Collaboration transforms delivery of care for surgical patients

Surgical patient optimization is a multidisciplinary, structured, and personalized prehabilitation program designed to assist patients in preparing for surgery. Prehabilitation before major surgery can lead to a faster recovery, better patient experiences and outcomes, and savings for the health care system. Best practices for surgical prehabilitation focus on both mental and physical aspects of surgery by decreasing presurgical risk factors and increasing a patient's functional capacity.

In BC, the Specialist Services Committee and the Shared Care Committee support an innovative provincial program that is improving patients' readiness for and outcomes after elective surgeries. Launched in 2019, the Surgical Patient Optimization Collaborative (SPOC) improves the experience for surgical patients by:

- Using a patient-centred and multidisciplinary approach.
- Supporting care providers to implement change processes.
- Using preoperative surgical wait times.
- Integrating available community resources.
- Improving patient outcomes.

Sites are supported to implement prehabilitation programs using the Institute for Healthcare Improvement's (IHI) Breakthrough Series Collaborative Model.[1] With this model, SPOC provides participating teams with:

- 18 months of interactive learning sessions and action periods.
- Evidence-based and expert-reviewed tools and strategies in 13 clinical components.
- Funding and support for physicians and multidisciplinary team members.
- Quality improvement coaching, including guidance on data collection.
- In-person connections to other teams to learn from each other and from recognized experts.

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Improved patient outcomes and experience

Access to appropriate information for patients and families to prepare for surgery significantly impacts their experience and recovery. For example, patients have a greater awareness of how important being healthy is for recovery and a better understanding of their role in influencing health outcomes. Meanwhile, families have a lesser caregiver burden or need less time to devote to post-op care.

Best practices for surgical prehabilitation focus on both mental and physical aspects of surgery by decreasing presurgical risk factors and increasing a patient's functional capacity.

To date, over 5200 patients were screened for more than 18 000 clinical components. Over 95% of patients were successfully prehabilitated for at least one clinical component.

Data[2] show that prior to surgery:

- 42% of patients improved their nutritional status.
- 80% of diabetic patients had their glycemic control assessed prior to surgery, and then decreased or maintained Hb A1C levels.
- 84% of patients increased physical activity.
- 79% of smoking patients decreased or stopped smoking.
- 86% of anemic patients increased their hemoglobin levels.

Thirteen clinical components for prehabilitation

Anemia
Cardiac
Frailty
Glycemic control
Mental health
Nutrition
Pain management
Physical activity
Smoking cessation
Social support
Sleep apnea
Substance use
VTE prophylaxis

And after surgery:

- 91% of patients reported an improved surgical experience.
- 86% of patients reported an improved surgical outcome.

Enriched provider experiences

Over 100 health care providers have implemented prehabilitation work in 14 sites/teams across the province. Surgeons, family doctors, and anesthesiologists collaborate with medical office assistants, preassessment clinic nurses, nurse navigators, site executives, and project managers to develop and sustain prehabilitation processes. This work includes regular collection and review of data, which is used to guide adjustments to plans and workflows. This has contributed to an increase in the number of patients screened.

Interdisciplinary collaboration is increasing job satisfaction for physicians and team members, with 94% of SPOC physicians reporting improved provider experiences. However, teams consistently noted system barriers such as complex workflows, including changes

to information technology and communication platforms and time for clinical follow-up, as well as shortages in workforce, space, and equipment.

Reduced system costs

Surgical patient prehabilitation increases efficiency of the health care system by better preparing patients for surgery, resulting in fewer adverse events and shorter hospital stays. In its first 2 years, SPOC has:

- Led to average net savings of approximately $2175 per arthroplasty patient and $7500 per colorectal patient.
  - 74% of the arthroplasty surgery savings and 55% of the colorectal surgery savings were due to a shorter surgical length of stay (LOS).
  - 37% of the colorectal surgery savings were due to a reduction in the rate of postsurgery surgical site infection.
- Shortened LOS for optimized patients by 28% for arthroplasty surgery and by 45% for colorectal surgery.

Spread and sustainability

SPOC is continuing to expand to more sites across the province, including through teams working with primary care networks and by offering a second cohort of teams. Learn more at www.sscbc.ca. ■

—Kelly Mayson, MD

—Thomas Wallace, MD

Co-chairs of SSC's Surgical Optimization Working Group

References

1. Institute for Healthcare Improvement. The breakthrough series: IHI's collaborative model for achieving breakthrough improvement. IHI Innovation Series white paper. Boston: Institute for Healthcare Improvement. 2003.
2. Specialist Services Committee. Surgical Patient Optimization Collaborative (SPOC). Accessed 15 September 2021. https://sscbc.ca/programs-and-initiatives/transform-care-delivery/surgical-patient-optimization-collaborative-spoc-0.

News

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Optimizing your disability and professional expense insurance

When did you last review your disability and professional expense insurance needs? It's recommended that you review your coverage with a Doctors of BC insurance advisor 1 year after starting a practice and 2 years thereafter.

If you have the Guaranteed Insurability Benefit (GIB) rider on your Doctors of BC Professional Expense Insurance (PEI) or Disability INCOMEprotect for practising physicians, you may increase your coverage without medical questions each November.

Disability insurance

Disability insurance provides monthly tax-free income if you're unable to work due to accident or illness. It's important to maximize your disability coverage, as 1) you could be disabled for a long period and disability benefits may be your only source of income, 2) the medical costs associated with a disability can be unexpectedly high, and 3) some of your disability benefits should be designated for retirement savings, since benefits end at age 65.

Insurers limit the amount of tax-free disability coverage you can purchase based on your net income (gross earnings less business expenses, excluding personal salary, dividends, and income tax). These limits are designed to ensure that claimants are not earning more from benefits than they were earning while employed. Depending on your income, the insurer may offer maximum coverage of 30% to 40% of your net income.

The BC government–paid Physicians' Disability Insurance (PDI) can help maximize the benefits available to a physician during a disability. PDI typically pays up to $6100 of monthly tax-free disability benefits for physicians earning eligible MSP income. PDI will reduce benefits if the claimant's total disability benefits from all sources are greater than 60% of predisability net income (after expenses but before income or corporation tax). This is an important factor in determining how much additional disability you should have. For example, if you earn $250 000 net income and are eligible for $6100 of PDI, you should have up to $6400 of additional personally paid disability. In this example, any additional coverage beyond $6400 will reduce PDI benefits,