

National Summary Data Report on Five Episode-Based Cost Measures

- Asthma/Chronic Obstructive Pulmonary Disease (COPD)
- Colon and Rectal Resection
- Diabetes
- Melanoma Resection
- Sepsis

Summer 2020 Field Testing



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1.0 Introduction

This National Summary Data Report provides the results of empirical analyses for 5 episode-based cost measures under development. This report presents national-level summary statistics, calculated using data from January 1 to December 31, 2019, that stakeholders may use to understand the performance of clinicians and clinician groups relative to the performance of others nationally. The information provided is for field testing purposes only. Specifically, this report provides summary statistics on patient demographics, clinicians and clinician groups that are attributed cost measures based on the draft specifications, and standardized Part D drug costs.

This document serves as a supplemental resource to other documents being shared with stakeholders for the summer 2020 field testing period. More detailed testing results for each measure can be found in the measure-specific Measure Testing Forms, available on the [MACRA Feedback Page](#).¹

The rest of this section gives an overview of field testing and the cost measures undergoing field testing and Section 2 provides national summary statistics for each measure.

1.1 Overview of 2020 Cost Measures Field Testing

Field Testing is taking place from August 17 to September 18, 2020. As a part of the measure development process, field testing is an opportunity for clinicians and other stakeholders to learn about episode-based cost measures and provide input on the draft specifications.² During field testing, we are:

- distributing Field Test Reports on the [Quality Payment Program website](#)³ for group practices and solo practitioners who meet the minimum number of cases for each measure;
- posting draft measure specifications (i.e., measure methodology and codes list) and supplemental documentation, such as testing results, on the [MACRA Feedback page](#); and
- collecting stakeholder feedback on the draft specifications for each measure.

We are collecting stakeholder feedback on the draft specifications for each measure from **August 17 to September 18, 2020**. To provide feedback, please navigate to this feedback survey: <https://www.surveymonkey.com/r/2020-cost-measures-field-testing>

Field Test Reports are available at the clinician group practice and solo practitioner (or clinician) levels. 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.

¹ CMS, “Cost Measure Field Testing”, MACRA Feedback Page, <https://www.cms.gov/Medicare/Quality-Payment-Program/Quality-Payment-Program/Give-Feedback>.

² The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) requires the Secretary, as determined appropriate, to conduct an analysis of cost with respect to care episode and patient condition groups (referred to as “episode groups”) and use the methodology developed for purposes of the cost performance category of the Merit-based Incentive Payment System (MIPS). CMS has contracted with Acumen to develop and re-evaluate cost measures for potential use in the MIPS cost performance category of the Quality Payment Program.

³ CMS, “QPP Account,” Quality Payment Program, <https://qpp.cms.gov/login>.

Clinicians and clinician groups meeting the minimum number of cases outlined below will receive a Field Test Report:

- 10 episodes for procedural and acute inpatient medical condition cost measures
- 20 episodes for chronic condition cost measures

The 5 episode-based cost measures being field tested can be classified into 3 episode group types:

- Procedural Episode Group
 - Colon Resection and Rectal Resection
 - Melanoma Resection
- Acute Inpatient Medical Condition Episode Group
 - Sepsis
- Chronic Condition Episode Group
 - Asthma/Chronic Obstructive Pulmonary Disease (COPD)
 - Diabetes

All stakeholders are encouraged to review and provide feedback on the draft measure specifications of these measures, even if you did not receive a Field Test Report. You can review publicly available materials including the draft measure specifications, mock reports, and supplemental documentation, including a fact sheet, Frequently Asked Questions (FAQ), and development process overview on the [MACRA Feedback Page](#).

1.2 Episode-Based Cost Measure Development

Stakeholder input is critical to the development of robust, meaningful, and actionable episode-based cost measures. Throughout the measure development process, Acumen sought input from clinicians and other stakeholders to inform the development of the cost measures. Acumen developed the episode-based cost measures with input from Clinical Subcommittees, Clinician Expert Workgroups, a technical expert panel (TEP), and a Person and Family Committee.

Episode-based cost measures represent the cost to Medicare for the items and services furnished to patients during an episode of care. These measures are designed to inform clinicians on the cost of care they are responsible for providing to a patient during the episode's timeframe. The measures focus on costs that are clinically related to the care provided by clinicians to whom the episodes are attributed. In conjunction with quality of care assessment, cost measures aim to incentivize high-value, patient centered care across a patient's care trajectory.

