP facility isn’t a short-term stay acute hospital as defined by subsection (d).

**TIP:** The following rules apply to all procedural episode-based measures (each measure also has measure-specific exclusions). Procedural episodes are excluded if:

- The patient was enrolled in a private Medicare health plan (such as MA or a Medicare private FFS plan) at any time during the episode window or 120-day lookback period prior to the trigger day.
- The patient wasn’t enrolled in Medicare Parts A and B during the entire lookback period plus episode window.
- No main clinician is attributed the episode.
- The patient’s date of birth is missing from data sources.
- The patient died before the episode ended.
- The episode trigger claim wasn’t performed in an ambulatory/office-based care center, inpatient hospital, outpatient hospital, or ambulatory surgical center setting based on its place of service code.
- The IP facility isn’t a short-term stay acute hospital as defined by subsection (d) when an IP stay concurrent with the trigger is found.

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

- 5. Calculate expected episode costs through risk adjustment:** Risk adjustment aims to isolate variation in clinician costs to only the costs that clinicians can reasonably influence by accounting for factors like patient age, comorbidities, and other measure-specific risk adjusters. See [slide 17](#) for more information on risk adjustment.
- 6. Calculate measure scores:** The ratio of standardized total observed cost to risk-adjusted expected cost is calculated and averaged across all of a clinician's or clinician group's attributed episodes to obtain the average episode cost ratio. The average episode cost ratio is multiplied by the national average observed episode cost to generate a dollar figure for the cost measure score. The dollar figure is compared to a performance period measure benchmark and achievement points are assigned based on the decile.

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

**For each measure listed in the table below:**

- An episode is opened (aka “triggered”) by a certain clinical event, referred to in the table and other documentation as a trigger.
- An episode window may (but not always) include a period of time before the triggering clinical event, referred to as a “pre-trigger period,” plus a period of time after the triggering clinical event (referred to as a “post-trigger period”).
- Some episode windows begin when the triggering event occurs and don’t include a pre-trigger period (therefore, they have a pre-trigger period of zero days). The episode window used to calculate each of the episode-based measures is listed below.

Measure Name	Measure Type	Episode Window	This measure evaluates a clinician’s risk-adjusted cost to Medicare for....	Measure can be triggered based on claims data from the following settings:
<b>Elective Outpatient Percutaneous Coronary Intervention (PCI)</b>	Procedural	Pre-Trigger Period= zero days Post-Trigger Period= 30 days	Patients who undergo elective outpatient PCI surgery to place a coronary stent for heart disease during the performance period.	Ambulatory/office-based care centers, hospital outpatient departments (HOPDs), Ambulatory surgical centers (ASCs)
<b>Knee Arthroplasty</b>	Procedural	Pre- Trigger Period= 30 days Post- Trigger Period=90 days	Patients who receive an elective knee arthroplasty during the performance period.	Acute inpatient (IP) hospitals, HOPDs, ambulatory/office-based care centers, and ASCs
<b>Revascularization for Lower Extremity Chronic Critical Limb Ischemia</b>	Procedural	Pre-Trigger Period= 30 days Post- Trigger Period=90 days	Patients who undergo elective revascularization surgery for lower extremity chronic critical limb ischemia during the performance period.	ASCs, HOPDs and acute IP hospitals
<b>Routine Cataract Removal with Intraocular Lens (IOL) Implantation</b>	Procedural	Pre-Trigger period=60 days Post-Trigger period=90 days	Patients who undergo a procedure for routine cataract removal with intraocular lens implantation during the performance period.	ASCs, ambulatory/office-based care, and HOPDs
<b>Screening/Surveillance Colonoscopy</b>	Procedural	Pre-Trigger Period= zero days Post-Trigger Period= 14 days	Patients who undergo a screening or surveillance colonoscopy procedure during the performance period.	ASCs, ambulatory/office-based care, HOPDs

