



**Measure Abbreviation:** TEMP 03 (MIPS 424)\*

*\*TEMP 03 is built to the specification outlined by the Merit Based Incentive Program (MIPS) 424: Perioperative Temperature Management measure. MIPS measure specifications are available for download at <https://qpp.cms.gov/resources/education>*

**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 recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time

**NQS Domain:** Patient Safety

**Measure Type:** Outcome

**Scope:** Measured on a per case basis.

**Measure Summary:**

TEMP 03 (MIPS 424) is a temperature management outcome measure that identifies the percentage of patients who undergo procedures under general or neuraxial anesthesia greater than or equal to 60 minutes or longer for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) was recorded within 30 minutes immediately before or 15 minutes after anesthesia end time. For sites that do not contribute PACU data to ASPIRE, this measure will only capture data documented by the anesthesia provider on the intraoperative anesthetic record.

**Rationale (Directly quoted from MIPS 424):**

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.<sup>1-5</sup>

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.

**Inclusions:**

- All patients, regardless of age, who undergo surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes duration or longer.
- Procedures (by CPT) included: 00100, 00102, 00103, 00104, 00120, 00124, 00126, 00140, 00142, 00144, 00145, 00147, 00148, 00160, 00162, 00164, 00170, 00172, 00174, 00176, 00190, 00192, 00210, 00211, 00212, 00214, 00215, 00216, 00218, 00220, 00222, 00300, 00320, 00322, 00326, 00350, 00352, 00400, 00402, 00404, 00406, 00410, 00450, 00454, 00470, 00472, 00474, 00500,

00520, 00522, 00524, 00528, 00529, 00530, 00532, 00534, 00537, 00539, 00540, 00541, 00542, 00546, 00548, 00550, 00560, 00600, 00604, 00620, 00625, 00626, 00630, 00632, 00635, 00640, 00670, 00700, 00702, 00730, 00740, 00750, 00752, 00754, 00756, 00770, 00790, 00792, 00794, 00796, 00797, 00800, 00802, 00810, 00820, 00830, 00832, 00834, 00836, 00840, 00842, 00844, 00846, 00848, 00851, 00860, 00862, 00864, 00865, 00866, 00868, 00870, 00872, 00873, 00880, 00882, 00902, 00904, 00906, 00908, 00910, 00912, 00914, 00916, 00918, 00920, 00921, 00922, 00924, 00926, 00928, 00930, 00932, 00934, 00936, 00938, 00940, 00942, 00944, 00948, 00950, 00952, 01112, 01120, 01130, 01140, 01150, 01160, 01170, 01173, 01180, 01190, 01200, 01202, 01210, 01212, 01214, 01215, 01220, 01230, 01232, 01234, 01250, 01260, 01270, 01272, 01274, 01320, 01340, 01360, 01380, 01382, 01390, 01392, 01400, 01402, 01404, 01420, 01430, 01432, 01440, 01442, 01444, 01462, 01464, 01470, 01472, 01474, 01480, 01482, 01484, 01486, 01490, 01500, 01502, 01520, 01522, 01610, 01620, 01622, 01630, 01634, 01636, 01638, 01650, 01652, 01654, 01656, 01670, 01680, 01682, 01710, 01712, 01714, 01716, 01730, 01732, 01740, 01742, 01744, 01756, 01758, 01760, 01770, 01772, 01780, 01782, 01810, 01820, 01829, 01830, 01832, 01840, 01842, 01844, 01850, 01852, 01860, 01924, 01925, 01926, 01930, 01931, 01932, 01933, 01935, 01936, 01951, 01952, 01961, 01962, 01963, 01965, 01966

