

# Emergency Medicine Cost Measure Field Test Report

Name of Clinician Group

Taxpayer Identification Number (TIN): #####

Measurement Period: January 1, 2019 – December 31, 2019

## 1 MEASURE SCORE

This report shows your performance on the Emergency Medicine measure for field testing. Field testing is a chance for stakeholders to provide feedback on the cost measures being developed in 2021-2022. For more information about field testing, please refer to the [MACRA Feedback Page](#).<sup>1</sup>

The field testing period is from **January 10 to February 25, 2022**. To provide feedback on this measure, please navigate to the [2022 Cost Measures Field Testing Feedback Survey](#).

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**The information in this report is for field testing only. It doesn't affect any scoring or payment adjustments in the Merit-based Incentive Payment System (MIPS).** The information in this report is believed to be accurate at the time of production. The information may be subject to change at the discretion of the Centers for Medicare & Medicare Services (CMS), including but not limited to circumstances in which an error is discovered. Only clinicians (identified by their unique Taxpayer Identification Number [TIN] and National Provider Identifier [NPI] combination, or TIN-NPI) and clinician groups (identified by their TIN) with at least 20 episodes during the measurement period have received a field test report.<sup>2</sup>

<sup>1</sup> CMS, MACRA Feedback Page, <https://www.cms.gov/Medicare/Quality-Payment-Program/Quality-Payment-Program/Give-Feedback>.

<sup>2</sup> Individuals using assistive technology may not be able to fully access information in this file. To request a fully accessible report, contact [macra-cost-measures-info@acumenllc.com](mailto:macra-cost-measures-info@acumenllc.com).

## What is the Emergency Medicine Cost Measure?

The Emergency Medicine cost measure assesses a broad scope of treatment occurring during emergency department (ED) visits. The measure identifies the clinician and clinician group that billed the emergency medicine evaluation and management services for an ED visit. Once the clinician-patient relationship starts, this opens up a 30-day episode where the TIN-NPI and TIN are being monitored for the patient's care. Given the large scope of care delivered in emergency medicine, the measure is stratified into 28 different ED visit types based on high volume ED conditions and other care categorized by organ system to improve comparisons of resource use during episodes.

Costs are measured during the ED visit as well as after the ED visit. Services are excluded from measurement if they are unlikely to be clinically related to the ED visit type or if they are not within the influence of the attributed clinician. In this report, "cost" generally means the Medicare allowed amount.<sup>3</sup> Costs are payment-standardized to facilitate comparisons of resource use. Payment standardization assigns a comparable allowed amount for the same service by removing geographic differences and payment adjustments from special Medicare programs, such as add-on payments for medical education.<sup>4</sup> In addition, the episode observed cost is risk-adjusted to ensure fair comparisons. Risk adjustment neutralizes the effects of risk factors deemed to be outside of a clinician's influence (e.g., pre-existing conditions, age, or indicators of clinical severity).

Please refer to [Section 4](#) for high-level measure specifications. For more details, please refer to the Measure Information Form and the Measure Codes List file on the MACRA Feedback Page.

## Your Field Testing Cost Measure Score

Table 1 shows how you performed on this measure in field testing. The score represents your average risk-adjusted cost to Medicare across all of your episodes for the Emergency Medicine measure. You can compare it to the national average score to see how you performed compared to all clinician groups with a least one Emergency Medicine measure episode. This is an inverse measure, so a lower score indicates a lower cost.

**Table 1: Your Field Testing Cost Measure Score**

	Emergency Medicine Measure
Number of Episodes	130
Your Cost Measure Score (TIN)	\$6,485
National Average Cost Measure Score	\$8,378
Your Cost Measure Score Percentile (TIN)	35

Note: Refer to the Glossary, [Table A1](#) for definitions of metrics

The score percentile shows where you rank among all clinician groups receiving a field test report. It represents the percentage of clinician groups that had an equal or lower risk-adjusted cost to

<sup>3</sup> The Medicare allowed amount on Medicare claims data includes both Medicare and trust fund payments and any applicable patient deductible and coinsurance amounts.

