CADTH

ENVIRONMENTAL SCAN

Surgical Interventions Performed Outside the Hospital Operating Room

Context

Lengthy surgical wait times are a hurdle faced by patients accessing health care in Canada. While they are waiting, patients may experience anxiety, frustration, and dissatisfaction, as well as an increase in the health risks associated with delayed surgical intervention.[1] Over the last decade, the problem of long surgical wait times has received attention from the Canadian government, the provincial and regional health systems, the media, and the public.[2]

Operating room (OR) caseloads and the multi-faceted nature of the surgical process — which includes coordination of the multi-disciplinary staff responsible for admitting and preparing patients for surgery, the surgical procedure itself, and recovery afterward — all impose demands on time and resources.[1] Hence, there is interest in transferring some lower-risk procedures outside of the hospital OR to settings that offer easier access, faster turnaround, and reduced costs. Alternative surgical settings located within hospital premises or in an independent care facility may increase surgical capacity in the publicly funded system.[3]

Not all surgical procedures can be transferred to an alternative setting — unstable or high-risk patients require the advanced level of care provided by a hospital OR. Nonetheless, balancing procedure loads based on sound triage algorithms while taking appropriate safety precautions could result in improved accessibility and productivity with minimal risk of patient harm.

Although any uncomplicated procedure carried out on a stable patient could potentially be performed outside the hospital OR, knowing which procedures are already being performed in an alternative setting, as well as those currently being considered for transfer, may help Canadian health care decision-makers identify changes that can be made. For jurisdictions considering the transfer of surgical procedures, the triage of surgical interventions to various hospital and non-hospital settings may already be supported by existing pan-Canadian policies and practices, as well as by current quality standards and practice guidelines.

Objectives

This report will summarize Canadian information obtained through a literature search and a survey of key informants. The objectives of this Environmental Scan are as follows:

1. Identify Canadian policies and practices related to the triage of surgical interventions to various settings.
2. List surgical procedures that are actively performed outside the hospital OR.
3. Identify surgical procedures that are under consideration for practice outside the hospital OR.
4. Identify and describe Canadian initiatives or programs aimed at transferring some low-risk surgical interventions outside the hospital OR setting, for the purpose of improving access for higher-risk surgeries.
5. Identify Canadian legislation or policies that specify the technical and operational standards for non-hospital surgical facilities.

Methods

The findings of this Environmental Scan are based on a limited literature search and responses to the CADTH Surgical Interventions Performed Outside the Operating Room Survey (Appendix 1), gathered as of March 30, 2015. The limited literature search draws primarily upon grey literature sources (information that is not published commercially and is not found in bibliographic databases), including government websites and those of key independent medical organizations such as Accreditation Canada and various jurisdictional Colleges of Physicians and Surgeons. Because clinical aspects of surgical interventions were outside the scope of this report, medical literature databases such as MEDLINE were not searched. As a complement to the literature search, survey responses were collected from key jurisdictional informants involved in administration of ambulatory care or surgical services at the hospital, health authority, or ministry levels. Of 19 informants surveyed, responses were received from 16, including two from British Columbia, five from Alberta, one from Manitoba, two from Ontario, three from New Brunswick, one from Nova Scotia, and two from Prince Edward Island (Appendix 2 includes more information on the organizations represented by survey respondents). All respondents gave explicit written permission to use the provided information for the purpose of this report.

Limitations

The findings of the survey are not intended to provide a comprehensive review of the topic, but rather present an indication of

current context and trends. As only a fraction of organizations operating in any province or territory were surveyed, it is not the intent of this report to depict the full context of all jurisdictions or health authorities across Canada. While survey respondents generally identified procedures performed in non-hospital settings, none of these individuals were based in non-hospital care facilities. This report is limited to the identification of patterns and opportunities for improving surgical access.

Initiatives or programs targeting many types of settings may be deployed across the country with the goal of improving surgical access and outcomes. This Environmental Scan does not intend to describe these broader initiatives. Furthermore, settings outside the OR offer a wide variety of non-surgical image-guided interventions that may present advantages over surgery. While consideration of such interventions may help address surgical access problems, the focus of this report is on alternative settings for surgeries rather than alternatives to surgery.

For the purpose of this scan, a surgical intervention is defined as any non-cosmetic, publically covered intervention requiring an incision to treat a condition. Interventions performed outside the context of the public health care system will not be considered in this report.

Findings

Information on surgical interventions performed outside the hospital OR is based on a limited literature search and communication with key informants (gathered as of March 2015). No information was obtained for the Canadian territories and Newfoundland and Labrador.