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

Measure Name	Measure Type	Episode Window	This measure evaluates a clinician's risk-adjusted cost to Medicare for....	Measure can be triggered based on claims data from the following settings:
<b>Acute Kidney Injury Requiring New Inpatient Dialysis</b>	Procedural	Pre-Trigger Period= zero days Post-Trigger Period= 30 days	Patients who receive their first inpatient dialysis service for acute kidney injury during the performance period.	Acute IP hospitals
<b>Elective Primary Hip Arthroplasty</b>	Procedural	Pre- Trigger Period= 30 days Post- Trigger Period=90 days	Patients who receive an elective primary hip arthroplasty during the performance period.	Acute IP hospitals, HOPDs, ambulatory/office-based care centers, and ASCs
<b>Femoral or Inguinal Hernia Repair</b>	Procedural	Pre-Trigger Period= 30 days Post-Trigger Period=90 days	Patients who undergo a surgical procedure to repair a femoral or inguinal hernia during the performance period.	Acute IP hospitals, HOPDs, ambulatory/office-based care centers, and ASCs
<b>Hemodialysis Access Creation</b>	Procedural	Pre- Trigger Period= 60 days Post- Trigger Period=90 days	Patients who undergo a procedure for the creation of graft or fistula access for long-term hemodialysis during the performance period.	Ambulatory/office-based care centers, outpatient (OP) hospitals, and ASCs
<b>Lumbar Spine Fusion for Degenerative Disease, 1-3 Levels</b>	Procedural	Pre- Trigger Period= 30 days Post- Trigger Period=90 days	Patients who undergo surgery for lumbar spine fusion during the performance period.	ASCs, HOPDs, and acute IP hospitals
<b>Lumpectomy Partial Mastectomy, Simple Mastectomy</b>	Procedural	Pre- Trigger Period= 30 days Post- Trigger Period=90 days	Patients who undergo partial or total mastectomy for breast cancer during the performance period.	Ambulatory/office-based care centers, outpatient hospitals, and ASCs
<b>Non-Emergent Coronary Artery Bypass Graft (CABG)</b>	Procedural	Pre- Trigger Period= 30 days Post- Trigger Period=90 days	Patients who undergo a non-emergent CABG procedure during the performance period.	Acute IP hospitals
<b>Renal or Ureteral Stone Surgical Treatment</b>	Procedural	Pre- Trigger Period= 90 days Post- Trigger Period=30 days	Patients who receive surgical treatment for renal or ureteral stones during the performance period.	Acute IP hospitals, HOPDs, ambulatory/office-based care centers, and ASCs

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

Measure Name	Measure Type	Episode Window	This measure evaluates a clinician's risk-adjusted cost to Medicare for....	Measure can be triggered based on claims data from the following settings:
<b>Intracranial Hemorrhage or Cerebral Infarction</b>	Acute inpatient medical condition	Pre- Trigger Period= zero days Post- Trigger Period=90 days	Patients who receive inpatient treatment for cerebral infarction or intracranial hemorrhage during the performance period.	Acute IP hospitals
<b>Simple Pneumonia with Hospitalization</b>	Acute inpatient medical condition	Pre-Trigger Period= zero days Post-Trigger Period= 30 days	Patients who receive inpatient treatment for simple pneumonia during the performance period.	Acute IP hospitals
<b>ST-Elevation Myocardial Infarction (STEMI) with Percutaneous Coronary Intervention (PCI)</b>	Acute inpatient medical condition	Pre-Trigger Period=zero days Post-Trigger Period= 30 days	Patients who present with ST-Elevation Myocardial Infarction indicating complete blockage of a coronary artery who emergently receive Percutaneous Coronary Intervention as treatment during the performance period.	Acute IP hospitals
<b>Inpatient Chronic Obstructive Pulmonary Disease (COPD) Exacerbation</b>	Acute inpatient medical condition	Pre-Trigger Period= zero days Post- Trigger Period= 60 days	Patients who receive inpatient treatment for an acute exacerbation of COPD during the performance period.	Acute IP hospitals
<b>Lower Gastrointestinal Hemorrhage (applies to groups only)</b>	Acute inpatient medical condition	Pre-Trigger Period= zero days Post- Tigger period=35 days	Patients who receive inpatient non-surgical treatment for acute bleeding in the lower gastrointestinal tract during the performance period.	Acute IP hospitals
<b>Melanoma Resection</b> <i>*NEW in PY 2022*</i>	Procedural	Pre-Trigger Window: 30 days Post-Trigger Window: 90 days	Patients who undergo an excision procedure to remove a cutaneous melanoma during the performance period.	ASCs, ambulatory/office-based care, and HOPDs.