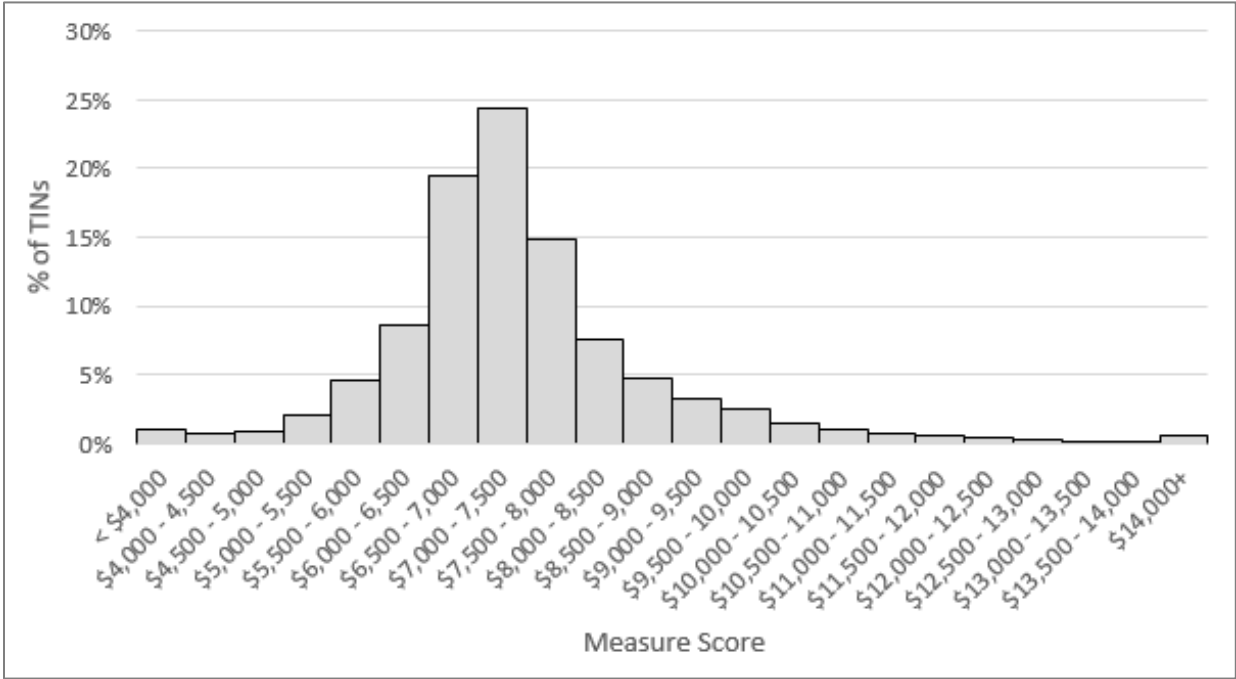
<sup>4</sup> CMS, Price (Payment) Standardization Overview, <https://www.resdac.org/articles/cms-price-payment-standardization-overview>.

Medicare. Since this is an inverse measure, a lower percentile means that you performed at a lower cost than more clinician groups. For example, if you're in the 25<sup>th</sup> score percentile, it means that your score was lower and you performed at a lower cost than 75% of clinician groups for this measure.

**Histogram of National Cost Measure Scores**

Figure 1 shows a histogram of how clinician groups performed on the Emergency Medicine measure in field testing. Specifically, the distribution includes measure scores for all TINs with at least 20 Emergency Medicine measure episodes. There were 4,071 clinician groups that met this volume threshold in field testing.

**Figure 1: National Distribution of Field Testing Measure Scores**



## 2 BREAKDOWN OF COST MEASURE PERFORMANCE

There are many ways of looking at where costs are coming from in your measure. This section has information about types of services and clinicians who are contributing to your episode costs.

### Utilization and Cost of Different Types of Services

This section shows what types of costs are being captured by the measure. The tables show your performance compared with the national average and for TINs in your risk bracket. A risk bracket represents clinician groups likely to have a similar patient case-mix as you.