1. Canadian policies and practices related to the triage of surgical interventions to various settings.

No formal pan-Canadian policies or practices were identified for the triage of surgical interventions outside of the hospital OR. Survey respondents identified how their jurisdictions approach the process of selecting surgical settings for various procedures. With regard to specific criteria used to direct the selection of surgical settings, respondents from Nova Scotia, Prince Edward Island, New Brunswick, Alberta, Manitoba, and British Columbia indicated that the type of anesthesia required for the procedure guides where it should be performed. For instance, procedures can be performed outside of an OR in Nova Scotia if the patient is classified as American Society of Anesthesiologists (ASA) I or II, an overnight stay is not required, and the patient's body mass index (BMI) is less than 37. In Prince Edward Island, procedures that use only local anesthesia can be performed in an ambulatory care centre, whereas any procedure requiring anesthesia support, such as intravenous (IV) sedation, should be performed in the OR.

Respondents from New Brunswick provided the following list of criteria that are considered when deciding where to perform a surgical procedure:

- The type of anesthesia needed for the procedure
- Invasiveness and complexity of procedure
- Financial resources of patients regarding transportation requirements
- Availability of space
- Expertise of staff
- Post-procedure recovery time
- Patient characteristics such as age and BMI
- Availability of equipment
- Availability of time
- Environmental requirements (air exchanges, positive or negative pressure, restricted area)
- Technology type.

Respondents from Alberta provided the following list of considerations:

- Anesthesia requirements
- Expected acute care length of stay, especially overnight stay
- Post-operative care and monitoring requirements
- Pain management requirements
- Need for intravenous sedation
- Hospital capacity and access pressures
- Market forces (i.e., costs)
- Need for the procedure to enter a large cavity
- Patient ASA score
- Patient age
- Current disposition of the patient.

One respondent from British Columbia similarly described three areas that are considered when choosing a surgical setting:

- Type of anesthesia required: general anesthesia, sedation, or local freezing
- Infection control practices necessary to meet the standards for a clinical procedure versus a sterile procedure room with more air exchanges

[a] The American Society of Anesthesiologists (ASA) classification of Physical Status is a grading system for preoperative health of surgical patients. Class I (normal healthy patient); Class II (patient has mild systemic disease); Class III (patient has severe systemic disease that is not incapacitating); Class IV (patient has incapacitating disease that is a constant threat to life); Class V (a moribund patient who is not expected to live 24 hours with or without surgery).[4]

- The complexity of the procedure and the staffing required to perform the surgery, including whether the surgeon can carry out the task with minimal assistance, moderate assistance, or full assistance with a scrub nurse.

It was also identified that legislation, health authority policy, and professional college standards and regulations may help to guide the setting of surgical procedures in British Columbia. In a similar fashion, the province of Ontario is guided by the Public Hospitals Act when selecting the appropriate setting for a surgery.[5]

Regarding existing processes for triaging surgical interventions to various settings, one respondent from British Columbia explained that many factors come into consideration:

- Assessing demand and capacity
- Assessing emerging technologies or advancements
- Cost-benefit analysis
- Patient preferences
- Evaluation of pilot projects
- Environmental scan of other jurisdictions.

According to a respondent from British Columbia, the type of patient condition is also important; for instance, whether it requires immediate laboratory results, requires a microscope for assessment of tissue, or is conditional on any concerns about the patient's overall well-being if the procedure is done outside of the OR.

Respondents from Alberta reported that there are no province-wide criteria for moving surgeries into contracted facilities. Factors considered in the process of triaging surgical procedures to non-hospital surgical facilities are defined by the patient, surgeon, anesthesiologist, and facility. In an outpatient (minor surgery) setting, the process for assessment, priority setting, and triaging of procedures is reviewed by site administration based on severity of illness and patient safety.

In Manitoba, a survey respondent described how the determination of the appropriate surgical setting for patients is made by the surgeon and anesthesiologist in consideration of the capacities of the available facilities and the clinical needs of the patient, including factors such as the type of anesthesia required and the patient's condition and comorbidities. The procedure under consideration must also not normally require post-operative care after 11:00 p.m. on the day when the surgery was performed.

A respondent from a regional health authority in New Brunswick indicated that their organization did not have any formal process, but that if an OR booking request does not meet the criteria for an OR suite, the requesting physician is approached by surgical management team members to consider alternative sites.

