REDUCING HYSTERECTOMY SURGICAL SITE INFECTIONS THROUGH UPDATED BEST PRACTICE GUIDELINES FOR VAGINAL/ABDOMINAL SKIN PREPARATION

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BACKGROUND

Surgical site infections (SSIs) are a primary focus for the infection preventionist as they are preventable and can cause significant harm to patients. SSIs are avoidable when utilizing evidence-based prevention strategies. To improve compliance, these strategies are combined into an SSI prevention bundle, a group of evidence-based practices that, when used together, improve patient outcomes[1]. Common bundle elements include chlorhexidine gluconate (CHG) bathing, antibiotic administration, surgical skin preparation, glucose control, and maintaining normothermia. Hysterectomy SSIs were specifically identified as an opportunity for improvement at a community hospital. A thorough analysis of SSIs and direct observations of surgeries led to an educational intervention focused on vaginal and abdominal skin preparation.

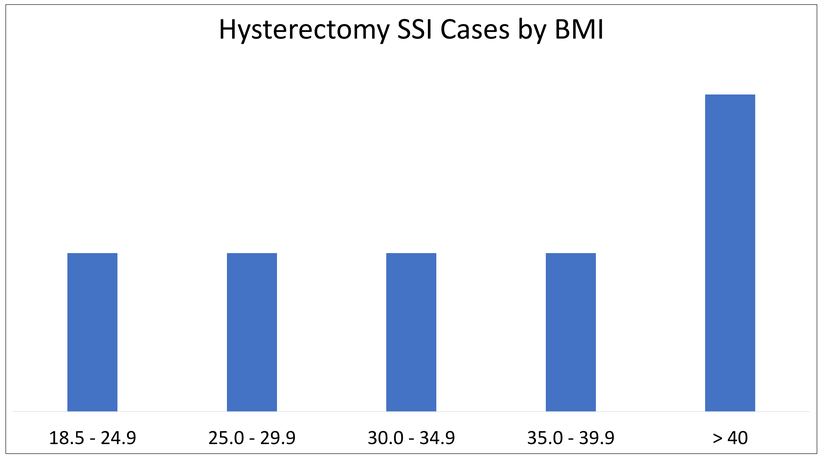
METHODS

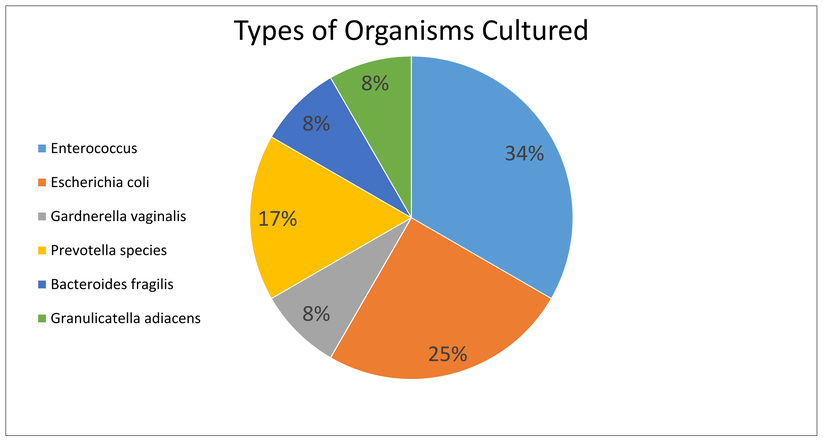
A comprehensive analysis of hysterectomy SSIs from the previous 20 months along with nine surgery observations were completed. Data was collected from the electronic health record for each infection including patient risk factors and compliance with best practices. Results from the analysis were reported to the SSI taskforce, a multidisciplinary team who regularly identifies trends and opportunities for improvement.

The team identified updated education on vaginal and abdominal skin preparation as a primary opportunity to reduce practice variation. Each staff member was required to participate in a check-off on vaginal and abdominal skin preparation. Nursing educators directly observed each staff member prepping a hysterectomy surgical patient and provided necessary feedback in real time.

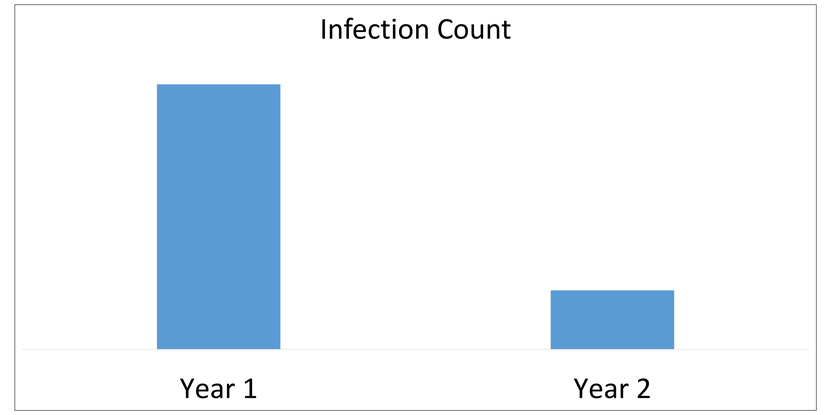
RESULTS

Data analyzed showed that 67% of patients had a body mass index (BMI) greater than 30 and 100% of organisms cultured are part of natural urogenital and gastrointestinal tract flora. Bacteria harbored in the vagina and perineal region, especially in higher BMI patients, increases risk for infection[2]. Direct observations demonstrated a pattern among inconsistences in skin preparation. The data from the analysis combined with the observations indicated a need for education on current best practices for skin preparation.





During and after intervention, there was a sustained decline in the number of hysterectomy SSIs. The facility achieved a 78% reduction in hysterectomy SSIs year over year after implementing recommended education.



CONCLUSIONS

This project shows that analysis of SSIs combined with surgical observations can highlight areas of opportunity. Pinpointing these areas allow facilities to provide tailored education on evidence-based practice to improve patient outcomes. Instead of searching for complex solutions that are often harder to replicate, the team took a deeper look at basic infection prevention measures that leadership often assumes are completed and done correctly. The intervention resulted in significant improvement without high cost, long timelines, or overuse of resources.

REFERENCES

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