**Exclusions:**

- Cases <60 minutes duration between anesthesia start and anesthesia end.
- MAC cases
- Peripheral Nerve Block only cases
- Radical clavicle or scapula surgery (CPT: 00452)
- Thoracolumbar sympathectomy (CPT: 00622)
- Lumbar chemonucleolysis (CPT: 00634)
- Diagnostic arteriography/venography (CPT: 01916)
- Burn debridement/grafting for 9% TBSA (CPT: 01953)
- Organ harvest (CPT: 01990)
- Anesthesia for diagnostic or therapeutic nerve blocks/injections (CPT: 01991, 01992)
- Other anesthesia procedure (CPT: 01999)
- Cardiac surgery (CPT: 00561, 00562, 00563, 00566, 00567, 00580, 01920)
- Obstetric Operative Procedures (CPT: 01968, 01969)
- Acute Pain Management (CPT: 01996)
- Obstetric Non-Operative Procedures (CPT: 01958, 01960, 01967)
- Obstetric Non-Operative Procedure Rooms (Rooms tagged as OB-GYN – Labor and Delivery)
- Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”
- Cases with an intraoperative note mapped to intentional hypothermia (MPOG concept: 50037)
- Emergency cases (MPOG concepts: 70142 or 515)

**MPOG Concept IDs Required:**

| Temperature MPOG Concept IDs |                              | Exclusion MPOG Concept IDs |                                     |
|------------------------------|------------------------------|----------------------------|-------------------------------------|
| 3050                         | Temp 1- Unspecified Site     | 50037                      | Intentional hypothermia             |
| 3051                         | Temp 2- Unspecified Site     | 70142                      | Assessment and Plan-Emergent Status |
| 3052                         | Temp 1- Monitoring Site      |                            |                                     |
| 3053                         | Temp 2- Monitoring Site      |                            |                                     |
| 3031                         | Temperature- Temporal Artery |                            |                                     |
| 3054                         | Temperature- Skin            |                            |                                     |
| 3055                         | Temperature- Esophageal      |                            |                                     |
| 3056                         | Temperature- Blood           |                            |                                     |
| 3057                         | Temperature- Tympanic        |                            |                                     |
| 3058                         | Temperature- Bladder         |                            |                                     |
| 3059                         | Temperature- Nasopharyngeal  |                            |                                     |
| 3060                         | Temperature- Axillary        |                            |                                     |
| 3061                         | Temperature- Rectal          |                            |                                     |
| 50174                        | Postoperative vital signs    |                            |                                     |

**Data Diagnostics Affected:**

- Cases with a Temperature Observation
- Cases with Staff Tracking
- Staff Role Mapping
- Staff Sign-Ins are Timed

**Collations Used:**

- Anesthesia Technique- General
- Anesthesia Technique- Neuraxial
- Anesthesia Duration
- Procedure Type- Labor Epidural

**Failed Case Review Grid Elements:**

- Link to Case
- Date of Service
- Procedure
- Surgical Service
- Anesthesia Duration
- Highest Temperature
- Time of Last Temperature
- Anesthesia End
- Has Anesthesia CPT
- Responsible Provider
- MPOG Case ID

**Case Viewer Template:**

**Other Measure Build Details:**

This measure requires CPT codes to be transferred to the MPOG database for cases to be included. Those sites participating with this measure must have current pro fee procedure data in the MPOG Central database- refer to the flow diagram on page 6 of this specification for more details.

Temperature documented in within the postop vital sign note in the anesthetic record or temperatures documented and mapped to the temperature physiologic concepts are acceptable sources for this measure.

**Success:** At least one body temperature measurement equal to or greater than 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time.

