

Safe Surgery Checklist

Preventing medical errors and improving quality of care and patient safety across Alberta



Strategic Clinical Networks™

Alberta Health Services Together.

What was the issue?

Approximately 300,000 Albertans will undergo surgery in Alberta's hospitals this year. According to the World Health Organization, complications after inpatient operations occur in up to 25% of patients, and nearly 50% of all adverse events in hospitalized patients are related to surgical care. At least half of the cases in which surgery led to harm are considered preventable, highlighting an opportunity to reduce risks associated with surgical care.

Overcoming challenges through collaboration

The team encountered some challenges when implementing the Safe Surgery Checklist and recognized the need to adapt its plan to align with operations and specific local and procedural needs (e.g., caesarean sections and cataract surgeries). Broad engagement across zones and collaboration among all health partners enabled them to navigate these challenges successfully and develop lasting solutions.

- Patients and families, patient and community engagement researchers (PaCERs), physician leaders and clinical teams worked alongside administrators and operational leaders, data analysts and auditors to implement the checklist provincially.
- Sandra Zelinsky, a PaCER, discovered that surgical patients were feeling anxious when repeatedly asked the same questions, and they wanted to be part of the process. "Sandra was the patient voice that was instrumental in changing our policies on how to include patients in our processes," says Tracy Wasylak, Chief Program Officer for the SCNs.²
- Clinicians and operational leads ensured that solutions reflected site-specific needs and operations. As Sharon Bilanski, Perioperative/Inpatient Surgery and MDR Director for the Central Zone explains, "This collaboration identified challenges and barriers in meeting the checklist requirement for each step in the process...Through continuous discussion and sharing of information, data and results, the Safe Surgery Checklist has now become an expected and accepted part of our surgical procedures."

Alberta's leadership and success in implementing the Safe Surgery Checklist province-wide has led to a partnership with the Canadian Patient Safety Institute. This partnership will enable us to continue to improve patient safety and drive quality improvements.

What we did to address it

In 2013, the Surgery SCN launched a province-wide effort to implement a standard Safe Surgery Checklist and use it in every operating room in Alberta. The checklist was modelled on one developed by the World Health Organization to improve patient safety around the world.

The network worked with patients, operational leaders, clinicians and physicians across the province to design a common tool that could be used to improve communication between all members of the care team. The goal was to improve patient safety by:

- preventing potential major surgical errors (e.g., completing a surgery on the wrong side or location)
- ensuring critical information is shared at three stages (before a patient receives anesthetic, before an incision is made, and before the patient leaves the operating room)
- reviewing and sharing important information about patient allergies and surgical supplies

As part of the implementation, teams developed a standard way of tracking use of the checklist and reporting on 'good catches.' This information is shared with operational leaders and frontline staff, and hospitals use the data to monitor performance and continuously improve the quality and safety of surgical care.

How this work is making a difference

Since implementing the Safe Surgery Checklist, surgical teams across Alberta communicate better, and performance data indicates that the checklist has helped prevent errors in about 4% of surgeries. This means that each year, more than 10,000 errors have been avoided in operating rooms across the province.

The project fully transitioned to operations in December 2014. Since then, compliance continues to climb across sites and latest figures show that the checklist is being used in 95% of surgeries in Alberta.

What's next?

Patient safety is a top priority for Alberta's health system, and the Surgery SCN continues to work collaboratively with zones and others to monitor use of the checklist and improve participation. In Alberta, compliance is based external observations, which are typically more accurate than selfaudited processes.

Work is currently underway to adapt and improve the checklist. Alberta researchers are co-leading this study as part of an international team of 20 to 30 leaders in surgical safety and health system research. The Surgery SCN will update Alberta's Safe Surgery Checklist and processes based on their findings.