Future Directions for Surgical Services in British Columbia

Executive Summary

Strategic Context

In a high functioning health system which is structured for patient centered care and services, patients with conditions requiring specialist surgical services would experience seamless and timely access to the information, care and service they need. Future Directions for Surgical Services in British Columbia focuses on improving timely access to appropriate surgical treatments and procedures built on five elements: understanding population and patient surgical health care needs; developing quality and sustainable surgical care delivery models; recruiting and retaining engaged, skilled health care providers; using IT/IM tools and processes as supports to allow innovation and effective coordination and delivery of surgical services; using financial models to support the achievement of intended health system outcomes; and using all of these elements across the province.

The recommendations of Future Directions align with the strategic direction for the health system in Setting Priorities for the B.C. Health System (Priorities 1, 4, and 7) and the areas of focus set out in the April 2014, the Ministry of Health published B.C. Health System Strategy Implementation: A Collaborative and Focused Approach. They also align with the three overarching goals of the Triple Aim (developed through the Institute of Health Improvement):

1. Improving the health of populations;
2. Improving the patient experience of care (including quality and satisfaction), to which B.C. has recognized the additional requirement of improving the experience of delivering care for providers and support staff as critical to patient-centred care built on efforts of those who deliver and support health services; and
3. Reducing the per capita cost of health by focusing on quality (especially effectiveness and appropriateness) and the efficiency of health care delivery.

The Case for Change

The health care needs of the population in B.C. are grouped into four areas: Staying Healthy, Getting Better, Living with Illness or Disability, and Coping with End of Life. Surgical services are reflected in the dimension of Getting Better which is defined as periods of short term illness requiring short term self-care, primary care, medical or surgical specialist care and services often supported by pharmaceutical medications and diagnostic services.
In 2013/14, approximately 541,886 publicly funded surgical procedures were performed in facilities across British Columbia. Of the total surgical procedures in 2013/14, 78 per cent were performed as day procedure cases and the remaining were as inpatient surgery cases. In 2013/14, a reported 5,503 publicly funded day care procedures were performed in private facilities.

A variety of factors are driving the increased demand for surgery. These include: a growing and aging population; a growing seniors’ population who enjoy increased longevity; an increasing prevalence of obesity; improvements in surgical procedures and technology, which shorten length of stay in hospital and speed recovery following surgery; a trend towards more day procedures; and “preference” or choice in understanding the risks and benefits of surgery at different points in a person’s life. Examples of surgical procedures where this is occurring include hip and knee replacement surgery, cataract surgery, and surgery to repair hip fracture.

In the area of IMIT infrastructure to support the provision of surgical services in B.C., while the Surgical Patient Registry (SPR) is the official registry of patients waiting for surgery in B.C., it does not reflect the entire wait time as experienced by the patient. Furthermore, there continues to be considerable variability in the quality, quantity, and timeliness of the information provided for the consultation by the specialist, which affects wait times. There is a need to increase the use of electronic health records, electronically connect the surgeons’ offices with the hospital OR booking offices, the SPR, and family physicians, as well as having patients access their own health records. This would result in accurate, synchronized information on patients waiting based on their clinical urgency, and provide the requisite information for everyone involved in the care continuum.

B.C., with a relatively small population spread over a very large geography experiences challenges with the distribution of surgical services needing to balance demand, volumes, access, and quality of care.

The lack of a comprehensive health human resources strategy creates a range of issues on the surgical services front. Factors include an aging workforce, pending retirements, examples of both oversupply (orthopedic surgeons) and undersupply (anesthesiologists, specialty nurses), compensation models, and models for care delivery and team composition of nursing and allied health.

The Ministry of Health has used a range of funding strategies for surgical services including Pay for Performance and Activity Based Funding. While it appears there has been a small positive impact of these funding initiatives, careful analysis needs to occur to understand the impact of these initiatives on groups not covered by the funding policies.
In terms of capital resources, across the province there are 295 Main ORs, with 82 per cent (242.2) regularly staffed. Funding allocation was the reason most commonly cited for unstaffed ORs, although in a few cases health human resources (specifically anesthesiology) and insufficient patient demand also contributed.

**Conclusions**

In order to achieve the vision of increasing value for patients based on providing patient-centred, quality services, there are a number of areas in surgical services that require improvement or change. These areas are summarized below:

There are operational issues that lead to cancellations of surgeries, inefficient use of ORs, and shortages of required surgical care providers.

Patients need more understandable and accessible information about their condition, options, the surgical journey and process, and their status in the journey, as well as the steps to optimal recovery.

For health human resources, the lack of a health human resources strategy leads to constant shortages of care providers.

Although technology can help with patient care, the lack of access to and inability to share patient information can lead to delays in, gaps and duplication of care. The current Surgical Patient Registry and operating room booking process could be redesigned to more effectively capture the entire patient journey and wait times and assist with more efficient booking and tracking of procedures. The current process also does not allow for comparability of data and robust analysis.

Regarding governance and leadership, there is very limited engagement of physicians in management of surgical services, and a lack of consistent and rigorous approach to planning, service delivery, cost management accounting, and performance monitoring. There is a need to carefully consider alternative models of physician compensation and practice; however, current policies lead to constraints in implementing other models.
The Next Steps - Better Meeting Surgical Demand

The recommendations put forward in this paper push the boundaries of what we have been doing so far and emphasize a need for timely, short and longer term action. I want to emphasize that we are putting forward a range of proposed actions that we think will improve our health services in a number of important areas and better position our health system to meet increasing demand from key patient populations. The actions proposed would be undertaken opportunistically building on initiatives and innovative service delivery already underway across B.C., but also will require a systematic approach to change that builds a truly patient-centred system of care (The British Columbia Patient-Centered Care Framework).

