

Let's Get to the Core of the Score: A Performance Improvement Project to Achieve Normothermia in Preoperative Area

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Background

Normothermia is defined as a core body temperature range of 96.8°F to 100.4°F (36°C to 38°C). Maintaining patient normothermia during the perioperative period is crucial for preventing complications and achieving better postoperative outcomes. Prewarming patients for at least 30 minutes before surgery is an effective way to maintain perioperative normothermia. Achieving normothermic temperature before transferring to the operating room has become a standard of care. The WT3 preop/AOD area monitors patients' core temperature using a noninvasive monitoring device, the spot-on (3M temperature monitoring system). Active (forced air warming device) and passive warming measures are provided to maintain normothermia before going to the OR. Despite the availability of technology and nursing management to prevent hypothermia, the normothermia average monthly scores remained below 98% with a quarterly score of 96.6% for the second quarter.

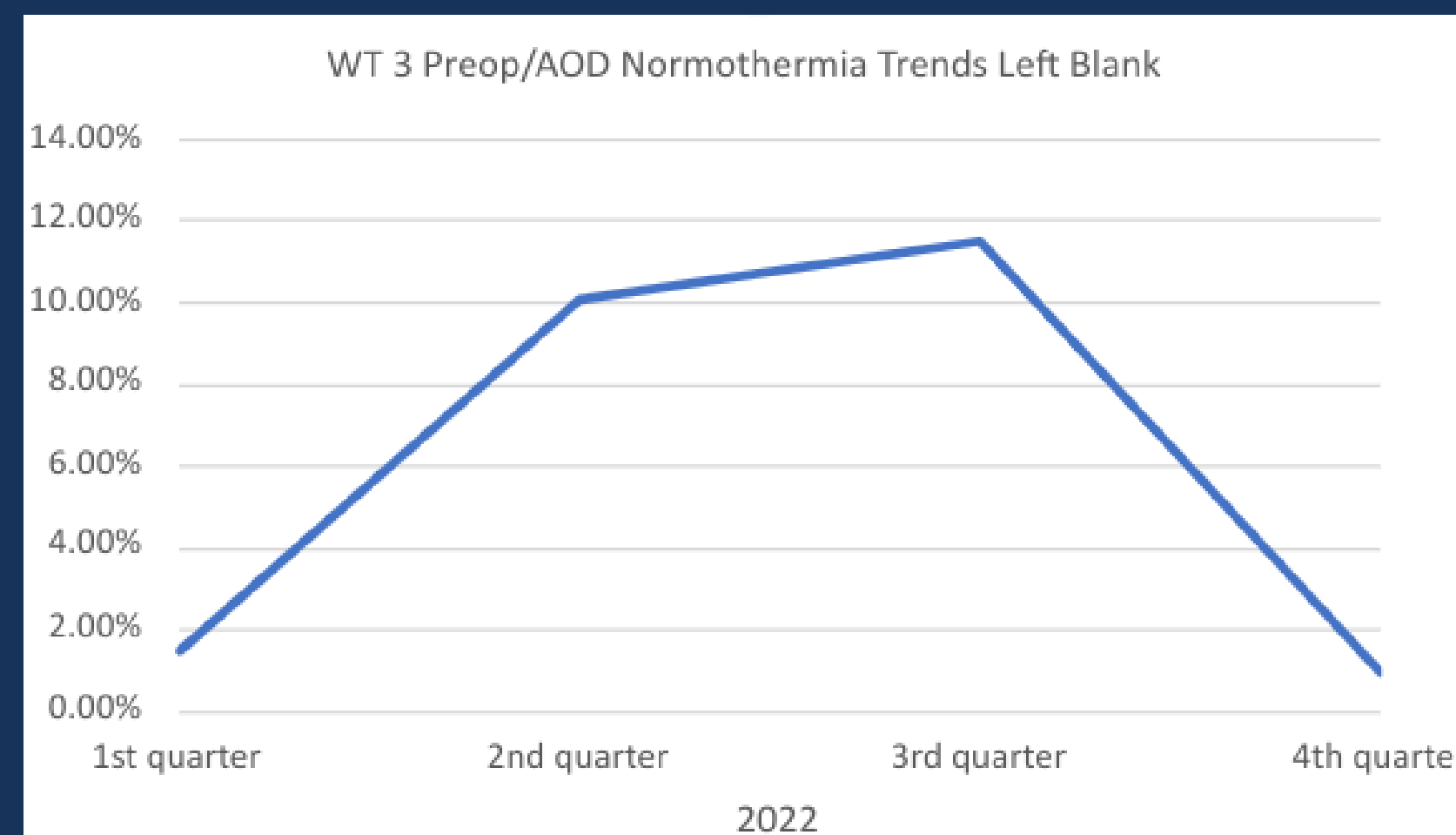
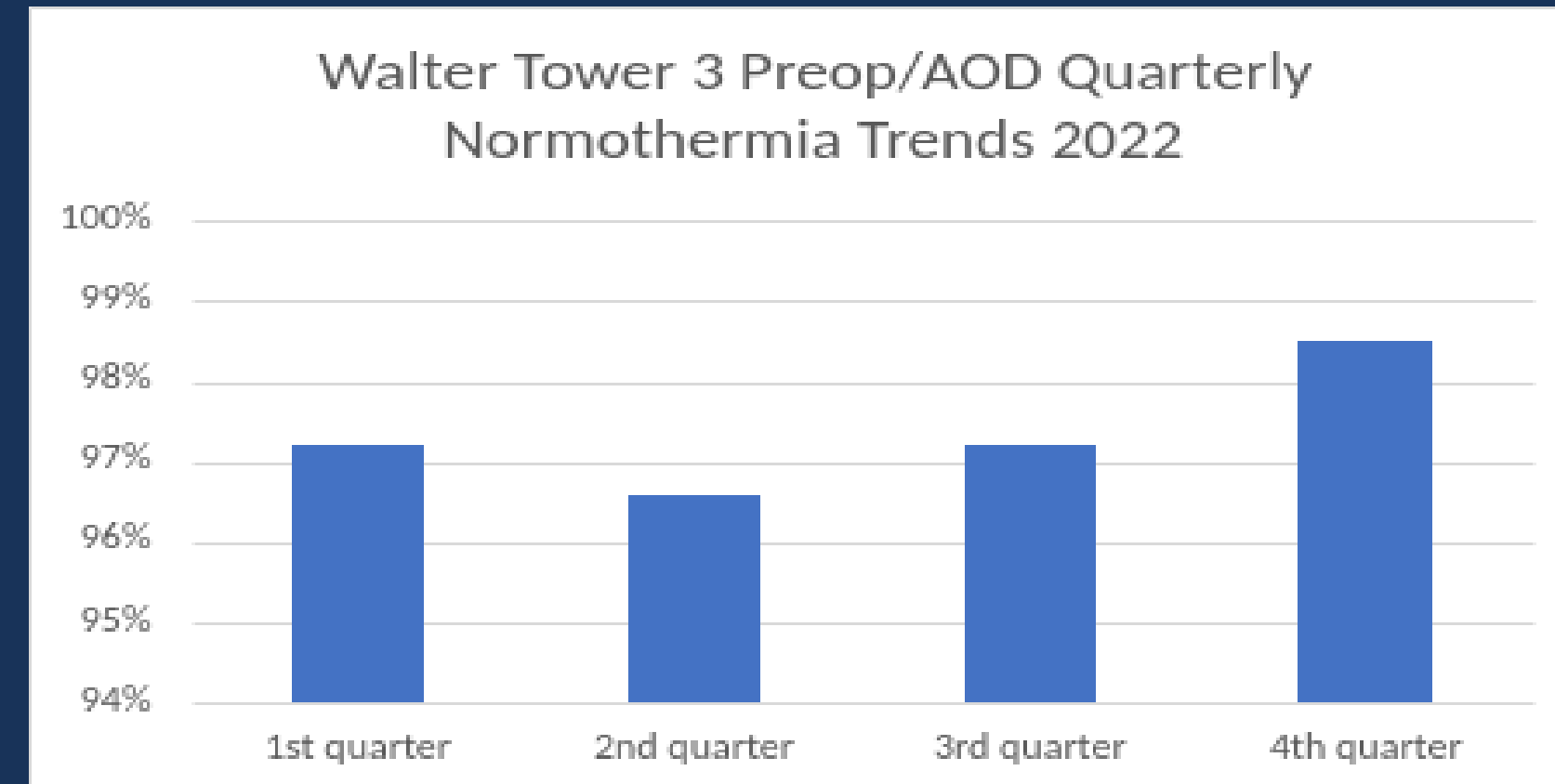
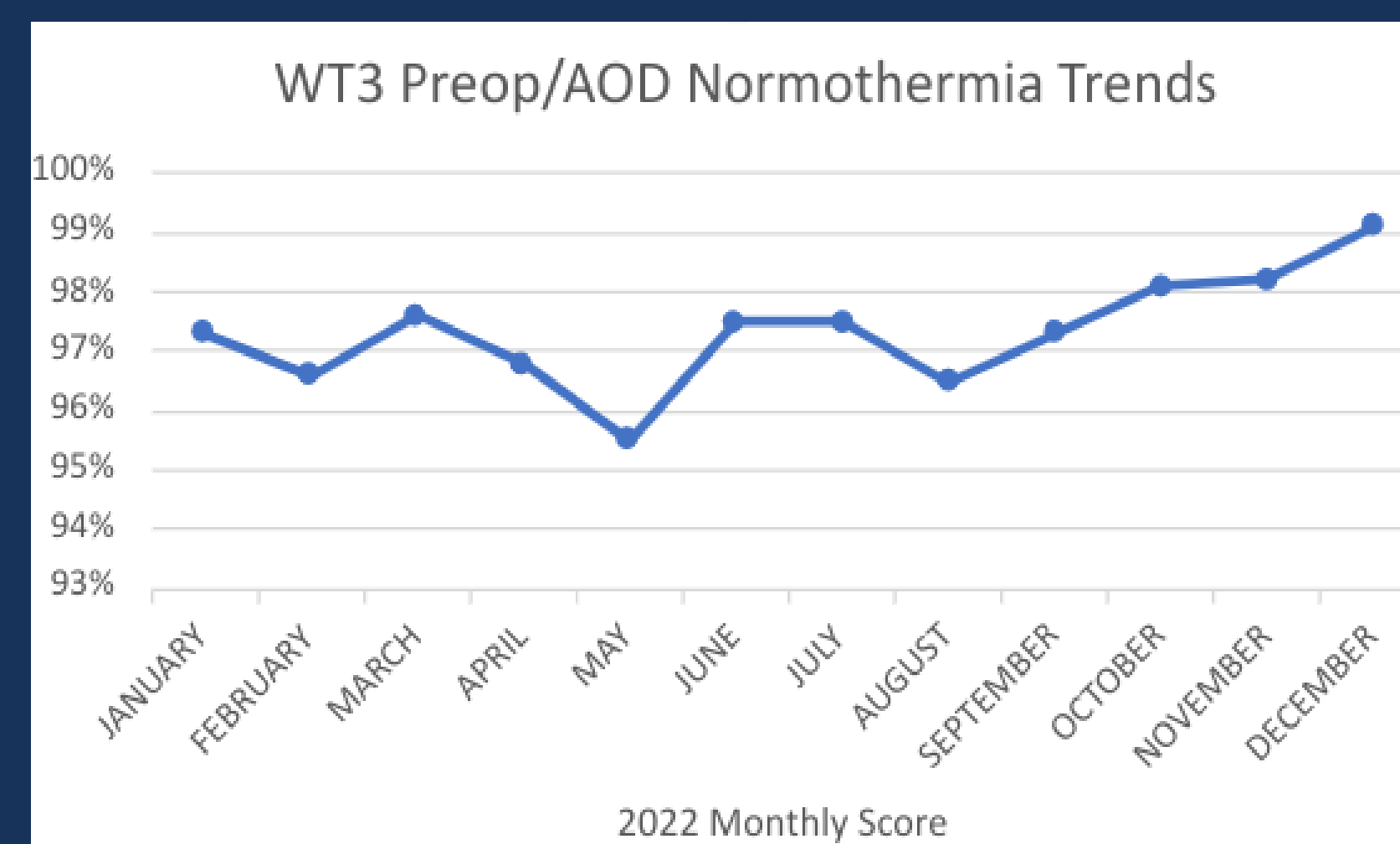
Purpose