Risk brackets are constructed in several steps:

- We calculate a risk score for each episode that indicates the complexity of your patient.
  - It's calculated as the episode's expected cost (as predicted through risk adjustment) divided by the national average observed cost for the measure.
  - This yields a ratio, where a higher value indicates that the episode is expected to be more costly, based on the patient characteristics in the risk adjustment model.
- We then calculate your average risk score. This is the average of the risk scores for all your episodes.
- Finally, we create a distribution for the average risk score across all clinician groups with at least 20 episodes for this measure.
  - We divide the distribution into deciles to create risk brackets.
  - Each risk bracket has clinician groups who, on average, have a similar average episode risk score as you.

Table 2 provides a breakdown of service use and cost by setting and various categorizations. The table includes Medicare Parts A and B services. For Part B and outpatient services, the table uses the Restructured BETOS Classification System (RBCS). This is a taxonomy that allows researchers to group Medicare Part B healthcare service codes into clinically meaningful categories.<sup>5</sup>

You can use this table to see how often your episodes have particular services, and compare this to the national average and to clinician groups with a similar case-mix. You can also see the average observed cost of those services for all episodes with at least one service in a particular category.

To highlight services where your performance is more markedly different from clinician groups in your risk bracket, please refer to values with:

- An asterisk (\*), which indicates that your performance was more than 1 standard deviation above the average for clinician groups in your risk bracket; and
- A caret (^), which indicates that your performance was more than 2 standard deviations above the average for clinician groups in your risk bracket.

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<sup>5</sup> CMS, Restructured BETOS Classification System, <https://data.cms.gov/provider-summary-by-type-of-service/provider-service-classifications/restructured-betos-classification-system>.

**Table 2: Service Use and Cost by Medicare Setting and Service Category**

Medicare Setting and Service Category	Share of Episodes with ≥1 Service			Average Observed Cost of Services among Episodes with ≥ 1 Service		
	Your TIN	National Average	Your Risk Bracket	Your TIN	National Average	Your Risk Bracket
All Services	100.0%	100.0%	100.0%	\$7,089	\$7,676	\$7,426
Outpatient Evaluation and Management Services, Procedures, and Therapy (excluding Emergency Department)	71.4%	86.8%	83.5%	\$420	\$577	\$571
Outpatient Evaluation & Management Services	70.7%	84.3%	81.2%	\$320	\$380	\$374
Major Procedures	1.9%	11.9%	5.7%	\$4,689	\$4,615	\$4,628
Ambulatory/Minor Procedures	6.9%	29.2%	19.1%	\$816	\$745	\$746
Outpatient Physical, Occupational, or Speech and Language Pathology Therapy	3.8%	12.0%	7.5%	\$156	\$308	\$305
Ancillary Services	87.2%	85.2%	83.1%	\$225	\$318	\$312
Laboratory, Pathology, and Other Tests	83.0%*	64.5%	58.4%	\$111	\$127	\$122
Imaging Services	53.8%	67.9%	62.5%	\$217	\$237	\$234
Durable Medical Equipment and Supplies	25.1%	31.2%	25.0%	\$185	\$276	\$273
Hospital Inpatient Services	33.6%	53.5%	40.9%	\$11,998	\$10,066	\$9,890
Facility Services	32.7%	48.5%	34.8%	\$11,001	\$9,492	\$9,400
Physician Services During Hospitalization	35.6%	53.4%	40.8%	\$1,106	\$1,566	\$1,505
Outpatient Emergency Department Services	91.1%	88.9%	88.0%	\$615	\$865	\$875
Emergency Evaluation & Management Services	91.1%	88.8%	87.9%	\$578	\$809	\$818
Procedures	6.8%	29.5%	16.7%	\$162	\$222	\$218
Laboratory, Pathology, and Other Tests	36.3%	40.8%	35.9%	\$10	\$11	\$11
Imaging Services	54.6%	63.1%	59.6%	\$80	\$59	\$59
Post-Acute Services	22.2%	41.3%	31.2%	\$8,101	\$5,364	\$5,295
Home Health	12.5%	30.0%	22.7%	\$1,485	\$1,648	\$1,666
Skilled Nursing Facility	10.4%	25.3%	15.0%	\$11,619*	\$9,164	\$9,061
Inpatient Rehabilitation or Long-Term Care Hospital	0.0%	3.7%	2.3%	\$0	\$17,921	\$17,891
All Other Services	90.6%	93.1%	91.0%	\$968	\$1,112	\$1,087
Ambulance Services	41.2%	54.0%	46.4%	\$1,008	\$817	\$794
Anesthesia Services	15.3%	39.4%	24.1%	\$316	\$232	\$226
Chemotherapy and Other Part B-Covered Drugs	56.0%	50.1%	41.9%	\$511	\$720	\$715
Dialysis	1.9%	12.8%	9.1%	\$151	\$972	\$980
All Other Services Not Otherwise Classified	6.6%	22.0%	10.0%	\$35	\$229	\$275