Table 1: Categories of Surgical Procedures Performed in Non-hospital Surgical Facilities by Province

Surgical Category	BC[8,a]	AB[6,a]	SK[7]	MB[a]	ON[a]	QC[9]	NB[a]	PEI[a]	NS[a]
Dentistry	●	●		●					●
Dermatologic	●	●	●		●		●	●	
Endoscopy		●	●	●				●	
Ear, Nose, Throat	●	●		●		●			
Extended Stay		●	●						
General Surgery	●	●	●			●		●	
Gynecologic	●	●	●			●	●	●	
Neurosurgery	●								
Ophthalmologic	●	●	●	●	●	●	●		
Orthopaedic	●	●	●	●	●	●	●	●	●
Otolaryngologic	●	●	●						
Plastic	●	●	●	●			●	●	
Podiatric	●	●							
Urologic	●	●	●				●	●	
Vascular	●				●	●	●		

AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; NS = Nova Scotia; ON = Ontario; PEI = Prince Edward Island; QC = Quebec; SK = Saskatchewan.

[a] Some procedures provided by survey respondents.

2. Surgical procedures that are performed outside the hospital operating room but within the hospital setting or outside of the hospital setting.

A number of provinces are subject to certain standards and guidelines governing the provision of surgical services in non-hospital facilities (Section 5 reports details). Four provinces have published lists of surgical procedures that can be performed in such settings. For instance, the College of Physicians and Surgeons of Alberta has published a document detailing specific procedures that have been approved, as well as the dates that the procedures were added to the list.[6] Similarly, the College of Physicians and Surgeons of Saskatchewan lists approved procedures within Bylaw 26.[1] Operation of Non-Hospital Treatment Facilities, and the College of Physicians and Surgeons of British Columbia provides an Appropriate Procedures List.[7,8] Within a document pertaining to the regulation of specialized medical centres, the Government of Quebec supplies a list of treatments that can be provided in these centres under general or local anesthesia.[9] Lists from these four provinces were used to inform the categories of surgical procedures and were complemented by information provided by survey respondents regarding procedures currently performed outside of a hospital OR, either within the hospital setting or in a non-hospital setting. These categories are listed in Table 1. Specific procedures performed within the categories by organization or region are listed in Appendix 3.

3. Surgical procedures that are under consideration for practice outside of the hospital operating room.

A number of survey respondents identified surgical procedures that their jurisdictions are considering transferring outside of the hospital OR (see Table 2). Overall, the respondents identified lower-risk procedures that could be safely undertaken in a day surgery or ambulatory facility.

Respondents from both British Columbia and New Brunswick identified hysteroscopy and PORT-A-CATH venous access systems as procedures they would like to see performed outside of an OR setting. In Alberta, hysteroscopy is also being considered, along with the Essure procedure and cystoscopy. Of note, all three procedures are approved to be performed in a non-hospital surgical facility,[6] which suggests that listing a procedure does not immediately translate into a change in practice. The respondent

Table 2: Surgical Procedures Under Consideration for Practice Outside of the Operating Room, Identified by Survey Respondents

Province	Procedures
British Columbia	Insertion of PleurX catheters and hysteroscopes. Many interventional vascular procedures (Trellis procedure, PORT-A-CATH, tunnelled catheters), contingent on the availability of emergency technology within radiology suites.
Alberta	Gynecologic interventions: diagnostic hysteroscopy, endometrial ablation by NovaSure, Essure fallopian tube occlusion. Cystoscopy.
Manitoba	Oral and maxillofacial surgery. Dental treatment requiring general anesthesia. Pelvic operations with ureteral catheterization. Node biopsies. Endoscopy in non-hospital settings. Lumps and bumps procedures.
Ontario	Any low-risk, same-day procedures.
New Brunswick	Installation of PORT-A-CATH implantable venous access systems. Cystoscopy, bronchoscopy, and hysteroscopy procedures. Some invasive, local plastic surgery procedures (carpal tunnel, various hand procedures). Pacemaker insertions or battery changes. Cataract surgery would be performed outside an operating room setting if the physical resources were available in an ambulatory setting.

from Manitoba identified dental and oral maxillofacial surgeries as procedures under consideration for transfer; both procedures were identified as operations that occur in non-hospital settings in Alberta. Respondents from New Brunswick also listed carpal tunnel, cataract, cystoscopy, and bronchoscopy procedures as those under consideration for transfer. Many of the aforementioned procedures are being performed outside of OR settings in other provinces: for example, carpal tunnel surgery in British Columbia, Alberta, and Prince Edward Island; cataract surgery in British Columbia, Alberta, and Ontario; cystoscopy in British Columbia and Prince Edward Island; and bronchoscopy in British Columbia, Alberta, and Prince Edward Island. Interestingly, all four of these procedures were listed by respondents from different regions of New Brunswick as interventions that are already performed outside of the OR, as can be seen in Appendix 3. This suggests regional variation within New Brunswick in terms of which procedures are being performed in alternative settings.

