

IMPROVING COLORECTAL SURGERY OUTCOMES THROUGH SUCCESSFUL IMPLEMENTATION OF A PERIOPERATIVE SURGICAL HOME MODEL IN A COMMUNITY HOSPITAL

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Background/Introduction:

The Perioperative Surgical Home (PSH) is a patient-centered multidisciplinary surgical patient care model that is designed to attain the Institute of Healthcare Improvement Triple Aim goals of improving the patient experience, improving the health of populations, and reducing the per capita cost of health care. Previous studies from academic centers have reported improved outcomes, reduced length of stay, and better patient satisfaction by implementing various enhanced recovery pathway (ERP) protocols. The PSH adds the element of customizing these protocols into a seamless and coordinated patient experience in the local setting and may be an ideal model for quality improvement and cost reduction at community hospitals with limited resources and non-employed physicians. St. Patrick Hospital, a 253-bed community hospital in Missoula, MT, was able to reduce the average length of stay (ALOS) for its colorectal surgical patient population by 46% in less than a year after initiation of a PSH. By creating a multidisciplinary team of experts including anesthesiologists, surgeons, dietitians, pharmacists, a nurse navigator, and others from both the ambulatory and inpatient settings, several common barriers were overcome to break down silos and allow a successful implementation of the PSH.

Methods:

Our physician led, multidisciplinary team developed a model for a PSH program in partnership with the PSH 2.0 Collaborative and utilizing the Society of American Gastrointestinal and Endoscopic Surgery/Enhanced Recovery after Surgery manual. Core teams were divided into operational and clinical working groups and project management drove the process of designing care pathways for medical problems including: diabetes, anemia and significant cardiovascular disease pre-, intra-, and post-operatively. The teams met every other week over six months to create the final pathway which was implemented in April 2017 following staff education. A patient handbook was developed and additional patient education was provided by a nurse navigator and dietitian. After program implementation, the team continually refined and improved the PSH process.

Results:

Since April 2017, 31 patients have completed the PSH pilot program. The PSH care model resulted in several important improvements, including a decrease in ALOS from 5.5 to 3.0 days, a decrease in standardized infection ratio (SIR) from 0.429 to zero, and a difference in post-operative oral morphine equivalents of 60 mg for non-PSH patients and 12 mg for PSH patients. Additionally, fewer PSH patients used PCAs for pain management or required IV narcotics after admission to the floor compared to non-PSH patients. Of note was a 44% increase in colorectal surgical case volume during the interventional phase. Further, we successfully implemented the program with no additional FTEs or outside consultants.

Conclusion:

We demonstrated that a community hospital can implement a successful PSH without expending additional funds for staffing, and still achieve meaningful outcomes in reduced ALOS, complication rates, and cost savings. The key to our successful implementation relied on active participation and leadership of committed champions in Administration, Surgery and Anesthesia departments. These team members worked together to build and validate the collaborative care team model within the hospital, to embrace the principles of the PSH and implement its vision at every level of patient care. We were able to launch the PSH within six months of concept rollout by creating parallel interdisciplinary clinical and operational teams. Based on the success of this project, the PSH care model will be expanded to other surgical services in our facility.

References:

1. Feldman L S, Delaney C P, Ljungqvist O, Carli F. The SAGES/ERAS Society Manual of Enhanced Recovery Programs for Gastrointestinal Surgery. Springer. Aug, 2015.