**Notes:** Asterisk (\*): More than 1 standard deviation above the average for clinician groups in your risk bracket.

Caret (^): More than 2 standard deviations above the average for clinician groups in your risk bracket.

Refer to the Glossary, [Table A2](#) for definitions of metrics.

Clinicians Contributing to Your Episode Costs

Table 3 lists the clinicians that contributed the most to your Part B Physician/Supplier episode costs for the Emergency Medicine measure. The table is divided into columns for clinicians within and outside your TIN.

Table 3: Top Clinicians Within and Outside Your TIN Contributing to Your Part B Physician/Supplier Episode Costs

NPIs Within Your TIN	NPIs Outside Your TIN
(1) Name of Clinician - #####	(1) Name of Clinician - #####
(2) Name of Clinician - #####	(2) Name of Clinician - #####
(3) Name of Clinician - #####	(3) Name of Clinician - #####
(4) Name of Clinician - #####	(4) Name of Clinician - #####
(5) Name of Clinician - #####	(5) Name of Clinician - #####

Refer to the Glossary, [Table A3](#) for definitions of metrics

### 3 EPISODE COSTS

Your measure score reflects how you performed on at least 20 episodes. This section shows episode cost distributions and the share of your episodes in each of the measure ED visit types.

#### Your Risk-Adjusted Episode Costs

Table 4 shows how your risk-adjusted episode costs are spread out across the distribution. Risk-adjusted costs are costs that have been calculated to take into account risk factors such as patient health characteristics, age, reason for enrollment, and others.