## Acute Inpatient Medical Condition and Procedural Episode-Based Cost Measure Basics (Continued)

Measure Name	Measure Type	Episode Window	This measure evaluates a clinician's risk-adjusted cost to Medicare for....	Measure can be triggered based on claims data from the following settings:
<b>Colon and Rectal Resection</b> <i>*NEW in PY 2022*</i>	Procedural	Pre-Trigger Window: 15 days Post-Trigger Window: 90 days	Patients who receive a colon or rectal resection for either benign or malignant indications during the performance period.	ASCs, HOPDs, and acute IP hospitals.
<b>Sepsis</b> <i>*NEW in PY 2022*</i>	Acute inpatient medical condition	Pre-Trigger Window: 0 days Post-Trigger Window: 45 days	Patients who receive inpatient medical treatment for sepsis during the performance period.	Acute IP hospitals.





## Episode-Based Measure Attribution

### Acute Inpatient Medical Condition Episode Attribution

- Acute inpatient medical conditions episodes are attributed to clinician groups (identified by TIN) that bill at least 30% of the inpatient E&M claim lines during the trigger inpatient stay, and to clinicians (identified by TIN-NPI) who bill at least one E&M claim line under a TIN that met the 30% threshold.
- All TIN-NPIs who bill at least one inpatient E&M service within a TIN that met the 30% threshold will be attributed the episode. As a result, an acute inpatient medical condition episode can be attributed to more than one individual clinician.

**TIP:** The same 12 inpatient E&M services, identified by CPT/HCPCS codes, are used to determine whether the 30% threshold is met and to attribute acute inpatient medical condition episodes to TINs. For more details on the E&M services, see the "Attribution" tab in the measure codes list files or Appendix A of the MIF.

### Procedural Episode-Based Cost Measure Attribution

- Procedural episodes are attributed to any TIN-NPI who bills a trigger code, defined by CPT/HCPCS codes, on the date of the procedure or during a concurrent related inpatient stay.
- As a result, procedural episodes can be attributed to more than one clinician.

CMS doesn't exclude episodes if a patient already qualified for another episode, since allowing for overlapping episodes incentivizes communication and care coordination as a patient moves through the care continuum. For example, if a patient is re-hospitalized for pneumonia after an initial episode, this would trigger 2 separate episodes of care for pneumonia.

**TIP:** See the ["Shared Data Across Cost Measures" Resource](#) for information on how the MIPS cost measures are constructed to avoid "double counting," or the "multiple weighting of costs in a clinician's measurement."

**TIP:** Episodes can be attributed to clinicians of a specialty that's eligible for MIPS. Some episode groups require additional attribution rules, such as modifier code requirements for procedural episodes or the existence of CPT/HCPCS codes in the list of E&M codes used for attribution for acute inpatient medical condition episodes. For more information, refer to the "Attribution" tab in the episode measure codes list files.



## Procedural and Acute Inpatient Medical Condition Episode-Based Cost Measure Case Minimums

The case minimum 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. For groups, a total of 10 procedural 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.

The case minimum for **acute inpatient medical condition episode-based measures** is 20, meaning 20 episodes must be attributed to a MIPS eligible clinician or group for the measure to be scored. For groups, a total of 20 acute inpatient medical condition 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.

## Chronic Condition Episode-Based Cost Measure Basics

This section of the document reviews the fundamental components of chronic condition episode-based measures. For additional details, please refer to the 2022 PY episode-based measure MIFs and the associated measure codes list files.

Please refer to the [Chronic Condition Measure Framework](#) one-pager for more information.

**Chronic condition episode-based MIPS cost measures are generally constructed and calculating via the following 8 steps:**

### Step 1: Identify patients receiving care

- A trigger event identifies the start or continuation of a clinician group's management of a patient's chronic condition. A trigger event is identified by the occurrence of 2 Part B Physician/Supplier (Carrier) claims billed by the same clinician group practice within 180 days of one another: 1) a trigger claim and 2) a confirming claim. (The trigger claim is an initial E&M code for outpatient services along with a relevant chronic condition diagnosis.) The confirming claim can be either: A) another outpatient services E&M code with a relevant chronic condition diagnosis, or B) a condition-related CPT/HCPCS code with a relevant chronic condition diagnosis. Once a trigger event is identified, a one-year attribution window is opened.

