FY21 Phys Comp 149: Perioperative Temperature Management Quality Measure

Dept. of Anesthesiology – BSW Central TX

Revised 11/05/2020: BBVacula

**Title**: 149: Perioperative Temperature Management

**Description**: Percentage of patients, regardless of age, who undergo elective surgical or therapeutic

procedures under general or neuraxial anesthesia of 60 minutes duration or longer (from Anesthesia start to Anesthesia end) 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 to 15 minutes immediately after anesthesia end time.

**Type**: Group outcome measure by region

**Rationale**: A drop in core temperature during surgery, unintended perioperative hypothermia, may occur in up to 20% of surgical patients and can result in numerous adverse effects. These may include adverse myocardial outcomes, increased transfusion requirements, increased incidence of surgical site infection, and impaired wound healing. The desired outcome, reduction in adverse surgical effects due to perioperative hypothermia, is affected by maintenance of normothermia perioperatively.

**Denominator**: All patients, regardless of age, who undergo elective surgical or therapeutic procedures under general or neuraxial anesthesia of 60 minutes or longer.

**Numerator**: Patients for whom at least one body temperature greater than or equal to 35.5 degrees Celsius (or 95.9 degrees Fahrenheit) is recorded within 30 minutes immediately before to 15 minutes immediately after anesthesia end time.

**Exclusions**:

* Less than 60 minutes between anesthesia start and anesthesia end.
* MAC
* Regional (Peripheral Nerve Block)
* Emergent
* GI
* Obstetric Operative Procedures (e.g. c-section, BTL) (CPT: 01968, 01969)
* Obstetric Non-Operative Procedures (e.g. labor epidural, CSE, spinal) (CPT: 01958, 01960, 01967)
* Cardiac surgery (CPT: 00561, 00562, 00563, 00566, 00567, 00580, 01920)
* Intentional hypothermia
* Radiation Oncology
* CT or MRI
* Acute Pain Management (e.g. APMS epidural) (CPT: 01996)
* Diagnostic arteriography/venography (CPT: 01916)
* Organ harvest (CPT: 01990)
* Anesthesia for diagnostic or therapeutic nerve blocks/injections (CPT: 01991, 01992)

**Baseline:** 96.2%(7/1/19 – 2/28/20: COVID-excluded FY20 Performance)

**Performance Table**: Approved 9/1/20 and to be averaged over 10 months: 9/1/20 - 6/30/21

|  |  |
| --- | --- |
| **Tier** | **Goal (%)** |
| Below Threshold | <95.1 |
| Performing | 95.2 – 97.2 |
| High Performing | >97.3 |

**References**:

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2. <https://mpog.org/files/quality/measures/TEMP-03.pdf>
3. Fleisher LA, Fleischmann KE, Auerbach AD, et al. 2014 ACC/AHA guideline on perioperative cardiovascular evaluation and management of patients undergoing noncardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines. Journal of the American College of Cardiology.2014;64(22):e77-137.
4. National Collaborating Centre for N, Supportive C. National Institute for Health and Clinical Excellence: Guidance. The Management of Inadvertent Perioperative Hypothermia in Adults. London: Royal College of Nursing (UK)National Collaborating Centre for Nursing and Supportive Care.; 2008.
5. Kim P, Taghon T, Fetzer M, Tobias JD. Perioperative hypothermia in the pediatric population: a quality improvement project. American journal of medical quality: the official journal of the American College of Medical Quality.2013;28(5):400-406.
6. Sessler DI. Temperature monitoring and perioperative thermoregulation. Anesthesiology. 2008;109(2):318-338.
7. 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.
8. Carpenter L, Baysinger CL. Maintaining perioperative normothermia in the patient undergoing cesarean delivery. Obstetrical & gynecological survey. 2012;67(7):436-446.
9. Insler SR, Sessler DI. Perioperative thermoregulation and temperature monitoring. Anesthesiology clinics. 2006;24(4):823-837.
10. Horn EP, Schroeder F, Gottschalk A, et al. Active warming during cesarean delivery. Anesthesia and analgesia. 2002;94(2):409-414, table of contents.
11. Yi J, Liang H, Song R, Xia H, Huang Y. Maintaining intraoperative normothermia reduces blood loss in patients undergoing major operations: a pilot randomized controlled clinical trial. BMC anesthesiology.2018;18(1):126.

**FAQs:**

1. Is GI included in the temperature measure?

*No. See Exclusions above. All GI cases, including MAC and general anesthesia, are excluded.*

1. Does the assumption remain that all temp measurements are central temps and does that necessitate a change in department utilization of skin temp monitoring?

*Not all perioperative temperature measurements are core body temperature although they are encouraged.* *When able and available, consider measuring intraop core temperature from a urinary foley equipped with temperature probe, esophageal temp probe, or nasopharyngeal probe.* *PACU temperature is routinely measured using a facial skin temperature device.*

*Although one of the goals of quality improvement is to standardize practice, adjustments may be made to accommodate patient, environmental, or other factors.*

1. How are exceptions to be documented?

*To standardize documentation for review, exceptions should be documented in a SCIP Note (e.g. “Active, forced air warming was not used do to surgeon preference.”).*

1. Where will these guidelines be posted?

*When finalized, it should be posted to* [*http://sw-anesthesia.com*](http://sw-anesthesia.com)*. When the new departmental SharePoint website goes live, it should be at <https://bswhealth.sharepoint.com/sites/deptofanesthesiology>.*