

2025 Measure Set Review (MSR): 00555-03-C-MIPS Preliminary Assessment

I. Measure Overview¹

CMIT ID	Title
Link to CMIT measure record: 00555-03-C-MIPS	Perioperative Temperature Management
Measure Steward	CMS Program
American Society of Anesthesiologists	Merit-based Incentive Payment System Link: Quality Payment Program Overview - QPP

CBE Endorsement Status	CBE Endorsement History
Endorsement Removed	<ul style="list-style-type: none"> Endorsement Removed, Surgery, Spring Cycle 2020 Initial Endorsement, September 2015 Link to endorsement measure record: Perioperative Temperature Management

Measure Overview
<p>Rationale for Use: A drop in core temperature during surgery, known as perioperative hypothermia, can result in numerous adverse effects, which can include adverse myocardial outcomes, subcutaneous vasoconstriction, increased incidence of surgical site infection, and impaired healing of wounds. The desired outcome, reduction in adverse surgical effects due to perioperative hypothermia, is affected by maintenance of normothermia during surgery. Unintended perioperative hypothermia occurs in up to 20% of surgical patients. An observational cohort study in a pediatric setting found that more than 50% of children experienced intraoperative hypothermia. Pediatric patients undergoing major surgery were at greater risk of intraoperative hypothermia.</p>
<p>CMS-Provided Rationale for Use in Program: CMS proposed removal of the MIPS measure Perioperative Temperature Management during PY2026 rulemaking. The rationale for proposed removal is due to extremely high performance with limited opportunity for continued improvement, indicating the quality action has become a standard of care. The average performance rate is 98.55% per the PY2025 historical benchmark, and the measure has been topped out and capped at 7 points since PY2023. As indicated in the CY2025 Physician Fee Schedule Final Rule, scoring requirements were met for the Topped-Out removal policy and applied for this measure.</p>
<p>Description: Percentage of patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end</p>

¹ The information in this PA is sourced from the [CMS Measures Inventory Tool \(CMIT\)](#) and the [PQM Submission Tool and Repository \(STAR\) Measure Database](#). This document reflects the content available as of September 2025. Version 1.0 | September 2025 | *The analyses upon which this publication (or document) is based were performed under Contract Number 75FCMC23C0010, entitled, "National Consensus Development and Strategic Planning for Health Care Quality Measurement," sponsored by the Department of Health and Human Services, Centers for Medicare & Medicaid Services. Restricted: Use, duplication, or disclosure is subject to the restrictions as stated in Contract Number 75FCMC23C0010 between the Government and Battelle.*

Measure Overview	
time.	
Numerator: Patients for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time. Exclusions: None	
Denominator: All patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer. Exclusions: Monitored Anesthesia Care (MAC) Peripheral Nerve Block (PNB)	
CMS Program History: In Merit-based Incentive Payment System Program since 2017.	Cascade of Meaningful Measures Priority: Safety
Measure Type: Outcome	Is the Measure Digital or an Electronic Clinical Quality Measure (eCQM)? Yes, digital measure
Level(s) of Analysis/Measured Entity: Clinician Group or Clinical Practice	Care Setting(s): Hospital: Inpatient Acute Care Facility, Hospital: Outpatient Department (HOD), Ambulatory
Does the Measure Fill a Statutorily Required Category for the Program? No	Is the Measure Included in Upcoming Rulemaking? Yes, PY2026 proposal for removal due to extremely high performance.

II. Measure Performance in Program

For this measure, the MSR evaluation and analysis team reviewed the past 3 years of publicly available data:

- The 2024 Quality Benchmarks CSV file from <https://qpp.cms.gov/benchmarks> (for data referred to as PY2022 in this assessment)
- The 2023 Quality Benchmarks CSV file from <https://qpp.cms.gov/benchmarks> (for data referred to as PY2021 in this assessment)
- The file 2022 MIPS Historical Quality Benchmarks.xlsx in [2022 Quality Benchmarks.zip](#) (for data referred to as PY2020 in this assessment)

Measure score statistics were obtained for Measure ID 424 from the benchmark files.