The College of Physicians and Surgeons of British Columbia provides a form that both new and existing non-hospital surgical facilities may submit for new or experimental procedures.8 This application would allow for a new or experimental procedure to be added to the list of approved procedures for which a non-hospital surgical facility may apply. The application requires details such as the training programs required, procedural steps involved, expected results of the procedure, any potential side effects or risks, and benefits of this procedure over an existing approved procedure.

4. Canadian initiatives or programs aimed at transferring low-risk surgical interventions outside the hospital operating room setting in order to improve access to higher-risk surgeries.

There are a number of Canadian examples of past or current initiatives, programs, and facilities aimed at improving overall access to surgery by transferring lower-risk surgeries outside of traditional hospital OR settings. Table 3 provides a high-level summary of these initiatives by province. Information on these initiatives has been collected from grey literature and survey responses.

British Columbia

In British Columbia, the Jim Pattison Outpatient Care and Surgery Centre, a public–private partnership between Fraser Health and BC Healthcare Solutions that opened in 2011, is an example of a unique facility aimed at unburdening ORs. The facility offers day surgeries, diagnostic procedures, biopsies, and specialized health programs in one building, and as a result, many services have been moved from the Surrey Memorial Hospital to relieve congestion.[10] Surgeries that do not require an overnight stay can be performed in this facility. As a survey respondent identified, Island Health has made progress in transferring procedures outside of OR settings. For instance, PORT-A-CATH and tunnelled catheter procedures are now performed in interventional radiology suites. In addition, varicose vein treatment has recently

Table 3: Initiatives, Programs, and Facilities Aimed at Transferring Surgical Interventions Outside the Operating Room, by Province

Province	Initiatives, Programs, and Facilities
British Columbia	Jim Pattison Outpatient Care and Surgery Centre[10] Island Health procedure transfer and a request for proposal for a day care facility
Alberta	Innisfail Health Centre surgical capacity expansion[11] Provincial Surgery Review Edmonton Zone Surgical Plan
Saskatchewan	Saskatchewan Surgical Initiative[12]
Ontario	Community-based Specialty Clinics[13]
New Brunswick	Submission for hospital expansion
Prince Edrward Island	New facility established in 2012
Quebec	Specialized medical centres (“Centre medical spécialisé”)[14]

been moved outside the OR after a four-month trial. Currently, there is also work being done to move hysteroscopy outside the OR, and a request for proposal (RFP) has been submitted to have a stand-alone, privately run day surgery facility for ASA Class I or II patients to free up OR suites for in-patient activity.

Alberta

In an effort to relieve pressure on the hospital and allow people to access services closer to home, Alberta Health Services announced that the Innisfail Health Centre's surgical capacity will be expanded.[10] Carpal tunnel surgery, tendon repairs, retinal surgical services, and a plastic surgery program are being added to the rural facility. In support of the input received from a Rural Health Review, this type of expansion of services may optimize the use of existing facilities and bring services to people closer to where they live.

Local and provincial programs are being developed to address the issue of surgical access in Alberta. One respondent indicated that the upcoming Edmonton Zone Surgical Plan may help to deal with this issue. At the provincial level, Alberta Health Services, Alberta Health, and the College of Physicians and Surgeons of Alberta are working together to review and optimize the provision of surgical services and propose a governance structure for contracted services.

Saskatchewan

The four-year Saskatchewan Surgical Initiative concluded on March 31, 2014. This was the first major initiative that emerged from the 2009 independent Patient First Review, which found that surgical wait times was a key concern of individuals and families.[12] The goal was to shorten wait times for surgery to three months by March 2014. Many regions achieved this target, while others greatly improved their wait times and are reported to be on track to meet this target in the future.[12] A coalition of patients, providers, and leaders from across the health system was formed, and a number of approaches were undertaken to achieve the target.[15] In addition to creating an online specialist directory, pooling referrals, articulating new clinical pathways, and implementing safety checklists and surgical site infection prevention protocols, the use of third-party surgical facilities was a key component of the success of the initiative.[3]

Ontario

The Ontario Ministry of Health and Long-Term Care's Community-Based Specialty Clinics (CBSCs) is another initiative that aims to help patients receive timely care in the most appropriate setting.[13] The idea was first proposed as a key component of the 2012 Action Plan for Health Care, which sought to:

- Keep Ontarians healthy
- Provide faster access and a stronger link to family health care
- Provide the right care, at the right time, in the right place.[13]

The CBSC models fall into two categories: (1) A public hospital operating in a new site (such as an ambulatory care centre) under the Public Hospitals Act, or (2) a non-profit, independent health facility licensed under the Independent Health Facilities Act.[13] While independent health facilities and out-of-hospital premises already perform low-risk surgical procedures, the CBSC initiative aims to support the creation and planned growth of not-for-profit specialty clinics that focus on providing high-volume procedures.[16] The initial rollout involves cataract and colonoscopy services, but the Ministry adds that in the future, other procedures that do not require overnight hospital stays will be eligible to be performed in specialty clinics.[13]