### Step 2: Identify the total length of care between a patient and a clinician group

- Once an attribution window is opened, it continues for one year unless there's a service that demonstrates a continuing care relationship, also known as a "reaffirming claim." A reaffirming claim is defined as a service billed during an open attribution window (from Step 1) by the same clinician group that billed the trigger event and reaffirms and extends a clinician group's responsibility for managing a patient's chronic disease. A reaffirming claim is either an outpatient services E&M code with a relevant chronic condition diagnosis, or a condition-related CPT/HCPCS code with a relevant chronic condition diagnosis.
- After a reaffirming claim is identified, the attribution window is extended by one year from the point of each reaffirming claim billed during an open attribution window. The total attribution window begins with the trigger claim and concludes one year after the final reaffirming claim. Therefore, the total attribution window can span multiple years and vary in length for different patients. This requires the total attribution window to be measured incrementally and periodically across multiple measurement periods.

## Chronic Condition Episode-Based Cost Measure Basics (Continued)

**TIP:** For a list of condition-related HCPCS/CPT codes and relevant diagnosis codes for a specific chronic condition episode-based measure, view the “Triggers\_CPT\_HCPCS” and “Triggers\_DGN” tabs in the measure’s codes list file.

### Step 3: Define an episode

- Episodes are segments of the total attribution window that are counted in a particular measurement period, allowing clinicians to have their costs assessed for that year. Episodes are assigned to a clinician group (identified by TIN) or individual clinicians (identified TIN-NPI) and can vary in length between 1 year (365 days) and 2 years minus 1 day (729 days). Episodes are assessed in the measurement period in which they conclude and only attribute days not previously measured in preceding measurement periods, so there’s no double counting of episode costs. After episodes are constructed, they’re placed into more granular, mutually exclusive, and exhaustive sub-groups based on clinical criteria to enable meaningful clinical comparisons.

### Step 4: Attribute the episode to the clinician group and clinician(s)

- An episode is attributed to the clinician group that bills the trigger and confirming claims for the total attribution window. To attribute episodes to an individual clinician, we identify any clinician within the attributed clinician group who plays a substantial role in the patient’s care. This is defined as a clinician billing at least 30% of outpatient services E&M codes with a relevant chronic condition diagnosis and/or condition-related CPT/HCPCS codes with a relevant chronic condition diagnosis on Part B Physician/Supplier claim lines during the episode. Additional checks are conducted to ensure episodes aren’t attributed to clinicians before they have their first encounter with the patient:
  - First, we check to ensure the qualifying clinician(s) have rendered at least 1 E&M service code for outpatient services or a condition-related HCPCS/CPT code with a relevant diagnosis in connection with the same patient triggering the episode within 1 year prior to or on the episode start date.
  - Second, we check whether the clinician(s) have written at least 2 condition-related prescriptions on different days to 2 different patients during the performance period plus a 1-year lookback period.
  - MIPS eligible clinicians in an attributed clinician group that render at least 30% of qualifying services and meet the 2 additional checks are considered for attribution.

## Chronic Condition Episode-Based Cost Measure Basics (Continued)

### Step 5: Assign costs to the episode and calculate the episode annualized observed cost

- Services that are clinically related to the care and management of a patient's chronic disease that occur during the episode are included in the measure. The standardized costs of the assigned services are summed and averaged across the number of days in an episode. This average daily cost is then multiplied by 365 to determine each episode's annualized standardized observed cost.

### Step 6: Exclude episodes

- Exclusions remove unique groups of patients or episodes from cost measure calculation in cases where it may be impractical or unfair to compare the costs of caring for these patients to the costs of caring for the cohort at large.

### Step 7: Calculate the annualized expected cost for risk adjustment

- Risk adjustment predicts expected costs by adjusting for factors outside a clinician or clinician group's reasonable influence (e.g., patient age, comorbidities, dual Medicare and Medicaid eligibility status, and other factors).

### Step 8: Calculate the measure score

- For each episode, the ratio of winsorized, annualized standardized observed cost to annualized expected cost (both of which are from Step 7) is calculated. The measure is calculated as a weighted average of these ratios across all of a clinician or clinician group's attributed episodes, where the weighting is each episode's number of assigned days. The weighted average episode cost ratio is then multiplied by the national average winsorized, annualized observed episode cost to generate a dollar figure for the cost measure score.