**Table 4: Distribution of the Risk-Adjusted Costs for Your Episodes**

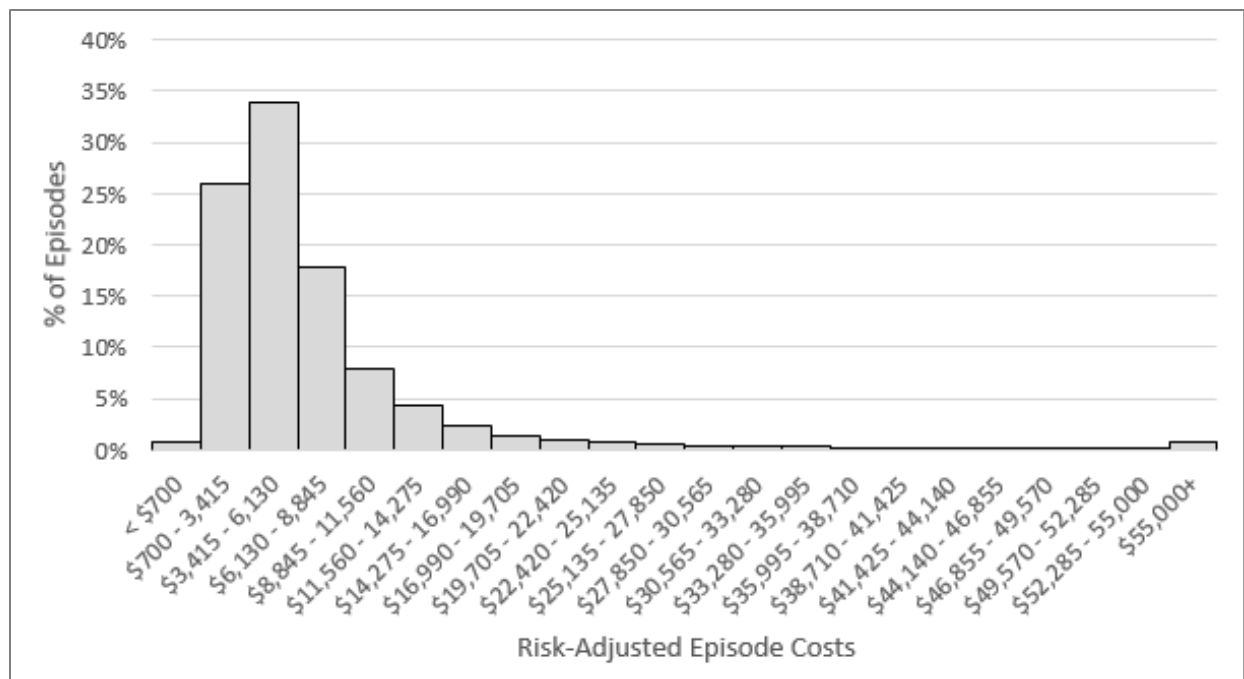
	Mean	Percentiles				
		5 <sup>th</sup> (Least Expensive)	25 <sup>th</sup>	50 <sup>th</sup> (Median)	75 <sup>th</sup>	95 <sup>th</sup> (Most Expensive)
Your Episodes	\$6,485	\$1,285	\$3,000	\$4,989	\$8,017	\$15,955

Refer to the Glossary, [Table A4](#) for definitions of metrics

#### Histogram of National Risk-Adjusted Episode Costs

Figure 2 shows a histogram of resource use for Emergency Medicine measure episodes in field testing. Specifically, the distribution includes risk-adjusted episode costs for all episodes among clinician groups with at least 20 Emergency Medicine measure episodes. Note that Figure 1 shows provider-level scores, whereas this figure shows episode-level costs.

**Figure 2: National Distribution of Risk-Adjusted Episode Costs**



## Episode ED Visit Types

The Emergency Medicine measure is stratified into ED visit types. These represent clinically distinct patient cohorts and are defined to be mutually exclusive and exhaustive stratifications. The risk adjustment model is run separately within each ED visit type. This means that episodes within each ED visit type are only compared with other episodes within that same ED visit type.

Table 5 shows how many of your episodes are within each ED visit type. The table also shows your performance on episodes within each ED visit type, represented by the mean ratio of observed to expected cost (as predicted through a risk adjustment model) across your episodes for each ED visit type, alongside the national average for comparison.<sup>6</sup>