Transferring procedures to specialty clinics in Ontario requires the co-operation of a number of key players in addition to the Ministry. Local Health Integration Networks (LHINs) maintain the right to set targets for the number of procedures performed in hospitals and specialty clinics, and public hospitals must have formal agreements with specialty clinics that cover issues such as record-sharing and emergency procedures. Cancer Care Ontario is a collaborator with regard to colonoscopies, the College of Physicians and Surgeons of Ontario is responsible for quality assessments and inspection of clinics, and existing independent health facilities may participate in the strategy as long as they are have non-profit status.[17]

Both new and existing facilities will be required to undergo an application process in order to become a specialty clinic, and the requirements differ by CBSC model (i.e., independent health facility or ambulatory care facility). Some of these requirements might include demonstrating support from local hospitals, having the ability to provide the procedure at the established cost per case, complying with relevant legislation and regulation (including those that are employment-related), having a detailed staffing plan, and having a capital plan to maintain the equipment and environment in which the procedures take place.[17] First, the LHIN will review the application and then submit recommendations to the Ministry. Taking the LHIN endorsement into consideration, the Ministry will then review the application.[18] The applications will be evaluated based on their ability to achieve outcomes in the following key areas: patient care, improved quality and efficiency, systems approach, access, value, and other criteria.[17]

To ensure the safety of services provided by CBSC, participating facilities will be subject to established quality assurance standards according to the relevant legislation:

- Hospital ambulatory care centres — under the Excellent Care for All Act, 2010, hospitals are required to have quality improvement plans.

- Independent health facilities — under the Independent Health Facilities Act, 1990, independent health facilities are required to participate in the mandatory quality assurance program administered by the College of Physicians and Surgeons of Ontario, which includes pre-licensing and quality inspections.[17]

Patients will not need to pay for medically necessary services provided in these specialty clinics, as these are covered by the Ontario Health Insurance Plan (OHIP). The costs associated with providing these services will be paid through Quality-Based Procedure (QBP) funding as part of Ontario's Health System Funding Reform. The QBP price is the amount of funding provided for a specific procedure, and the QBPs will be funded on a "price × volume" basis.[17]

In March 2013, the Kensington Health Centre, a non-profit independent facility, received one-time funding from the Ministry to act as a pilot study to discover the benefits and requirements of out-of-hospital endoscopy procedures.[19] The report highlights elements such as patient satisfaction, patient safety, quality assurance, and overall benefits to the health care system; and, in general, the Kensington Health Centre has expressed excitement about working with Cancer Care Ontario as the initiative is rolled out.19 Survey respondents indicated that they hope that this initiative will yield shorter wait times for services and that, as a result, greater patient satisfaction will be experienced, along with an increased capacity in ORs to perform more complex procedures sooner. To the best of our knowledge, there are no publicly available updates on the progress of the CBSC initiative.

Quebec

In Quebec, the Ministry of Health and Social Services regulates specialized medical centres by granting permits and licences (see Section 5).[14] These specialized medical centres can have long-term partnership agreements with local hospitals or the health authority to facilitate patient referrals and the transfer of a subset of surgical services.[14] This type of partnership potentially creates more hospital OR time for complex procedures if lower-risk surgeries can be transferred to an associated clinic.

Atlantic Provinces

A survey respondent from New Brunswick has indicated that a submission to the Department of Health has been made for a major hospital expansion, which would include the creation of an ambulatory procedures unit to accommodate minor procedures. This submission has not yet been approved; however, it indicates that there are potential opportunities for transferring surgical interventions outside of the OR. A respondent from Prince Edward Island indicated that a number of minor procedures were moved three years ago to an ambulatory care centre and that a dedicated eye surgery centre was built, separate from the main OR.

Some survey respondents indicated that while they would like to see surgical interventions transferred to settings other than the OR, this may not always be feasible. In New Brunswick, it was identified that cost and lack of physical resources and facilities was preventing the transfer of low-risk surgeries outside the OR. This will likely continue to be the reality pending the approval of the previously mentioned proposed hospital expansion. In Nova Scotia, a survey respondent mentioned that while it may not necessarily move procedures out of an OR setting, the merging of local health authorities into one provincial health authority is expected to result in a realignment of services that could improve surgical access within the province.

5. Canadian legislation and policies specifying the technical and operational standards for non-hospital surgical facilities.