This project aims to improve performance by increasing the normothermia score in the WT3 preoperative/AOD area by 2% by the end of the 4th quarter of 2022. This project will use a baseline of 96.6% from the 2nd quarter of 2022 as a starting point for measuring progress.

Methods

- All temperature monitoring equipment and prewarming devices were checked for functionality. Malfunctioning equipment or devices were logged and reported to Biomed for repair or replacement.
- Daily calibration of the temperature monitoring device at the beginning of the shift was performed to ensure the device transmitted accurate temperature readings.
- Daily chart audits were performed to check for core temperature recorded upon arrival in preop and 30 minutes before departure to OR.
- Staff in-services were conducted.
- A poster board about normothermia was created to educate the staff.
- Flyers were posted as a guide on daily documentation.
- Based on the audit results, staff-to-staff coaching, and real-time reminders were conducted as needed.
- Patients were also educated.

Results



Results

A 2% increase was recorded from Q2 to Q4 of 2022. Additionally, the number of quarterly temperature trends left blank dropped from 10.1% to 1% between the second and fourth quarters which showed improvement in staff compliance. Barriers that impacted the normothermia scores, in addition to patients not reaching normothermia, were identified as:

- not using the core as the temperature source
- missing core temperature records 30 minutes before the patient's departure to the OR
- malfunctioning devices/equipment

Implications

Preoperative nurses are responsible for keeping patients normothermic while in the preoperative area. Close monitoring and recording of the temperature are also essential in accountability for ensuring patient safety and preventing postoperative complications.

Future Actions

- To focus on maintaining and improving staff compliance in order to ensure sustained improvement in normothermia scores and to prevent a resurgence in the number of temperature trends left blank.
 - This can be accomplished by providing training and education on the importance of perioperative normothermia, using the core as the temperature source, regularly recording core temperature records, and ensuring that all devices and equipment are functioning properly.
- Establish a team to regularly evaluate and improve the processes and procedures related to temperature monitoring.
- Establish clear policies and procedures for temperature monitoring and recording in the preoperative area.

Acknowledgments

The authors would like to thank Tymeka Bradley for providing the data, Biomed department, and the Walter Tower 3 preop/AOD Nursing Management and Staff

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