

Quality Initiative to Improve Intraoperative Normothermia to Reduce Hysteretomy Surgical Site Infections

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Learning **Objectives**

- · Describe the importance of reducing abdominal hysterectomy surgical site infections
- Describe normothermia initiatives implemented to decrease the abdominal hysterectomy surgical site infection rate
- Demonstrate the benefits of interdisciplinary collaboration to implement a normothermia protocol



- Tampa General Hospital is a 1,040-bed non-profit hospital, tertiary, research and academic medical center. One of the regions only university-level academic medical center.
- An average of 700 abdominal Hysterectomy procedures are performed annually at Tampa General Hospital.

Background

- · The Center for Medicare and Medicaid Services (CMS) requires monthly data for inpatient abdominal hysterectomy surgical site infections (SSIs) to be reported to the Center for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN).
- · Risks for abdominal hysterectomy SSIs include prolonged surgical discomfort, increased morbidity, extended length of stay, and increased likelihood of readmissions.
- The hospital identified a significant increase in abdominal hysterectomy SSIs between October 2021 and September 2022.

Methods

- A multidisciplinary team was formed to address abdominal hysterectomy SSIs.
- Based on a review of literature, the team recommended maintenance of intra-operative normothermia (equal to or greater than 36° Celsius) as a process measure to improve our SSI rate.
- In September 2022, the Women's Center operating room (OR) nursing team piloted a normothermia protocol: ensuring patients were warmed to equal to or greater than 36° Celsius by use of a warming blanket/warming gown in Pre-operative holding; use of hot lines (warm intravenous infusions) by anesthesia; and communication between the anesthesia provider and surgical team about initial patient temperature, raising the OR room temperature if the patient was hypothermic.
- The timeline for the pilot protocol was from September 2022 to June 2023.

- · The surgical and anesthesia teams kept track of the patient's temperature throughout the procedure.
- · The OR nurse clinicians educated surgical staff and anesthesia providers about the goal of the protocol and its importance.
- · Our HYST SSI team used the Model for improvement process by conducting a Plan, Do, Study, Act Cycle (PDSA) with the prewarming incision Normothermia tool that helped keep track of our improvement efforts.



The Multidisciplinary Team

- Infection Preventionists
- OR Nursing Clinicians
- OR Nursing Educators
- · Anesthesia
- Performance Improvement Specialist Communicate patient's initial temp_if patient is hypother (less than 36'C), increase the OR room temperature!
- Surgeons

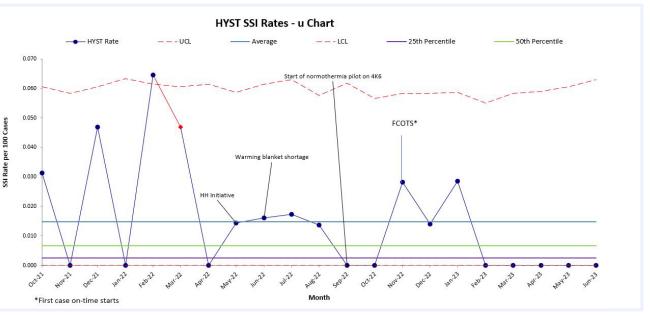
Poster: Keep Your Patients Warm!

Keep Your Pati

Temperature should be 36°C befor starting the procedure:

-line is set up by Anesthesia and d

inkets on patient upon arrival to OR.



Results

- The cumulative rate of abdominal hysterectomy SSIs was 2.1 per 100 surgeries between Oct. 2021 and Sept. 2022.
- Pre-intervention, normothermia was maintained in 45% of reviewed abdominal hysterectomy surgeries.
- Post-intervention, normothermia was maintained in 61% of reviewed abdominal hysterectomy surgeries from Sept. 2022 to April 2023.
- The hysterectomy SSI rate decreased to 0.9 per 100 surgeries from Jan. to March 2023 and to 0.0 per 100 surgeries from April to June 2023.

Conclusions

- Since the implementation of the normothermia protocol, the abdominal hysterectomy rate has improved significantly over a 6-month period.
- The initial increase in HYST SSI from Nov. 2022 to Jan. 2023 may be associated with a separate initiative; FCOTS (first case on-time starts), where the goal was to reduce turnover time at the start of the day & between surgeries.

this project



 The spread of the normothermia protocol to other surgical suites should be considered to determine if sustained reduction in SSIs can be maintained in other specialties.

 Our interdisciplinary collaboration helped standardize pre-operative antibiotics, establish a HYST SSI bundle. and created more awareness around infection prevention best practices.

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Reference

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**We have no disclosures to report.