**Table 5: Breakdown of Episodes by ED Visit Type**

Emergency Medicine ED Visit Type	Number of Episodes	Share of Episodes		Mean Ratio of Observed to Expected Cost	
		Your TIN	National Average	Your TIN	National Average
<b>All</b>	130	100.0%	100.0%	1.13	1.14
Abdominal Pain, Nausea, and Vomiting	7	5.4%	8.4%	2.00	1.12
Altered Mental State	1	0.8%	0.1%	0.96	0.97
Behavioral Health	1	0.8%	1.7%	0.93	0.95
Cancer	0	0.0%	2.2%	0.00	1.00
Diabetes	4	3.1%	2.1%	0.99	1.00
Eye and Ear	0	0.0%	1.4%	1.05	1.07
Female Disorders	1	0.8%	0.4%	1.26	1.04
Fracture	2	1.5%	3.3%	1.72	1.09
Gastrointestinal or Liver Condition	5	3.8%	12.4%	0.89	1.03
General Infection	0	0.0%	0.8%	0.00	0.97
Health Care Maintenance	0	0.0%	0.0%	0.00	1.08
Hematologic and Immunologic	2	1.5%	7.5%	0.85	1.00
Kidney and Urinary	25	19.2%	10.5%	1.06	1.03
Major or Head Trauma	3	2.3%	7.4%	0.81	1.08
Neurologic	0	0.0%	4.2%	0.00	1.01
Non-Fracture Musculoskeletal	12	9.2%	2.1%	1.25	0.98
Non-Respiratory Chest Pain	2	1.5%	2.6%	0.70	1.08
Oral, Nasal, and Skin	7	5.4%	3.5%	1.24	1.06
Other Cardiovascular	26	20.0%	6.5%	0.91	1.05
Peripheral Vascular	0	0.0%	3.1%	0.00	1.03
Poisoning	0	0.0%	0.1%	0.00	0.96
Pregnancy	0	0.0%	0.4%	0.00	0.91
Respiratory	19	14.6%	9.3%	1.01	1.01
Sepsis	1	0.8%	2.5%	2.47	1.03
Stroke	2	1.5%	3.2%	0.96	1.00
Syncope	5	3.8%	1.5%	0.85	0.98
Trauma: Minor or Unclear Severity	5	3.8%	2.8%	1.70	1.19

Refer to the Glossary, [Table A5](#) for definitions of metrics

<sup>6</sup> Please note that we provide the mean ratio of observed to expected cost instead of your risk-adjusted cost for each ED visit type, since ratios are more helpful when you analyze your performance across ED visit types.

