HOW AN ENHANCED RECOVERY AFTER SURGERY PATHWAY FOR COLORECTAL PATIENTS IMPROVED PATIENT OUTCOMES

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Nothing to Disclose

Background

Surgical site infections following colorectal surgery are associated with worse postoperative outcomes and longer lengths of stay. Better patient outcomes are correlated with the implementation of enhanced recovery pathways, centered on perioperative care best practices. This Agency for Healthcare Research and Quality (AHRQ) Safety Program for Improving Surgical Care and Recovery (ISCR) quality improvement project focused on one Midwest regional health system's involvement in creation and implementation of an evidence-based clinical pathway for colorectal patients struggling with elevated surgical site infections following colorectal surgeries.

Pathway Checklist for Pre and Intraop Areas

PREOPERATIVE AREA	
Yes No	Carbohydrate drink completed Time: If no, note reason:
Yes No	Mechanical bowel preparation completed at home
Yes No	Oral antibiotics completed at home:
Yes No	Bathing completed at home
Yes No	Patient education materials brought with patient to hospital
Yes No	Patient NPO Last liquid: Last solid:
Yes No	SCDs placed/running
Yes No	Preop analegesics (Gabapentin or Lyrica, Tylenol and Celebrex):
Yes No	Preop anti-emetics (scopolamine patch):
Yes No	Forced air warming device placed on patient
Yes No	Glucose checked and appropriate action taken Result: Action taken if >200:
Yes No	Subcutaneous heparin/Lovenox administered (will not be given if receiving block) If no, note reason:
INTRAOPERATIVE AREA	
Yes No	Antibiotic administered prior to incision: Time:
Yes No	Forced air warmer applied
Yes No	hotline used
Yes No	Skin prep complete:
Yes No	SCDs running
Yes No	Anti-emetics given (Zofran, dexamethasone):
Yes No	Regional analgesia (Epidural, Spinal or TAP)

Results

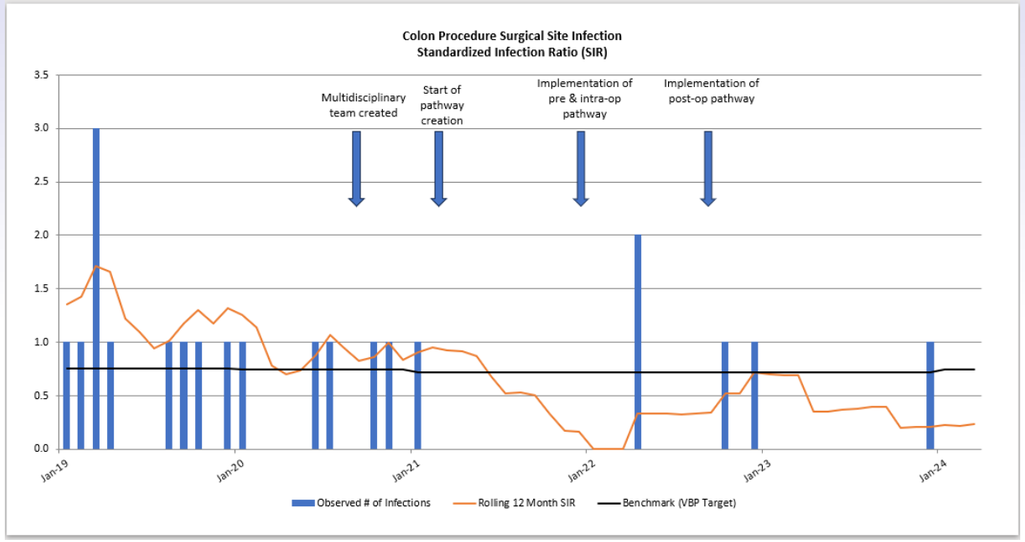
Baseline data from 29 colorectal surgery patients was collected pre pathway in 2021 and was compared to 153 collected post-pathway from 2022-March of 2024.

- Standardized infection ratios decreased from 0.167 to **0.0**
- Median length of stay decreased by **1.85 days**
- Readmission rates decreased by **2.14%**
- Multi-modal pain management use increased by **45.65%**
- Regional anesthesia use increased by **70.24%**
- Return of bowel function decreased by **1.15 days**

Methods

A multi-disciplinary team was created to develop and implement an Enhanced Recovery After Surgery surgical pathway for all scheduled colorectal patients.

Comparison of pre- and post-pathway surgical site infections, length of stay, readmission rate, use of multi-modal pain management, use of regional anesthesia and mean days of return of bowel function were performed along with other measures.



Conclusion

Implementation of an Enhanced Recovery After Surgery colorectal pathway resulted in improvements in patient management and outcomes.

- The keys to success were the continued involvement of a multi-disciplinary team and the strong relationship between the clinic and hospitals.
- Hospitals struggling with higher colorectal surgical site infections can use the framework developed in this quality improvement project to improve patient care and safety.

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