Publicly insured health services are subject to the requirements of the Canada Health Act.[20] Under the criteria of public administration, independent facilities or providers are not precluded from providing insured health services, as long as the services are publicly funded and administered and the patient is not charged additional costs in relation to those services.[21] Non-hospital surgical facilities in Canada can become accredited or approved to perform publicly funded procedures. The permission to perform publically funded procedures in facilities is granted by the regional health authority or ministry and may require accreditation by an independent organization. At a national level, two organizations are responsible for the accreditation process: the Canadian Association for Accreditation of Ambulatory Surgical Facilities (CAAASF) and Accreditation Canada.

CAAASF is a not-for-profit voluntary organization of doctors committed to patient safety. Member facilities undergo inspection in order to ensure that all criteria for accreditation are met. CAAASF aims:

- To establish facility and equipment guidelines that facilities must meet before being accepted for membership
- To designate appropriate qualifications for individuals working in an ambulatory surgical facilities
- To ensure that these standards are maintained in the day-to-day operation of the facility.[22]

All surgery performed in a CAAASF facility must be done by a fully qualified surgeon certified by the Royal College of Surgeons of Canada. The surgeon must be eligible to perform the same surgical procedures in an accredited hospital. This protects the public from surgeons who perform procedures for which they are not qualified. To maintain accreditation, member facilities must provide evidence that the standards set by the CAAASF are adhered to in the day-to-day workings of the surgical unit. This is accomplished by written reports and facility inspections.[23]

Table 4: Publicly Available Information Regarding Non-hospital Surgical Facilities, by Province

	Accreditation/Licensure	Standards Document Available	List of Approved Sites
British Columbia	The College of Physicians and Surgeons of British Columbia provides accreditation through the Non-Hospital Medical and Surgical Facilities Program under the Health Professions Act.26	Yes[26] Non-Hospital Medical and Surgical Facilities Standards	Yes[27]
Alberta	Alberta's Health Professions Act provides for the accreditation of medical services in non-hospital facilities by the College of Physicians and Surgeons of Alberta.28 Facilities must also have a contractual agreement with Alberta Health Services.	Yes[28] Non-Hospital Surgical Facility Standards and Guidelines	Yes[29]
Saskatchewan	The government of Saskatchewan provides a licence under the Health Facilities Licensing Act. Non-hospital treatment facilities require College of Surgeons and Physicians of Saskatchewan approval under Bylaw 26.1.30	Yes[30] Saskatchewan uses most of Alberta's Non-Hospital Surgical Facility Standards	Yes[31]
Manitoba	Manitoba's Medical Act provides for the accreditation of medical services in non-hospital medical or surgical facilities by the College of Physicians and Surgeons of Manitoba.[32]	Yes[32] Non-Hospital Medical/Surgical Facilities Standards	No
Ontario	Independent Health Facilities are licensed by the Ministry of Health and Long-Term Care. The College of Physicians and Surgeons of Ontario conducts quality assurance assessments.[33]	Yes[34] Out-of-Hospital Premises Inspection Program Standards	Yes[35]
Quebec	Specialized Medical Centres are licensed by the Ministry of Health and Social Services. The Conseil québécois d'agrément and Accreditation Canada collaborates in the accreditation process.[36]	No	Yes[37]

The CAAASF provides a published list of criteria required for accreditation, including specifics pertaining to staff requirements, in-house quality assurance, medical records, peer review and quality control, health standards, and facility requirements specific to facility type.[24] Similarly, the second accreditation organization, Accreditation Canada, has published an Independent Medical/Surgical Facilities Standards document that contains the following sections: Building an Effective Facility, Maintaining a Safe Facility, Having the Right People Work Together to Deliver Services, Coordinating and Delivering Services, Maintaining Accessible and Efficient Health Information Systems, and Monitoring Quality and Achieving Positive Outcomes.[25]

Both organizations classify facilities according to the level of risk and type of anesthesia provided:

- Type I — Local Anesthesia
- Type II — Local Anesthesia and Sedation
- Type III — General or Regional Anesthesia.

Some Canadian jurisdictions provide detailed information regarding standards and policies in place that apply to non-hospital surgical facilities. Table 4 presents a high-level view of the types of information publicly available by province.

The provinces of British Columbia, Alberta, and Saskatchewan offer extensive information about the legislation, policies, and standards related to non-hospital surgical facilities.[26-31] As noted in Table 4, the College of Physicians and Surgeons in each province is responsible for the accreditation and enforcement of standards pertaining to these facilities. Saskatchewan utilizes most of the standards established in Alberta, and British Columbia standards are very similar. These standards cover such broad issues as personnel, patient care, infection prevention and control, facility requirements, equipment and supplies, documentation and record-keeping, safety standards, and quality assurance and improvement. Also available are up-to-date lists of the approved facilities in each province.