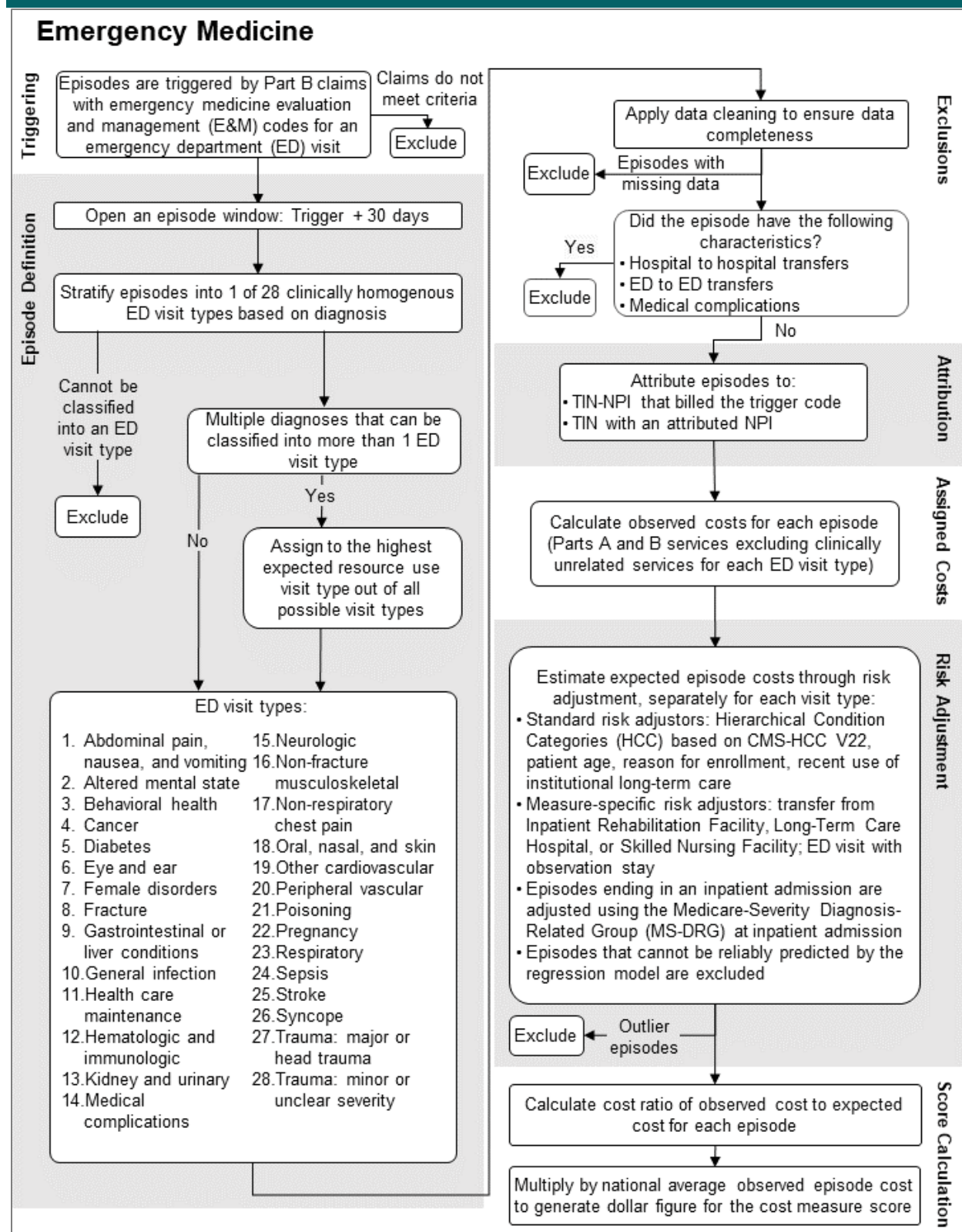


### Episode-Level File (CSV)

For the most granular information for each episode, you have an episode-level file in the same ZIP file as this report. This file lists each episode used to calculate your field testing measure score and provides information to help you understand the costs of care for each episode. It includes details to help you identify your patient and which providers furnished services during the episode of care. The file also has detailed breakdowns of what types of services in each episode counted towards your cost measure score. Finally, there's a data dictionary in the format of an excel workbook that has definitions for all metrics in the episode-level file.

## 4 ADDITIONAL INFORMATION

### Measure Flowchart



## Where Can I Find More Information?

The [MACRA Feedback Page](#)<sup>7</sup> has all the field testing resources. Materials include:

- An online field testing survey (embedded in some field testing resources) where you can provide feedback about the measures,
- Frequently Asked Questions (FAQ),
- An overview of the measure development process,
- Draft measure specifications (Measure Information Form, Measure Codes List file), and
- Testing results.

If you have further questions, please contact the Quality Payment Program Service Center:

- Email: [gpp@cms.hhs.gov](mailto:gpp@cms.hhs.gov)
- Telephone: 1-866-288-8292, Monday – Friday, 8 a.m. – 8 p.m. ET
  - 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 Telecommunications Relay Services Communications Assistant.

## Appendix A – Glossary

**Table A1: Definitions for Your Cost Measure Score Performance (Report: [Table 1](#))**

Term	Description
Number of Episodes	The number of episodes attributed to your TIN within the measurement period.
Your TIN's Cost Measure Score	Your TIN's average risk-adjusted cost for the measure. <u>Method of calculation:</u> The average ratio of observed cost to expected cost (as predicted through a risk adjustment model) across all your episodes, multiplied by the national average observed episode cost.
National Average Cost Measure Score	Average risk-adjusted cost across all clinician groups nationally for this episode-based cost measure. <u>Method of calculation:</u> The mean ratio of observed cost to expected cost (as predicted through a risk adjustment model) across all clinician groups nationally, multiplied by the national average observed episode cost. The mean ratio is calculated by taking the mean observed to expected ratio for each clinician group and then calculating the average of these ratios across all clinician groups.
Your TIN's Cost Measure Score Percentile	The percentile for your TIN's cost measure score among all cost measure scores for all clinician groups nationally. <u>Interpretation:</u> Higher values indicate that your episodes are relatively more expensive than episodes attributed to other clinician groups (and the inverse for lower values). <u>Example:</u> If your cost measure score percentile is in the 40 <sup>th</sup> percentile, then that means your cost measure score was higher than the scores for 40% of all clinician groups nationally and lower than the scores for 60% of all clinician groups. This is an inverse measure, so a lower score indicates a lower cost.

