ABSTRACT SUBMISSION: THE TED FREEDMAN AWARD FOR INNOVATION IN EDUCATION

Project Name: The Ontario Surgical Quality Improvement Network Community of Practice – Improving Surgical Care in Ontario

Name: Pierrette Price Arsenault, Tricia Beath, Tasleen Adatia, Lisa Bitonti-Bengert and Dr. Timothy Jackson

Organization: Ontario Health (Quality business unit) (formerly Heath Quality Ontario)

Improving Surgical Care in Ontario

Initiated by surgical leaders and driven by its members, the Ontario Surgical Quality Improvement Network (ON-SQIN) is a quality improvement (QI) program of 46 surgical teams that form a Community of Practice dedicated to improving surgical outcomes across Ontario.

The Surgical Network uses high-quality clinical data collected through the National Surgical Quality Improvement Program (NSQIP) to spur surgical QI practices among participating hospitals. Outcomes measured include rates of unplanned intubation, postsurgical infection, hospital readmissions, and sepsis after surgery. These data help ON-SQIN hospitals identify areas for improvement.

With support from staff at Ontario Health (Quality), QI science, and the best evidence in surgical care, ON-SQIN teams analyze their data on postsurgical outcomes, identify improvement opportunities, set goals, exchange resources, implement change ideas, and share lessons learned. As of March 2020, 72% of Ontarians are now discharged from an ON-SQIN hospital.

Accelerating QI Through a Community of Practice

Since the inception of ON-SQIN in 2015, a Provincial Surgeon Lead has engaged new members from academic, community, small/rural, and pediatric hospitals, while the program delivery team at Ontario Health (Quality) fosters intercommunity relationships; develops resources, reports, and newsletters; and hosts activities such as teleconferences, webinars, site visits, in-person meetings. The program delivery team also maintains the group’s presence on Quorum, an online QI platform to support discussions and resource-sharing.

Each participating hospital appoints a Surgeon Champion, who focuses on collaboration, building awareness of surgical QI, and garnering hospital support, and a Surgical Clinical Reviewer who enters and analyzes NSQIP data. Participating hospitals can use these data to bridge gaps in clinical practice to support better outcomes in their chosen area of focus. For accountability, teams create a formal Surgical Quality Improvement Plan for the program delivery team at Ontario Health (Quality), who use them to document progress and connect teams working on similar goals.
Members stay connected through this robust Community of Practice. Opportunities to network virtually and in person leverages group wisdom, and emphasis is placed on creating a safe environment to share best practices, successes, and failures. New teams learned from experienced teams, while mentorships are established between new members and seasoned participants. Quality improvement tools and practices are modified based on feedback, with a focus on sustainability.

Results

Participating hospitals initially focused on building QI capacity to support change from the ground up. Members took advantage of learning opportunities offered by the Improving and Driving Excellence Across Sectors program, the Comprehensive Unit-Based Safety Program, and the Institute for Healthcare Improvement Open School. After the first 18 months, participating teams reported an overall increase in QI capacity—such as better collaboration among surgical teams, better access to QI resources, and improved organizational engagement—from 0.4 to 0.7 on a scale of 0 to 1.

In May 2017, NSQIP data showed that Ontario’s postsurgical infection rates were above the international average. The ON-SQIN community had matured to the point where they were able to work toward implementing change provincially, and launched a year-long campaign to reduce postsurgical infections by at least 20%. Members implemented a bundle of evidence-based changes to improve their chosen area of focus (surgical site infection [SSI], urinary tract infection [UTI], or pneumonia). After 1 year, teams self-reported a 27% combined reduction in rates of UTI, SSI and pneumonia. Results of the infection reduction campaign were shared at international conferences and in publications such as the Canadian Journal of Surgery.¹

To address surgeons’ role in the growing opioid crisis, a second 2-year campaign was introduced: In April 2019, members collectively aimed to reduce the number of opioids prescribed at surgical discharge by 30%, while effectively managing postsurgical pain. Teams shared evidence-based tools and resources to meet this goal. Halfway through year 1, teams reported an overall average of 9 fewer pills (28%) prescribed across all targeted surgeries.

In 2019, eight Ontario hospitals were among 88 of the 592 eligible hospitals who achieved NSQIP recognition for Meritorious Outcomes for Surgical Patient Care.

Conclusion

Delivering high-quality surgical care for patients is a priority for Ontario’s surgical teams. Through the ON-SQIN Community of Practice, with help of high-quality data and supports provided by the team at Ontario Health (Quality), members have accelerated QI initiatives resulting in better patient outcomes.