1.3 Methodology

All empirical analyses presented in this document were conducted using the following data sources:

- Medicare Enrollment Database (EDB)
- Common Working File (CWF) Claims Data
 - Durable Medical Equipment (DME) Claims Data
 - Home Health (HH) Claims Data
 - Hospice (HS) Claims Data
 - Inpatient (IP) Claims Data
 - Outpatient (OP) Claims Data

- Part B Physician/Supplier (PB) Claims Data
- Skilled Nursing (SN) Claims Data
- Minimum Data Set (MDS)
- Medicare Prescription Drug Event Tap Data (PDT)

In field testing documentation, the term “cost” refers to allowed amounts on traditional, fee-for-service Medicare claims data which include the Medicare-allowed charge for a given service and both the amount of the Medicare trust fund payments and any applicable patient deductible and coinsurance amounts. Additionally, cost figures are standardized to 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. This standardization is intended to isolate cost differences that result from healthcare delivery choices, allowing for more accurate resource use comparisons between health care providers.⁴

The cost measures were developed and the cost measure scores were calculated based on the methodology documented in the Draft Cost Measure Methodology and the Draft Measure Codes List files corresponding to each of the 5 cost measures.⁵ All analyses were calculated on episodes ending during the measurement period of January 1, 2019 through December 31, 2019.

⁴CMS, “CMS Price (Payment) Standardization - Basics” and “CMS Price (Payment) Standardization - Detailed Methods” *QualityNet page*,

https://www.qualitynet.org/files/5d27feb7203dc1001ffeb324?filename=Basics_payment_std_041819.pdf

⁵ CMS, Draft Cost Measure Methodology and Draft Measure Codes List files, *MACRA Feedback Page* (August 2020), <https://www.cms.gov/Medicare/Quality-Payment-Program/Quality-Payment-Program/Give-Feedback>

2.0 National Summary Statistics

This section provides national summary statistics and high-level trends for the 5 cost measures undergoing field testing. Section 2.1 presents summary statistics on patient demographics. Section 2.2 provides details on the number and specialties of clinicians and clinician groups that are attributed cost measures. Finally, Section 2.3 presents summary statistics of Medicare Part D prescription drug costs for the 3 cost measures that include those costs.

Note: Unless otherwise noted in the table description, only clinicians and clinician groups attributed at least 10 episodes for procedural and acute inpatient medical condition cost measures and 20 episodes for chronic condition measures for the measurement period are included in the tables below.

2.1 Summary of Patient Demographics

The table below provides a summary of demographic information for patients with at least 1 episode for the cost measures being field tested during the measurement period. There may be more episodes than patients since the same patient can have more than 1 episode in the period.

Table 1. Patient Demographics

Cost Measure	Number of Episodes	Number of Patients	Average Age (Years)	Sex (% Female)
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	3,125,069	2,526,604	72.83	60.67%
Colon and Rectal Resection	56,266	56,002	73.78	59.25%
Diabetes	6,386,294	4,641,871	72.48	52.13%
Melanoma Resection	77,945	65,980	75.96	36.84%
Sepsis	518,677	451,693	74.57	51.91%

2.2 Summary Information for Clinicians and Clinician Groups that are Attributed Cost Measures

Episodes are attributed to a principal (or managing) clinician based on the claims information available at the time of the trigger. The principal clinician is held responsible for the services that are assigned to the episode based on their clinical relevance to the clinician's role in managing patient care.

The rules for attributing episodes vary depending on the type of episode group. For detailed information on the attribution methodologies for each of the cost measures, please refer to the corresponding measure methodology available on the [MACRA Feedback page](#).

Table 3 presents the number of clinicians (TIN-NPIs) and clinician groups (TINs) by the number of cost measures for which they received a Field Test Report.

Table 2. Number of TINs and TIN-NPIs with a Field Test Report for At Least One Episode-Based Cost Measure

Number of Episode-Based Cost Measures	Number of TINs	Number of TIN-NPIs
1	27,642	130,664
2	15,710	35,860
3	2,371	1,522
4	479	0
5	344	0

Table 4 summarizes the 3 most attributed specialties for each cost measure, based on the number of episodes attributed to clinicians from each specialty. Specialty information is based on the reported Health Care Finance Administration (HCFA) specialty designations found on the Medicare Part B Physician/Supplier claims included in the episode.