<sup>7</sup> CMS, MACRA Feedback Page, <https://www.cms.gov/Medicare/Quality-Payment-Program/Quality-Payment-Program/Give-Feedback>.

**Table A2: Definitions for Cost and Use by Medicare Setting and Service Category**  
(Report: [Table 2](#))

Term	Description
Medicare Setting and Service Category	The settings and service categories available from the claims data. This includes RBCS categorizations.
Share of Episodes with $\geq 1$ Service	<p><u>Your TIN</u>: The share of episodes with any cost from a setting/category across all episodes for your TIN.</p> <p><u>National Average</u>: The average share of episodes with any cost from a setting/category across all clinician groups nationally.</p> <p><u>TINs in Your Risk Bracket</u>: The share of episodes with any cost from a setting/category across all clinician groups in your risk bracket.</p>
Average Observed Cost of Services among Episodes with $\geq 1$ Service	<p><u>Your TIN</u>: The average cost of services from a setting/category across all episodes for your TIN. Note that this average is calculated out of all your TIN's episodes that include at least 1 service from the given setting/category.</p> <p><u>National Average</u>: The average cost of services for a setting/category across all episodes for all clinician groups nationally. Note that this average is calculated out of all episodes that include at least 1 service from the given setting/category.</p> <p><u>TINs in Your Risk Bracket</u>: The average cost of services for a setting/category across all episodes for clinician groups in your risk bracket. Note that this average is calculated out of all episodes that include at least 1 service from the given setting/category.</p>

**Table A3: Definitions for Top Clinicians Within and Outside Your TIN Contributing to Your Part B Physician/Supplier Episode Costs** (Report: [Table 3](#))

Term	Description
NPIs Within Your TIN	List of the top 5 clinicians (i.e., NPIs) within your TIN that contributed the most Part B Physician/Supplier costs to your episodes.
NPIs Outside Your TIN	List of the top 5 clinicians (i.e., NPIs) outside your TIN that contributed the most Part B Physician/Supplier costs to your episodes.

**Table A4: Distribution of the Risk-Adjusted Costs for Your Episodes** (Report: [Table 4](#))

Term	Description
Risk-adjusted cost	This is the episode cost after accounting for risk factors deemed to be outside of a clinician group's influence (e.g., pre-existing conditions, age, or indicators of clinical severity). The episode cost is risk-adjusted to ensure fair comparisons and neutralize the effects of these risk factors. The distribution statistics of the risk-adjusted costs for your episodes are shown (including mean and various percentiles).

**Table A5: Definitions for Cost Measure Performance by Episode ED Visit Type (Report: Table 5)**

Term	Description
Episode ED Visit Type	The episode ED visit type. Given the large scope of care delivered in emergency medicine, the measure is stratified into 28 different ED visit types based on high volume ED conditions and other care categorized by organ system. Episode ED visit types are mutually exclusive and exhaustive stratifications which means that episodes in each ED visit type are only compared with other episodes within that same ED visit type. The ED visit types aim to enable meaningful clinical comparisons by allowing risk-adjustment models to be run separately for each ED visit types.
Your Episode Count	The number of episodes attributed to your TIN within the measurement period for each ED visit type.
Share of Episodes	<u>Your TIN</u> : Share of episodes (across all episodes for your TIN) by ED visit type. <u>National Average</u> : Average share of episodes (for all clinician groups nationally) by ED visit type.
Mean Ratio of Observed to Expected Cost	<u>Your TIN</u> : Your mean ratio of observed to expected cost (as predicted through a risk adjustment model) across your episodes for each ED visit type. <u>National Average</u> : The mean ratio of observed to expected cost (as predicted through a risk adjustment model) across all clinician groups nationally for each ED visit type. This is calculated by taking the mean observed to expected ratio for each clinician group and then calculating the average of these ratios across all clinician groups.