About Table 1: Table 1 illustrates the distribution of scores for PY2020-PY2022. The number of providers and the denominators (number of visits) are not available in the QPP dataset, limiting possible interpretations of these results. The analyses presented in table 1 were shaped by the availability of data and in alignment with program guidance. All values shown are drawn directly from the published historical benchmark files.

For this measure, Decile 1 represents a grouping of organizations who have the lowest measure scores and Decile 10 shows those with the highest measure scores. The arrow denotes improving performance on the measure.

Table 1. Importance (Decile by Measure Score)

<div> <div>Lowest Performers</div> <div>→</div> <div>Highest Performers</div> </div>											
Year	Mean	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
2020	98.2	--	--	98.4-99.6	99.6-99.9	100	100	--	--	--	100
2021	99.3	88.7-98.5	98.5-99.6	99.6-99.9	99.9-100	100	100	100	100	100	100
2022	99.1	84.5-98.4	98.4-99.5	99.5-99.9	99.9-100	100	100	100	100	100	100

Table 1 Interpretation: The average performance score increased from 98.2 to 99.3 from PY2020 to PY2021 and decreased to 99.1 in PY 2022.

III. Evaluation Criteria

Meaningfulness

Importance
<p>Guiding Questions: Does the evidence show that the focus of the measure is linked to meaningful outcomes for patients and health care organizations? Do the data demonstrate that using this measure within the quality program results in benefits that outweigh any associated burdens or costs?</p>
<p>Current clinical literature and perioperative care guidelines indicate that a drop in core body temperature during surgery can lead to multiple complications and that maintaining normothermia can reduce these outcomes.²</p> <p>From 2020 to 2022, performance on the measure remained consistently high, with mean scores above 98% each year. By 2022, most entities reported rates at or near 100%, with minimal variation across deciles. This sustained excellence suggests limited opportunity for further improvement, reducing the measure's utility in distinguishing performance among MIPS participants.</p> <p>MIPS allows clinicians to voluntarily select and report measures, which introduces the potential for self-selection bias. High-performing providers are more likely to report on measures for which they will perform well, meaning reported data may reflect a motivated subset rather than the broader provider population</p>
<p>Committee Member Considerations: Based on reviewing measure performance and professional and personal experiences, committee members should consider the balance of implementation costs or burdens with the benefit of measure use within MIPS. Committee members will have a chance to share these thoughts with the broader committee via Pre-Meeting Initial Evaluation (PIE) Forms and group discussion.</p>
<p>Staff Rating: Met</p>

Conformance
<p>Guiding Question: Do measure components and specifications align with the measure intent and target population?</p>
<p>The intent of this measure is to reduce the chances of perioperative hypothermia in patients who receive anesthesia to prevent adverse outcomes. The specifications align with this intent: the numerator includes patients for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was achieved within the 30 minutes before or the 15 minutes immediately after anesthesia. The denominator includes all patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer. This measure supports the MIPS objective to improve beneficiary population health and safety.</p> <p>Committee Member Considerations: Committee members should review the list of active measures within relevant specialty sets for MIPS in the appendix and consider this measure's alignment with the group. The appendix lists all active measures reported in relevant MIPS specialty sets.</p>
<p>Staff Rating: Met</p>

² Engelman DT, Ben Ali W, Williams JB, et al. Guidelines for Perioperative Care in Cardiac Surgery: Enhanced Recovery After Surgery Society Recommendations. *JAMA Surg.* 2019;154(8):755–766.

