Warming Up to Quality – The Normothermia Initiative

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The Purpose

The purpose of this quality improvement initiative was to improve perioperative temperature management at Surgery Center San Carlos. The project aimed to enhance patient safety, reduce the risk of surgical complications, and ensure compliance with the ASC-13: Normothermia Outcome measure. The national benchmark for this measure is ≥99.10%, requiring patients who undergo general anesthesia for 60 minutes or longer to maintain a temperature of ≥36.0°C within 15 minutes of PACU arrival. Our average compliance rate in 2023 was 97.51%

The Goal

The goal of this project was to achieve and sustain a normothermia compliance rate exceeding the national benchmark of 99.10%, as defined by the ASC Quality Reporting (ASCQR) Program. The center aimed for 100% monthly compliance following intervention, with a sustained annual average of at least 99.5%.

The Remeasurement

Following implementation:

- Achieved 100% normothermia compliance each month from February to December 2024.
- Achieved 2024 annual average of 99.86%, exceeding the national benchmark of 99.10%.
- Improvements were sustained over time, supported by workflow integration and ongoing staff engagement.

The Communication

Study findings and outcomes were shared with:

- The Medical Advisory and Quality Assurance Board (October 2024)
- The Surgery Center Oversight Committees (January 2025)
- More than 30 Sutter Health ASCs during the Clinical Leaders Meeting (March 5, 2025), facilitating cross-center learning and broader adoption of best practices.

The Gap

A gap analysis revealed several contributing factors:

- 20% of PACU RNs lacked clarity on the documentation requirements for patients under general anesthesia ≥60 minutes.
- Warming initiated in the OR was not always resumed in PACU unless the patient was already hypothermic.
- Warming blankets often became displaced during transfers and were not properly repositioned.
- Shoulder arthroscopy and rotator cuff repairs accounted for over 60% of non-compliant cases, indicating a need for targeted improvements.

The Corrective Actions

To address these gaps, the center implemented the following:

- Education: Interdepartmental training sessions in January 2024 clarified the ASC-13 requirements and emphasized a team-based approach.
- Collaboration: Admissions, OR, and PACU staff were engaged in developing shared workflows that supported normothermia throughout the perioperative timeline.
- Equipment trials: Warming products such as Thermoflect blankets and bonnets, and 3M Bair Huggers of varying sizes, were evaluated and implemented.
- Audit tool: From February to September 2024, PACU nurses used a Normothermia Audit Tool to document temperature checks, reinforcing the importance of timely assessment.

The Outcome Statement

This study demonstrated that clear education, interdepartmental collaboration, and consistent workflow practices can drive measurable improvements in patient outcomes.
Key takeaway: Maintaining normothermia is a shared responsibility across the perioperative continuum, and embedding best practices into daily routines ensures long-term success.