## Chronic Condition Episode-Based Cost Measure Basics (Continued)

### Exclusions

The following standard exclusions, to ensure data completeness, are used when calculating chronic-condition episode-based cost measures:

- The patient has a primary payer other than Medicare for any time overlapping the episode window or 120-day lookback period prior to the episode window.
- The patient wasn't enrolled in Medicare Parts A and B for the entirety of the lookback period plus episode window, or was enrolled in Part C for any part of the lookback plus episode window.
- The patient wasn't found in the Medicare Enrollment Database (EDB).
- The patient's death date occurred before the episode end date.
- The patient resided outside the United States or its territories during the episode window.
- The patient has an episode window shorter than one year.

**TIP:** For measure-specific exclusions, see the “Exclusions” and “Exclusions Details” tabs of the measure's codes list file.

For example, patients receiving hospice care are excluded from the diabetes chronic condition episode-based measure. Measure-specific exclusions for the Asthma/COPD measure include but isn't limited to patients with cystic fibrosis, sickle cell disease, prior lung cancer, and prior lung surgery.

## Chronic Condition Episode-Based Cost Measure Basics (Continued)

The chronic-condition episode-based cost measures available in 2022 are:

Measure Name	Episode Window	This Measure Evaluates a Clinician's Risk Adjusted Cost to Medicare for...	Measures Can Be Triggered Based on Claims Data from the Following Settings:
<p><b>Diabetes</b> *NEW in PY 2022*</p>	<p>An episode is a segment of time during which clinicians or clinician groups are assessed for the care that they provide to a patient with diabetes. The episode window length for the Diabetes measure is between 1 year (365 days) and 2 years minus 1 day (729 days) and can vary in length across patients.</p>	<p>Patients receiving medical care to manage and treat diabetes. This chronic condition measure includes the costs of services that are clinically related to the attributed clinician's role in managing care during a Diabetes episode.</p>	<p>The measure focuses on care provided by clinicians practicing in non-IP hospital settings for patients with diabetes. The most frequent settings in which a Diabetes episode is triggered include: Office, Skilled Nursing Facility (SNF), and OP Hospital.</p>
<p><b>Asthma/Chronic Obstructive Pulmonary Disease (COPD)</b> *NEW in PY 2022*</p>	<p>An episode is a segment of time during which clinicians or clinician groups are assessed for the care that they provide to a patient with asthma or COPD. The episode window length for the Asthma/COPD measure is between 1 year (365 days) and 2 years minus 1 day (729 days) and can vary in length across patients.</p>	<p>Patients receiving medical care to manage and treat asthma or COPD. This chronic condition measure includes the costs of services that are clinically related to the attributed clinician's role in managing care during an Asthma/COPD episode.</p>	<p>The measure focuses on care provided by clinicians practicing in non-IP hospital settings for patients with asthma or COPD. The most frequent settings in which an Asthma/COPD episode is triggered include: Office, SNF, and OP Hospital.</p>

## Case Minimum for Chronic Condition Episode-Based Cost Measures

Clinicians and groups will only be scored on the measure if they're attributed at least 20 episodes for chronic condition episode-based measures.





## Reporting Requirements



## Overview

CMS will use data from Medicare Parts A and B claims—with dates of service from January 1, 2022 to December 31, 2022—to calculate your cost performance category score.

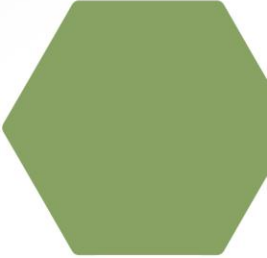
You **don't** need to submit any data or take any separate actions for this performance category.







**Scoring**



## Overview

The cost performance category is weighted at 30% for individuals, groups, and virtual groups reporting traditional MIPS. The cost performance category is weighted at 0% for APM Entities reporting via traditional MIPS.

For a cost measure to be scored, an individual MIPS eligible clinician or group must meet or exceed the case minimum for that cost measure.



If **only one** cost measure can be scored, that measure's score will be used to compute a cost performance category score.



If **multiple** cost measures are scored, the cost performance category score is the equally-weighted average points assigned to the scored measures. For example, if 7 out of 25 cost measures are scored, the cost performance category score is the equally-weighted average of the 7 scored measures.



If **none** of the cost measures can be scored, the cost performance category will count as 0% of your MIPS final score, and we'll redistribute its weight to other performance categories.



