



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.¹⁻⁵

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)
- 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

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. Conversion from F to C: $F=32 +9/5$ (°C)

Artifact algorithm:

- Less than 32.0°C (89.6F)
- Greater than 40.0°C (104.0F)
- Any minute-to-minute jumps >0.5°C equivalent.
Example: 0.125°C /15s, 0.25°C / 30s, 1°C / 2mins

Algorithm for determining Case Duration:

Case Start:

1. Anesthesia Induction End. If not available, then
2. Anesthesia Induction Begin. If not available, then
3. Procedure Start. If not available, then
4. Patient in Room. If not available, then
5. Anesthesia Start

Case End:

1. Patient Extubated. If not available, then
2. Procedure End. If not available, then
3. Patient Out of Room. If not available, then
4. Anesthesia End.

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. See 'Other Measure Build Details' section of this specification to view the algorithm used for determining case duration.

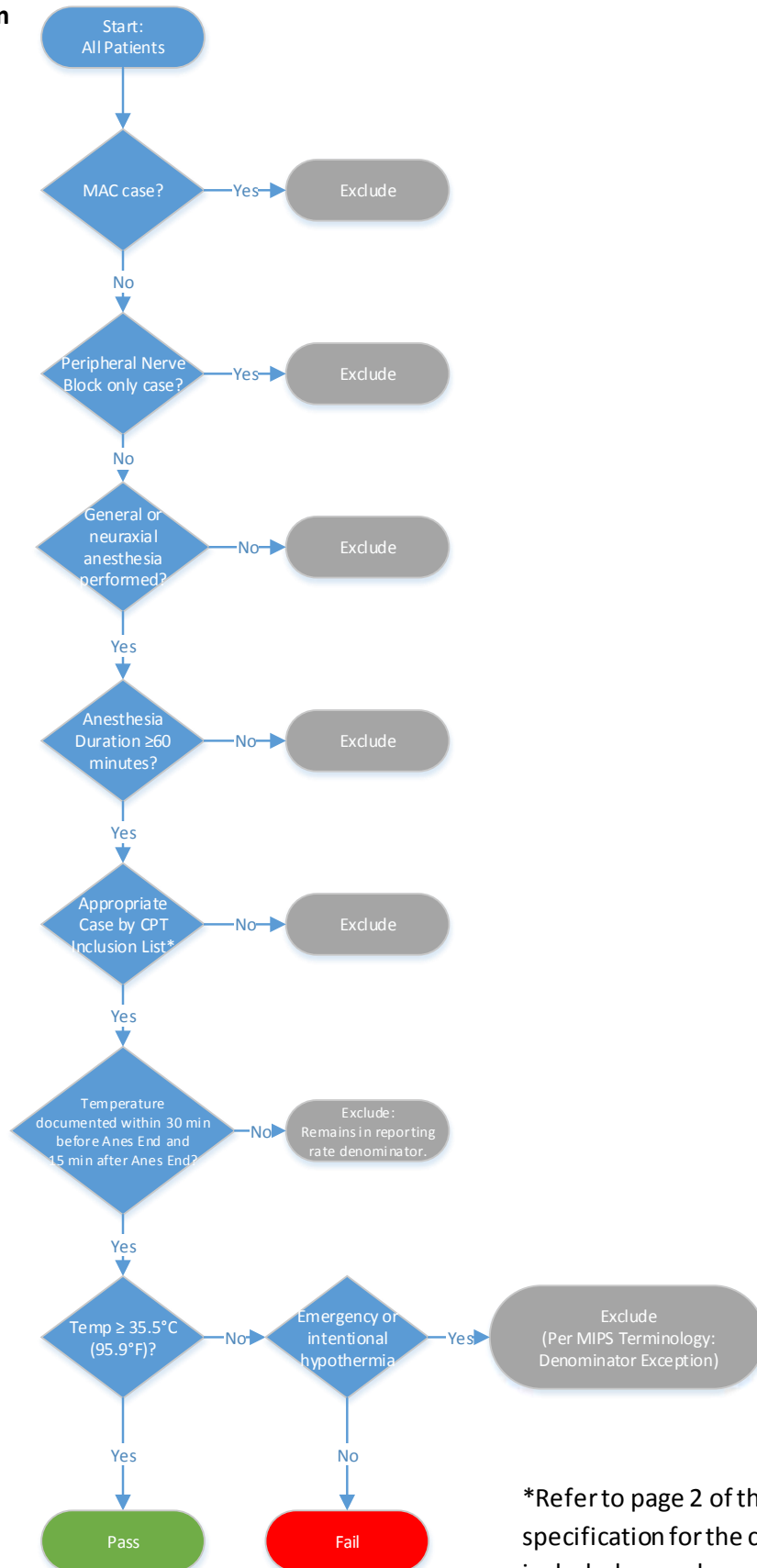
Method for determining Responsible Provider:

In the event that two or more providers in the same class are signed in for the same duration, all providers signed in for the longest duration will be attributed.

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.