**Threshold:** 90%.

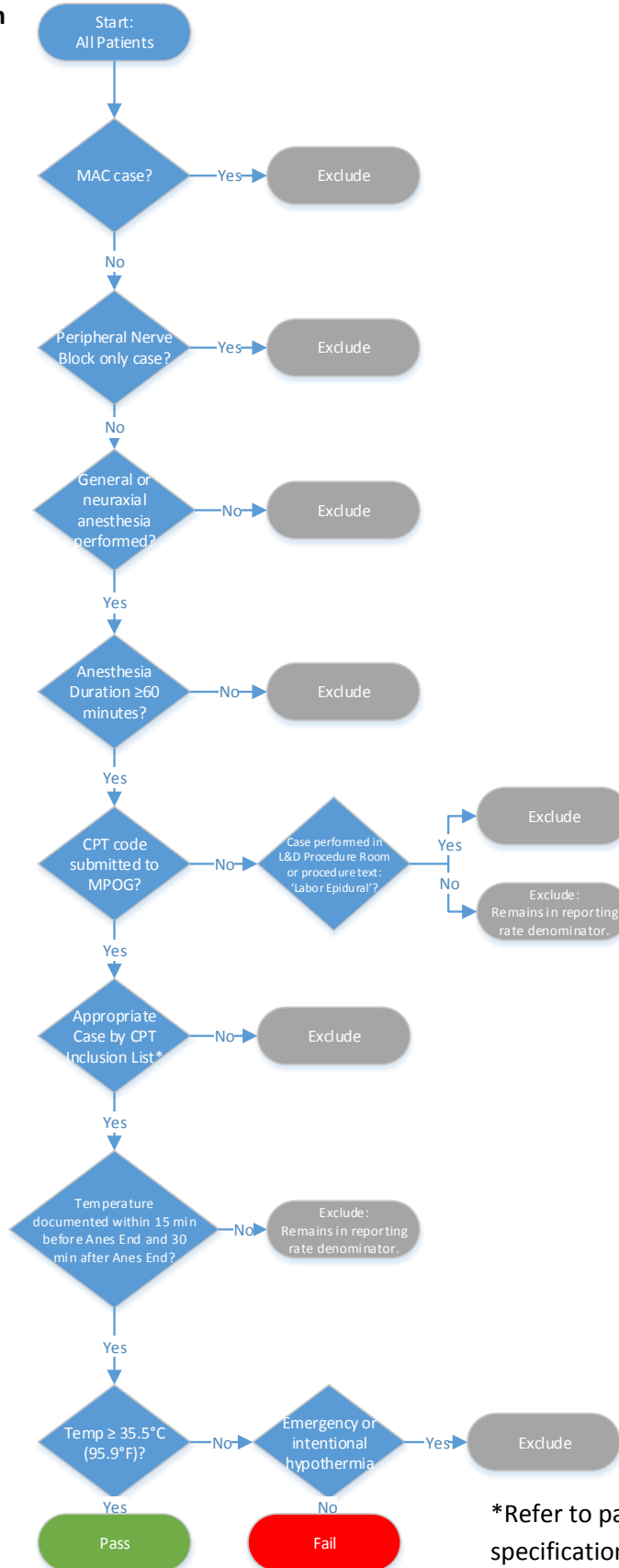
**Responsible Provider:** Provider present for longest duration of the case per staff role.

**Method for determining Responsible Provider:** If two providers with the same role are signed in for the same duration of time during the case, the person signed in first is attributed for that role.

**Risk Adjustment (for outcome measures):**

*Not applicable.*

TEMP 03 Flow Diagram



\*Refer to page 2 of this measure specification for the complete list of included procedures by CPT code.

**References:**

1. Sessler DI. Temperature monitoring and perioperative thermoregulation. *Anesthesiology*. 2008;109(2):318-338.
2. Sun Z, Honar H, Sessler DI, et al. Intraoperative core temperature patterns, transfusion requirement, and hospital duration in patients warmed with forced air. *Anesthesiology*. 2015;122(2):276-285.
3. Carpenter L, Baysinger CL. Maintaining perioperative normothermia in the patient undergoing cesarean delivery. *Obstetrical & gynecological survey*. 2012;67(7):436-446.
4. Insler SR, Sessler DI. Perioperative thermoregulation and temperature monitoring. *Anesthesiology clinics*. 2006;24(4):823-837.
5. Horn EP, Schroeder F, Gottschalk A, et al. Active warming during cesarean delivery. *Anesthesia and analgesia*. 2002;94(2):409-414, table of contents.