

# 2024 Measure Set Review (MSR): Final Preliminary Assessment

The following information was sourced in June of 2024 from the Centers for Medicare & Medicaid Services Measures Inventory Tool (CMIT), the PQM Submission Tool and Repository (STAR), discussions with CMS program leads, and publicly available CMS datasets (see links below).

## I. Measure Information

CMIT ID	Title				
00237-01-C-MIPS	Emergency Medicine: Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 18 Years and Older <sup>1</sup>				
Measure Steward	CMS Program				
American College of Emergency Physicians	Merit-Based Incentive Payment System Program (MIPS)				

#### **Measure Overview**

Rationale: Though it is difficult to directly attribute the effects of smaller dosages of radiation, such as that received through computed tomography (CT), the dosage of radiation from CTs has increased in recent years. As radiation doses associated with commonly used CT examinations resemble doses received by individuals for whom an increased risk of cancer was documented, the use of some CT scans is associated with a nonnegligible lifetime attributable risk of cancer. As over 1.3 million individuals are treated and released from the emergency department (ED) for mild traumatic brain injury annually, it is critical that CT scans only be utilized when clinically appropriate. Through measurement of the share of CT scans that are performed inappropriately, a focus can be brought to quality improvement and increased application of clinical decision tools around this topic.

**Description:** Percentage of emergency department visits for patients aged 18 years and older who presented with a minor blunt head trauma who had a head CT for trauma ordered by an emergency care provider who have an indication for a head CT.

**Numerator:** Emergency department visits for patients who have an indication for a head CT. **Exclusions:** None identified.

**Denominator:** All emergency department visits for patients aged 18 years and older who presented with a minor blunt head trauma who had a head CT for trauma ordered by an emergency care provider.

**Exclusions:** Patient has documentation of ventricular shunt, brain tumor, multisystem trauma, or is currently taking an antiplatelet medication including: abciximab, anagrelide, cangrelor, cilostazol, clopidogrel, dipyridamole, eptifibatide, prasugrel, ticlopidine, ticagrelor, tirofiban, or vorapaxar.

Measure type: Process	Measure is a composite: No
	Measure is digital and/or an eCQM: Yes (a
	MIPS CQM is considered a dQM).

<sup>&</sup>lt;sup>1</sup> Two versions of this measure are under review for MSR. This measure's focus is patients aged 18 and older.



Level(s) of analysis/measured entity: Clinician	Care setting: Emergency Departments
Risk adjustment and/or stratification: No. Process measures are not often risk adjusted.	Data source(s): Claims data, Registries <sup>2</sup>
<b>Data collection method:</b> Claims data, Electronic health records <sup>3</sup>	Reporting frequency: Visit <sup>4</sup>
All required data are collected as part of clinical workflow: Yes. This is a claims data or registry measure.	Reporting overlap with similar/related measures: 00237-02-C-MIPS measure Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 2 Through 17 Years.
Does this measure fill a statutorily required category for the program? No	Is this measure included in upcoming rulemaking? No

Measure Status	
Current CBE Endorsement Status:	CBE Endorsement History:
Not Endorsed	None

## II. Measure Performance<sup>5</sup>

### 00237-01-C-MIPS Performance in MIPS 2020-2022

For this measure, the MSR evaluation and analysis team reviewed the following publicly available datasets at data.cms.gov: PY 2022 Clinician Public Reporting: <a href="Overall MIPS">Overall MIPS</a> Performance and the Quality Payment Program Experience.

Figure 1 is a boxplot that shows the distribution of the performance over the past 3 years (where available). For each performance year, the dots indicate the lower 5th and upper 95th percentiles, and the vertical line is the range between these values (90% of the measure scores are between the dots). The box spans the lower 25th to the upper 75th percentile (50% of the measure scores are within the box). The horizontal line in the box indicates the median score, and the "+" indicates the average score. This plot can be used to assess overall trends in the score over time.

**Interpretation:** This plot shows an increase in the median score from 6 in 2020 to nearly 9 in 2021 to 10 in 2022. There was a wide range of performance across measured entities during the years assessed.

<sup>&</sup>lt;sup>2</sup> Note from CMS program lead on MIPS CQMs: Data may be gathered from paper, electronic charts, or collected with the assistance of a third-party intermediary.

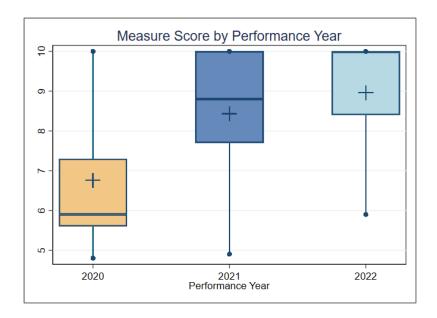
<sup>&</sup>lt;sup>3</sup> Note from CMS program lead: Other data collection methods are available for use with MIPS CQMs depending on clinician/system workflow and who is collecting the data.

<sup>&</sup>lt;sup>4</sup> MIPS only allows reporting of data during the submission period January-March and ongoing reporting by episode, visit or, other defined frequency occurs during that period.

<sup>&</sup>lt;sup>5</sup> Analyses presented in this PA may differ slightly from those conducted by MIPS program analysts due to variation in analytic methods. Additional resources and information about MIPS scoring and benchmarks are available at Quality Payment Program (QPP) (cms.gov).



Figure 1. Boxplot of Quality Measure Score by Year





## **Importance Table**

**Interpretation of measures scores:** Table 1 shows the relative spread of the scores and can also be used to evaluate the impact of improving the score. For example, here, 5 of the 10 deciles have an average score of 10. Examining mean scores at the lower deciles show the relative change required to achieve a score of 10. For Deciles 4 and 5, the score cannot be improved much, but the impact could be significant if the 10% of the entities in Decile 1 were to achieve a score of 10.

Table 1. Importance (Decile by measure score, 2022)

Data Type	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Mean Score (SD)	8.96 (1.59)	3.00	5.30	7.21	8.30	9.12	9.67	10	10	10	10	10	10
Entities	10,514	253	1,052	1,051	1,052	1,051	1,051	1,052	1,051	1,052	1,051	1,051	5,439