Our institution started an ERAS program a number of years ago to decrease surgical site infections (SSIs) in colon cases. At that time, our surgical staff could only agree on 9 elements for the protocol and participation was voluntary. The protocol was implemented and compliance was 55% but colon SSIs were decreased to around our benchmark. This was consistent with reports in the literature at the time. In early 2016, we experienced a sharp spike in our colon SSIs that persisted for several quarters. Standard quality assessments were used—case RCA, individual surgeon rates/practices, OR process/procedures, etc.—but no cause was identified and the increased scrutiny did not lead to any improvement in colon SSI rate. We were tasked with examining all aspects of care in our colon surgery patients and to implement a program not only to decrease SSI rates but improve all aspects of care in this high risk patient cohort. The project was consistent with the organization’s overall goals for improvements in Complications, Mortality, Readmissions, Length of Stay and Cost per Case. In association, the improvements in SSI rates to below the national benchmark of 0.78 and our ultimate goal was a significant reduction in colon SSI. We were tasked with examining all aspects of care in our colon patients. Within one year of implementation of our protocol, we were below benchmark for colon SSI and we didn’t incur a financial reimbursement penalty for the first time in colon surgery.

A multidisciplinary physician led task force was developed with leadership provided by our NSQIP surgeon champion and NSQIP PI nurse coordinator. From the outset, all stakeholders were involved and attended each meeting where issues and variations was discussed, solutions suggested, and protocol was developed. Executive Senior leadership, surgeons, nursing representation from all aspects of the perioperative period, Anesthesia, pharmacy, nutrition, infection control, and the IT department was represented. The evidence based literature was reviewed and all elements that were felt to be beneficial were included creating a comprehensive and extensive protocol that began from the day surgery was scheduled in the surgeons office to patient discharge date.

NHSN and NSQIP were continuously monitored and reported to various medical staff and quality committees. In addition, the use of intra-operative audits provided valuable insight regarding educational needs related to OR standards to all staff.

Creating a nurse navigator position was pivotal as it provided “real time” QI compliance.

Development of Intraoperative Colon Isolation Checklist to reduce OR standards variation.

Comprehensive Order Sets developed by IT for PAT, DOS, Post-op Periods

ERAS Clinical Nursing Pathway for dedicated Surgical Floor

Nutritional Optimization started 5 days prior to surgery, DOS and 5 days Post-operative

Our goal was to implement a colon ERAS program that would be comprehensive in the pre-op, day of surgery, and post-op settings. We made it mandatory to achieve a high compliance rate (90%).

Within one year of implementation of the protocol when our SSI rate spiked to the 9 months after implementation to be able to present our work at The American College of Surgeons Quality Conference. Colon SSI rates dropped from 11.3% to 2.1%. For all cases LOS was 300% higher if an SSI occurred. When total hospital costs were measured, cost was 300% higher if an SSI occurred. When volume of cases and decreased SSI rates were assessed, a cost savings of one million dollars was found. When our NSQIP data was compared for 2016 to 2017, which reflects pre and post protocol data, there was marked improvement in all aspects of care for our colon patients.