Table 3. Most Attributed Specialties by Number of Episodes

Cost Measure	Most Attributed Specialty			Second Most Attributed Specialty			Third Most Attributed Specialty		
	Specialty	# of TIN-NPIs	# Episodes	Specialty	# of TIN-NPIs	# Episodes	Specialty	# of TIN-NPIs	# Episodes
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	Internal Medicine	14,616	603,979	Family Practice	11,677	404,132	Pulmonary Disease	6,810	698,137
Colon and Rectal Resection	General Surgery	975	13,657	Colorectal Surgery	793	14,720	Physician Assistant	146	2,398
Diabetes	Internal Medicine	32,843	1,745,561	Family Practice	31,882	1,469,624	Nurse Practitioner	10,075	392,239
Melanoma Resection	Dermatology	1,535	31,446	Plastic and Reconstructive Surgery	275	6,017	General Surgery	152	3,268
Sepsis	Internal Medicine	22,124	290,811	Hospitalist	9,769	135,751	Pulmonary Disease	4,153	59,474

The following tables provide a distribution of the number of episodes attributed to TINs and TIN-NPIs for each of the cost measures being field tested.

Table 4-A. Distribution of Episode Counts per TIN

Cost Measure	# of TINs	Mean # of Episodes	Episode Count Percentile					
			10th	25th	50th	75th	90th	99th
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	20,642	136	23	29	47	99	264	1,549
Colon and Rectal Resection	1,422	35	11	14	21	41	77	166
Diabetes	39,445	151	24	32	54	105	237	1,962
Melanoma Resection	1,812	35	11	14	21	38	71	209
Sepsis	6,490	89	11	15	29	78	208	939

Table 4-B. Distribution of Episode Counts per TIN-NPI

Cost Measure	# TIN-NPIs	Mean # of Episodes	Episode Count Percentile					
			10th	25th	50th	75th	90th	99th
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	44,430	51	21	25	33	53	98	276
Colon and Rectal Resection	1,993	17	10	12	15	20	28	48
Diabetes	107,041	52	22	27	39	61	94	216
Melanoma Resection	2,188	21	10	12	17	24	36	79
Sepsis	51,298	23	11	13	18	27	40	76

2.3 Summary of Standardized Part D Drug Costs

Part D drugs have been identified by stakeholders as an important clinical component of costs for the episode-based cost measures. Three of the 5 cost measures undergoing field testing include Part D drug costs in the measure: Asthma/Chronic Obstructive Pulmonary Disease (COPD), Diabetes, and Sepsis. Part D drug costs likely account for a greater share of the overall episode cost for these measures. An adjustment to account for post-point-of-sale rebates within Part D standardized amounts (which only reflect point-of-sale drug costs) is included in the Part D payment standardization methodology to ensure that the cost of Part D branded drugs do not appear disproportionately costly relative to generic and/or Part B drug substitutes.

The rules for including Part D drugs vary depending on the cost measure. For detailed information on the inclusion of Part D drug costs for each of the 3 cost measures, please refer to the corresponding measure methodology available on the [MACRA Feedback page](#).

The following tables provide Part D coverage statistics for each of the 3 cost measures. Table 5 provides summary statistics for the cost measures that include Part D drug costs. Table 6 presents episode cost information, broken out by the patient's Part D enrollment status,

including the ratio of observed to expected cost (O/E), risk scores indicating how costly episodes are expected to be as predicted through risk adjustment, and observed costs.

Table 5. Part D Enrollment by Measure

Cost Measure	Total # of Episodes	# of Episodes with Part D Enrollment	% of Episodes with Part D Enrollment
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	3,125,069	2,378,751	76.1%
Diabetes	6,386,294	4,817,560	75.4%
Sepsis	518,677	407,124	78.5%

Table 6. Episode Cost Information by Part D Enrollment

Cost Measure	Part D Enrollment Status	O/E Cost Ratio		Risk Score		Observed Cost	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Asthma/Chronic Obstructive Pulmonary Disease (COPD)	All	1.07	1.80	1.02	0.75	\$5,872	\$9,781
	Yes	1.07	1.62	1.12	0.78	\$6,400	\$10,150
	No	1.10	2.28	0.72	0.55	\$4,191	\$8,278
Diabetes	All	1.07	1.83	1.03	0.85	\$7,413	\$12,003
	Yes	1.06	1.63	1.15	0.88	\$8,238	\$12,530
	No	1.09	2.35	0.66	0.60	\$4,879	\$9,790
Sepsis	All	1.02	0.62	1.01	0.43	\$20,228	\$15,581
	Yes	1.02	0.62	1.03	0.44	\$20,546	\$15,890
	No	1.02	0.62	0.95	0.38	\$19,069	\$14,341