Cost

0%



Quality

55%



Improvement  
Activities

15%



Promoting  
Interoperability

30%

## Overview (Continued)

To calculate the cost performance category score in 2022, CMS will assign **1 to 10 achievement points** to each scored measure based on the MIPS eligible clinician or group's performance on the measure compared to the performance year benchmark. As a result, the achievement points assigned for each measure depends on which decile range you or your group's performance on the measure is between.

**REMEMBER:** An individual or group's cost measure **performance** is expressed as a dollar amount. A measure score (expressed as up to 10 points from a benchmark decile) is derived by comparing your performance on the measure to the performance of all individual MIPS eligible clinicians, groups, and virtual groups who were evaluated on the measure.

### To assess your MIPS cost measure performance, we'll:

- Establish a benchmark for each cost measure based on the performance period.
  - There are **no historical benchmarks** established for cost measures.
- Compare performance (expressed as a dollar amount) on each measure to the performance period benchmark(s).
- Assign **1 to 10 achievement points** to each scored measure based on that comparison.
  - The amount of achievement points assigned to each measure is determined by identifying which benchmark decile range the measure's performance falls in.

**Partial achievement points are awarded to scored measures according to the following formula:**

$$\begin{array}{c} \text{decile \#} \\ X \end{array} + \frac{\left[ \begin{array}{cc} q & a \\ \text{measure score,} & \text{bottom of} \\ \text{expressed as a} & \text{decile range} \\ \text{dollar amount} & \end{array} \right] - \left[ \begin{array}{cc} b & a \\ \text{top of} & \text{bottom of} \\ \text{decile range} & \text{decile range} \end{array} \right]}{\quad} = \text{Achievement Points}$$

## Overview (Continued)

### 2022 Cost Performance Category Illustrative Scoring Example for a Group

Measure	Measure Achievement Points Earned by the Group	Total Measure Achievement Points Available
1. TPCC	8.2	10
2. MSPB Clinician	6.4	10
3. Elective Outpatient PCI	Not scored	N/A-not scored
4. Knee Arthroplasty	Not scored	N/A-not scored
5. Revascularization for Lower Extremity Chronic Critical Limb Ischemia	Not scored	N/A-not scored
6. Routine Cataract Removal with IOL Implantation	Not scored	N/A-not scored
7. Screening/Surveillance Colonoscopy	7	10
8. Intracranial Hemorrhage or Cerebral Infarction	4.8	10
9. Simple Pneumonia with Hospitalization	6.7	10
10. STEMI with PCI	Not scored	N/A-Not scored
11. Acute Kidney Injury Requiring New Inpatient Dialysis	9	10
12. Elective Primary Hip Arthroplasty	Not scored	N/A-Not scored
13. Femoral or Inguinal Hernia Repair	6.6	10
14. Hemodialysis Access Creation	8.3	10
15. Lumbar Spine Fusion for Degenerative Disease, 1-3 Levels	Not scored	N/A-not scored
16. Lumpectomy Partial Mastectomy, Simple Mastectomy	Not scored	N/A-not scored
17. Non-Emergent CABG	Not scored	N/A-not scored
18. Renal or Ureteral Stone Surgical Treatment	Not scored	N/A-not scored
19. Inpatient COPD Exacerbation	5	10
20. Lower Gastrointestinal Hemorrhage (applies to groups only)	8.8	10
21. Sepsis	Not scored	N/A-not scored
22. Diabetes	Not scored	N/A-not scored
23. Melanoma Resection	Not scored	N/A-not scored
24. Colon and Rectal Resection	5.5	10
25. Asthma/COPD	7	10
<b>TOTAL</b>	<b>83.3</b>	<b>120</b>

In the example above, the group was scored on 12 out of the 25 available cost measures. Each scored measure is eligible to receive a maximum of 10 points. So, 120 achievement points (12 measures x 10 points) are available to this group.

The group's cost performance category score is 69.4% ( $83.3/120=0.694$ ). This score is multiplied by the performance category's weight, resulting in 20.8 points towards their final score ( $69.4 \times .30=20.8$ )

## Reweighting the Cost Performance Category

In circumstances where CMS may not be able to reliably calculate a score for any of the cost measures within the cost performance category that adequately captures and reflects the performance of a MIPS eligible clinician, CMS won't calculate a score for the cost performance category and will redistribute the category weight to other performance categories.