Additionally, British Columbia's Non-Hospital Medical and Surgical Facilities Program uses a similar classification system to that of CAAASF and Accreditation Canada to organize the type of facility. All of the administrative forms necessary for new facilities and existing facilities are available on the public site.[38] The site also specifies patient criteria guidelines as per the Canadian Anesthesiologists' Society: only ASA Class I and Class II patients should be considered for anesthesia in a non-hospital medical or surgical facility.

Manitoba's Non-Hospital Medical/Surgical Facilities Standards document is analogous to Alberta's, covering many of the same issues mentioned above and also featuring a standards section relating only to endoscopy procedures.[39] Surgical procedures performed outside the hospital setting are governed by the Health Services Insurance Act of Manitoba (C.C.S.M. C H35) and the Surgical Facilities Regulation (M.R. 222/98) made under this Act.40 All surgical facilities must be accredited by the College of Physicians and Surgeons of Manitoba.[40] A list of approved sites across the province was not publicly available.

The Ontario regulation of non-hospital facilities differs in some aspects from that of the Western provinces. The provincial College of Physicians and Surgeons is also involved in the process by providing quality assurance assessments. In addition, the Ministry of Health and Long-Term Care administers the licensure of independent health facilities. According to survey respondents, in the fall of 2014, the Ministry requested that Health Quality Ontario conduct a review of quality oversight in non-hospital premises and provide recommendations, expected in spring 2015, on how quality could be strengthened in these clinics.

Similar to Ontario, the Quebec Ministry of Health and Social Services licenses specialized medical centres to perform surgeries, sometimes under an agreement and partnership with hospital centres and regional health authorities. Once licensed, specialized centres must be accredited within three years by either the Conseil québécois d'agrément or Accreditation Canada.[14] Under this framework, it was found that the number of private clinics is expanding and include many that perform one-day cataract, knee, and hip surgeries.[41]

While a search of the grey literature pertaining to the policies and standards applicable to non-hospital surgical facilities in New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador did not identify any relevant information, survey respondents were able to identify some standards and policies used in their regions. For instance, in New Brunswick, it was mentioned that Accreditation Canada, New Brunswick OR nurses (NBORN) standards, infection prevention standards, and Integrated Quality Management were in place. However, it is unclear whether a structure exists to evaluate compliance. The respondent from Nova Scotia also mentioned that their organization is following standards from Accreditation Canada, the Operating Room Nurses Association of Canada (ORNAC) standards of care for nursing practice, and Surgical Patient Safety Checklists.

Conclusion

The objective of the Environmental Scan was to gain an understanding of the policies and practices for performing surgical procedures outside of a hospital OR setting across Canada. Although a number of similarities were identified across jurisdictions for determining the surgical setting (e.g., level of anesthesia required), provinces differed in terms of the specific policies that guide the triage of surgical interventions, the types of procedures performed in non-OR settings, and those under consideration for transfer.

Survey respondents noted that many elements are involved in the triage of procedures and identified various factors involved at the level of the patient, facility, environment, and health care personnel. The provinces of British Columbia, Alberta, Saskatchewan, and Quebec have published lists of approved procedures outlining which surgical interventions can be performed in non-hospital settings. In other provinces, surgical interventions performed in a non-OR setting are not necessarily consistent. Within the province of New Brunswick, there seems to be regional variation in terms of which procedures are being performed in such settings. Cataract surgery, carpal tunnel release, cystoscopy, and bronchoscopy were identified by respondents both as procedures being performed in non-OR settings and procedures under consideration for transfer to such settings. Many of the procedures mentioned by survey respondents that are under consideration for transfer outside of an OR setting — such as various endoscopy procedures (including hysteroscopy, cystoscopy, and bronchoscopy), catheterization procedures, and carpal tunnel release surgery — are already being performed in day surgery or ambulatory care facilities from other jurisdictions.

Initiatives or programs aimed at transferring procedures outside of the OR and the legislation and policies in place to guide standards for non-hospital surgical facilities also varied across the country. In some cases, such as the Saskatchewan Surgical Initiative, Ontario's CBSCs, and Quebec's Specialized Medical Centres, the initiatives to improve surgical access were province-wide, whereas other initiatives included the building or expansion of services at local ambulatory facilities. Non-hospital surgical facilities in British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario are all held to published standards and guidelines, whereas the legislation and policies in place to guide these facilities in other jurisdictions are less clear.

The differences highlighted in this Environmental Scan can be used to help each jurisdiction benchmark itself against others and identify additional procedures that might be considered for transfer, depending on the local context. The Environmental Scan provides a pan-Canadian perspective on the triage and provision of surgical procedures in alternative settings and their potential to affect surgery wait times.

