



SURGICAL PATIENT PREHABILITATION

► AIM STATEMENT

To improve the health of surgical patients between seeing their surgeon and having their surgeries and to decrease the rate of cancellations of surgery where possible.

► BACKGROUND

Surgical patients undergo evaluations in the pre-surgical anesthesia clinic shortly before their surgery is scheduled and this does not allow time for patients to optimize their health prior to surgery. Many times issues such as glycemic control, smoking, frailty of the patient and lack of social supports put the patient at higher risk for surgical complications. Cancellation of surgeries for medical reasons just prior to the surgery can also result due to these matters. This causes challenges for the patients as well as increases waitlists and costs to the medical system. The process of screening operating room (OR) referrals for surgery and booking the surgery is not standardized. This can lead to inconsistencies in care and longer wait times for some patients.

► PROBLEM STATEMENT

The time from the OR booking card being received in the hospital to the surgery date is not being adequately used to maximize a patient's health prior to surgery. Improving a patient's health decreases their risks for complications after the surgery. Currently, the health of patients is being assessed approximately 2-6 weeks prior to surgery. Efficient use of the wait time prior to surgery can enhance the safety of surgery for patients.

► CHANGE IDEAS

- To create 12 pathways for case management of patients needing to improve their health prior to surgery. These pathways include:
 - Glycemia
 - Smoking
 - Social Supports
 - Frailty
 - Cardiac
 - Nutrition
 - Physical Activity
 - Substance Use
 - Sleep Apnea
 - Pain
 - Anxiety
 - Anemia
- To screen the patient file within 1 week of the OR booking card being received or sooner to start patients on any of the above pathways as is identified in their initial screening
- To provide case management of patients needing one or more of these pathways prior to surgery

► RESULTS

- 92%** of patients optimized for glycemic control reduced or maintained A1C
- 78%** of patients with anemia increased HGB before surgery
- 68%** of optimized patients stopped or decreased smoking before surgery
- 78%** of patients captured on the smoking cessation pathway started nicotine replacement therapy
- 91%** of optimized patients participated in anxiety-reducing activities before surgery
- 85%** of optimized patients reported that their overall health improved as a result of prehabilitation
- 82%** of optimized patients reported that their surgical experience improved as a result of prehabilitation

Cost savings were calculated for the Provincial Collaborative as a whole and also for the UHNBC project specifically. Per patient cost savings were calculated to be:

	SPOC outcomes compared to provincial NSQIP	SPOC outcomes compared to UHNBC NSQIP
Gynecology	-\$2,086	-\$4,029
Urology	-\$2,931	-\$1,594

► NEXT STEPS

- Adopting all components into Pre-Surgical Screening workflow by December 2021
- Collaborating with IT to develop patient facing app
- Promoting the Surgical Patient Optimization Collaborative to other NH sites

► SUSTAINING THE GAINS

- Working with site leadership to gain sustainable support for a nurse navigator role
- Introducing an improved process to allow for prehabilitation at site
- Continuing work on communication updates to various physician groups, NH staff

► PATIENT/CUSTOMER

Surgical patients. Starting with Gynecology and Urology patients, and later expanded to include Orthopedic and General Surgery patients.

► TEAM MEMBERS

Dr. R. McGhee – Family Physician
Dr. A. Abdulla – Urologist
Dr. J. Akhtar – Anesthesiologist
Dr. F. Mansour – Internist
Dr. M. Odulio – Obstetrician/Gynecologist
Dr. D. Mackey – Orthopedic Surgeon
Nicole Dron – Presurgical Screening Optimization Nurse
Lia Clemas – Director of Perioperative/High Intervention

Jana O'Neill – Perioperative Team Lead
Karen Newman – Surgical Clinical Reviewer, NSQIP
Andrea Mainer/Kristin Massey – Community Services Manager
Carling Lovell – Administrative Support
Stacey Patchett – Regional Quality Process Lead
Shelley Movold – Quality Improvement Coach