doi:10.1001/jamasurg.2019.1153

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Feasibility
Guiding Question: Are the tools, processes, and people necessary to implement and report on the measure reasonably available for measured entities in the CMS program?
This measure relies on data that are considered a standard practice during surgical or therapeutic procedures under general or neuraxial anesthesia. All required data elements are routinely captured in electronic health records, and reporting is integrated into existing digital workflows. No additional resources are needed for implementation.
Committee Member Considerations: Committee members with experience implementing this or similar measures in acute care hospital settings should reflect on potential challenges to feasibility of data collection and reporting.
Staff Rating: Met

Validity
Guiding Question: Do the data and/or logic support the idea that the measured entity can improve their performance on the measure?
Most entities are already performing at or near the maximum score. Opportunity for further improvement of this score among entities that report on this measure is limited.
Committee Member Considerations: Committee members with experience implementing this or similar measures in acute care hospital and outpatient department settings should reflect on potential methods to temperature management of patients undergoing surgical or therapeutic procedures under general or neuraxial anesthesia.
Staff Rating: Not Met

Reliability

Data are insufficient to estimate the reliability of this measure. Reliability cannot be calculated without denominators, and QPP data do not include denominators.

Reliability
Guiding Question: Does the evidence show that changes in measure performance are due to improvements in quality of care? In other words, do the data demonstrate that variation in measure performance is linked to changes made to processes or behaviors to improve care?
Data were insufficient to estimate reliability for this measure within MIPS.
Staff Rating: Insufficient Information Available

Usability
<p>Guiding Questions: Are there any known barriers or facilitators that determine whether the person or entity could improve on the measure focus? Are these barriers addressable?</p>
<p>Based on the limited information available, the measure appears to be integrated into existing reporting processes and is generally understood by participating entities. No significant barriers to use or improvement have been identified, although unidentified challenges may exist that limit reporting of this measure.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should consider any barriers to using this measure for certain measured entities as well as any potential facilitators that might promote usability within the program.</p>
<p>Staff Rating: Met</p>

Data Stream Parsimony

Data Stream Parsimony
<p>Guiding Question: Does the clinical data flow required for the measure promote non-burdensome data collection and reporting?</p>
<p>The measure uses data elements that are already routinely collected for a patient's record, requiring no additional manual data entry or special data collection processes. Electronic reporting further streamlines the process and minimizes staff burden. There is minimal overlap with other measures in the MIPS quality measure inventory.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should reflect on any additional barriers to the clinical data flow that collection may add as well as potential mitigation strategies.</p>

Patient Journey

Patient Health Journey
<p>Guiding Question: Does the measure address the appropriate aspects of care to align with the patient health care journey?</p>
<p>The measure focuses on assessing a patient's core body temperature during surgical and therapeutic procedures, which may help reduce adverse outcomes as a result of perioperative hypothermia. The measure addresses a specific clinical process that could prevent long-term complications in the patient's health care journey.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should consider if the measure identifies an appropriate and critical time to assess continued temperature management of patients undergoing surgical or therapeutic procedures under general or neuraxial anesthesia. Reflect on if this timepoint is meaningful to patients and any potential barriers or burdens associated with this timepoint in the care journey.</p>

Appendix: Active Measures in the Merit-based Incentive Payment System

Use in MIPS Program
<p>This measure is in the following traditional MIPS specialty sets:</p> <ul style="list-style-type: none">Anesthesiology <p>This measure is in the following MIPS Value Pathways:</p> <ul style="list-style-type: none">Patient Safety and Support of Positive Experiences with Anesthesia. View this pathway at Explore MIPS Value Pathways (MVPs) - G0059 - QPP

Measures in the MIPS Anesthesiology Specialty Set	
CMIT ID	Measure Title
00055-01-C-MIPS	Anesthesiology Smoking Abstinence
00456-01-C-MIPS	Multimodal Pain Management
00555-03-C-MIPS	<i>Perioperative Temperature Management</i>
00591-01-C-MIPS	Prevention of Post-Operative Nausea and Vomiting (PONV) - Combination Therapy
00592-01-C-MIPS	Prevention of Post-Operative Vomiting (POV) - Combination Therapy (Pediatrics)