CMS will automatically reweight the cost performance category for individual 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'll:

Assume the clinician doesn't have sufficient cost measures applicable.

AND

Assign a weight of 0% 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.

Clinicians, groups and virtual groups can also request reweighting of the cost performance category (and other performance categories) by submitting an [extreme and uncontrollable circumstance exception application](#).

If other performance categories are reweighted, the cost performance category will always be weighted at either 30% or 0%—we won't redistribute weight **to** the cost performance category for the 2022 performance year, except in cases when the cost and the improvement activities performance categories are the only 2 categories scored. In this case, both categories will receive a weight of 50%.



## Facility-Based Scoring

## Overview

Facility-based measurement offers certain clinicians and groups that primarily work within an inpatient setting the opportunity to receive MIPS quality and cost performance category scores based on their assigned facility's Hospital Value-Based Purchasing (VBP) Program score instead of receiving scores based on MIPS quality and cost measures

**Facility-based scoring will be used for your quality and cost performance category scores when all the following conditions are met:**

1

You're identified as facility-based.

2

You're attributed to a facility with a fiscal year 2023 Hospital Value-Based Purchasing (VBP) Program score.  
(These scores aren't available until the end of the performance year.)

3

The facility-based scoring methodology using your Hospital VBP Program score results in a higher final score than your final score calculated without the application of facility-based measurement.

For more information on facility-based measurement, please review the [2022 Facility-based Quick Start Guide](#) (PDF).





## **Cost Performance Category Feedback**



## Overview

For the 2022 MIPS performance year, cost performance category feedback and additional patient-level data will be provided in the summer 2023.

You can review the [2019 Performance Feedback Resources](#) (ZIP) for more information about the type of feedback available for this performance category. (Because we didn't calculate cost measures for the 2020 performance period, this is the most recent information about cost performance feedback at the time of this resource's publication.)



## **Help, Resources, and Version History**

## Where Can You Go for Help?

Please contact the Quality Payment Program Service Center at 1-866-288-8292 (Monday-Friday 8 a.m. - 8 p.m. ET) or by e-mail at: [QPP@cms.hhs.gov](mailto:QPP@cms.hhs.gov). To receive assistance more quickly, please consider calling during non-peak hours—before 10 a.m. and after 2 p.m. ET.

- Customers who are hearing impaired can dial 711 to be connected to a TRS Communications Assistant.

Visit the [Quality Payment Program website](#) for other [help and support](#) information, to learn more about [MIPS](#), and to view resources available on the [QPP Resource Library](#).

# Help, Resources, and Version History

## Additional Resources

The [Quality Payment Program Resource Library](#) houses fact sheets, specialty guides, technical guides, user guides, helpful videos, and more. We will update this table as more resources become available.

- [2022 MIPS Cost Measure Codes Lists \(ZIP\)](#)
- [2022 MIPS Cost Measure Information Forms \(ZIP\)](#)
- [2022 MIPS Summary of Cost Measures \(PDF\)](#)
- [2022 Cost Quick Start Guide \(PDF\)](#)



## Version History

If we need to update this document, changes will be identified here.

Date	Description
03/14/2022	Original Posting.



## Appendix

## Inpatient E&M Services used for Acute Inpatient Medical Condition Episode- Based Measure Attribution

CPT/HCPCS Codes	Code Label
99221	Initial Hospital Inpatient Care, Typically 30 Minutes Per Day
99222	Initial Hospital Inpatient Care, Typically 50 Minutes Per Day
99223	Initial Hospital Inpatient Care, Typically 70 Minutes Per Day
99231	Subsequent Hospital Inpatient Care, Typically 15 Minutes Per Day
99232	Subsequent Hospital Inpatient Care, Typically 25 Minutes Per Day
99233	Subsequent Hospital Inpatient Care, Typically 35 Minutes Per Day
99234	Hospital Observation Or Inpatient Care Low Severity, 40 Minutes Per Day
99235	Hospital Observation Or Inpatient Care Moderate Severity, 50 Minutes Per Day
99236	Hospital Observation Or Inpatient Care High Severity, 55 Minutes Per Day
99238	Hospital Discharge Day Management, 30 Minutes Or Less
99239	Hospital Discharge Day Management, More Than 30 Minutes
99291	Critical Care Delivery Critically Ill Or Injured Patient, First 30-74 Minutes