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Appendix 1: CADTH Survey on Surgical Interventions Performed Outside the Operating Room

A. Management of Surgeries at the Hospital

1. In your jurisdiction or organization, what criteria direct the selection of setting for various types of surgical interventions? The setting may be an OR suite or a location outside the OR or the hospital.
2. Please briefly describe any existing process for triaging surgical interventions to various settings, including external surgery providers?

B. Surgeries Performed in Settings Other than the Hospital Operating Room (OR)

3. In your jurisdiction or organization, what surgical interventions are performed outside of the hospital OR? Please limit your list to non-cosmetic, provincially covered interventions requiring an incision to penetrate an anatomical barrier. Settings can be hospital day surgery units or equivalent, or independent non-hospital facilities.
4. What other surgical interventions are being considered for conduct outside of the OR? These can include procedures in trials, pilot studies, or new or emerging technologies.

C. Implementation of Non-hospital Surgical Facilities

5. In your jurisdiction or organization, what operational and technical standards are in place to ensure surgical patient safety when treated outside the hospital?

Appendix 2: Information on Survey Respondents

Province	Organizations represented by survey respondents
British Columbia	Island Health (Ambulatory Care) Ministry of Health
Alberta	Alberta Health Services • Adult Operative Services/Endoscopy/Medical Device Reprocessing, Edmonton Zone • Royal Alexandra Hospital • Surgical Services, Calgary Zone • Fort Saskatchewan Community Hospital • WestView Health Centre — Stony Plain
Manitoba	Manitoba Health, Healthy Living and Seniors (Acute, Tertiary, and Specialty Care)
Ontario	Ministry of Health and Long-Term Care • Program Delivery and Development • Program Policy and Development
New Brunswick	Horizon Health Network Fredericton Area (Surgical Program) Horizon Health Network Saint John Area (Surgical Services) Réseau de santé Vitalité
Nova Scotia	Capital District Health Authority, Halifax Infirmary Site
Prince Edward Island	Queen Elizabeth Hospital (Ambulatory Care Centre) Queen Elizabeth Hospital (Surgical Services)

Appendix 3: Surgical Procedures Performed Outside of the Hospital Operating Room, as Identified by Survey Respondents

Province	Procedures	
British Columbia	• Procedures involving ENT scopes – endoscopy – cystoscopy – colposcopy – bronchoscopy • Carpal tunnel surgery	• Removal of lesions • Arteriovenous fistula procedures • Varicose vein stripping and ligation • Temporal artery biopsy • Cataract surgery
Alberta	• Dental surgery • Ophthalmology (cataracts, corneal transplants, retinal and other non-cataract surgery) • Minor otolaryngology • Minor plastic surgery • Women's health options (e.g., pregnancy termination)	• Dermatology requiring general anesthesia • Oral maxillofacial surgery • Podiatry • Gastrointestinal endoscopy • Bronchoscopy procedures
Manitoba	• Endoscopy • ENT surgery • Pediatric and adult dentistry • Oral surgery	• Plastic surgery • Orthopaedic surgery • Ophthalmologic surgery (including cataracts) • Various other minor surgeries
Ontario	• Treatment of peripheral vascular disease • Vision care procedures (e.g., cataracts, retinal) • Arthroscopic procedures	• Outpatient orthopaedic procedures (hip and knee) • Dermatology procedures (e.g., abscess removal) • Nephrology (e.g., dialysis, vascular access surgery)
	This list is not exhaustive. These procedures are performed in private physicians' offices, independent health facilities, out-of-hospital premises, day surgery hospitals, and/or ambulatory care centres.	
New Brunswick	• Lens insertion for cataracts • Cystoscopy • Bronchoscopic procedures • Minor local plastic surgery procedures • Removal of lesions • Finger pinning	• Carpal tunnel • Interventional suites with diagnostic imaging: • Endovascular repair of abdominal aortic aneurysms • TAVI using the percutaneous femoral or transapical approach • Thoracic aortic aneurysm repair by stent grafting
Nova Scotia	• Contracted to Scotia Surgery private provider: • Day orthopaedic surgeries • Knee endoscopy • Anterior cruciate ligament repair	• Hospital procedure rooms: • Oral surgeries • Other minor procedures without full anesthesia
Prince Edward Island	• Biopsies • Toenail removals • Minor excisions and incisions • Carpal tunnel procedure • Cystoscopies, colonoscopies, bronchoscopy procedures	• Release of trigger fingers • Lithotripsy • Vasectomies • Plastic surgeries

ENT = ear, nose, and throat; TAVI = transcatheter aortic valve implantation.

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Canadian Agency for Drugs and Technologies in Health (CADTH)
600-865 Carling Avenue,
Ottawa, Ontario K1S 5S8