You may have different views on the proposed action, how to improve the system or how to implement these recommendations and that is precisely what we are testing out by posting these papers. Your feedback will be part of a healthy and thoughtful discussion of these recommendations. Over the coming three months, my aim is for us to achieve a good level of consensus across key partner and stakeholder groups of what the final set of specific actions should be; and then, for us to move forward collaboratively to figure out the detail, the how and the timing of implementation linked to better meeting current and emerging needs in a timely way. Patients as Partners will be an important part of this process.

I want to assure you the implementation of the final set of recommendations will allow enough flexibility for a diversity of implementation approaches across communities but that I also intend to push us to create a truly integrated system of health care that works for patients and not just for us. Your input, creativity and innovation in shaping and implementing the final set of recommendations at the local, organizational and provincial levels will bring new solutions and enrich our B.C. health system.

A patient-centred and a cross health system approach is required to achieve significant improvement in timely access to appropriate surgical treatments and procedures to realize the vision of high quality, patient centered surgical care within a sustainable health system for the residents of British Columbia. The Institute for Health Improvement Triple Aim principles will serve as a guide:

1. Improving the health of populations;
2. Improving the patient experience of care (including quality and satisfaction), to which B.C. has recognized the additional requirement of improving the experience of delivering care for providers and support staff as critical to patient-centred care built on efforts of those who deliver and support health services; and
3. Reducing the per capita cost of health by focusing on quality (especially effectiveness and appropriateness) and the efficiency of health care delivery.

The Provincial Surgery Executive Committee (PSEC) has been given the mandate and authority to drive a common vision and a comprehensive policy framework, inclusive of the entire surgical care continuum, that gives priority to improving the quality of surgical services and embed the philosophy of patient centered care into strategic and operational processes. PSEC will facilitate collaborative partnerships between patients, health authorities, physicians, the Ministry of Health, the BC Patient Safety Quality Council, the Doctors of BC and other relevant nursing and allied health stakeholders. Fundamental to the success of this work is the need for accurate and timely data and an effective and adequately resourced change management process that engages stakeholders and works effectively with the existing organization and professional cultures.

Specific policy directions and actions are assigned to the practice, organization, and provincial levels. These policy directions build on work that has been undertaken over the last several years and is currently underway through PSEC and the health authorities.

1. **Practice Level - Service Delivery**

1.1 **Implementing a Patient and Family Centred Approach to Care**

This starts with **acceptability and information**. Patients and their families need to be better informed of the potential benefits, risks and limitations attached to various surgical interventions linked to the presenting issue and related overall health status, especially with respect to elective surgeries. This should involve the patient (and family as appropriate or desired by the patient), the family physician and the surgical specialist. There will be a requirement for fully informed consent based on comprehensive, plain language material available on line and in printed format given to the patient along with fulsome discussion. The information will cover the full care pathway including appropriateness (potential benefits, risks, limitations in terms of outcomes), pre-operative preparation, surgical intervention, detailed post-operative recovery instructions and expected timelines through to being fully healthy back at home.

Equally important is to ensure there are easy to access and well known ways for patients to provide feedback during their journey in care, not exclusively at the end of their journey by focusing only on outcomes. Important lessons will be derived by listening to the patients’ voices on “the what and the how” pertaining to care and services.
“I am very excited to be working on this committee with a group of medical professionals who are so clearly dedicated to making B.C.’s medical system one that is truly patient-centered.

When I think of what I wish for as the outcome for the work we are doing here, it would be that patients will feel included in each step of the surgical process. From the first discussion with their GP to any post-surgical therapies that are required to attain full recovery.”

V., PSEC Patient representative, November 2014

Incrementally increase the amount of information available to patients on the surgical care pathway in terms of best practice standards for timely access, Wait One time (GP to surgical consult), Wait Two time (access to diagnostics), Wait Three time (surgical consult to surgery completed), and Wait Four time (recovery).

Increase the amount of information available on hospital and surgeon performance quality indicators (including National Surgical Quality Improvement Program reports made accessible in plain language).

Introduce standardized patient satisfaction surveys that are provided to patients as part of their discharge planning and are accessible online. Introduce standardized follow up calls by relevant nursing/allied health staff to patients following their surgical procedures and use the same patient surveys across the province for outcome assessment, regardless of the location or the provider of the surgical services, in order to enhance comparability.

1.2 Implement Practice Guidelines for Consulting with Patients on Treatment Options

Consultation on whether surgery, or which type of surgery, is the best option is a key issue for a range of conditions and/or contingent on the age and/or other medical conditions of a patient. Consultation must take into account a range of circumstances:

- surgeries that are scheduled (elective) or unscheduled (emergency)
- high volume routine surgeries, more complex surgeries for patients with chronic conditions and co-morbidities that range from low to medium to high complexity; lower volume highly complex specialized surgery
- surgeries for patients across the age spectrum from neonates and paediatrics, through to adults and older adults.
Equipoise is defined medically as a state of genuine uncertainty about the relative benefits of alternative treatment options. How these options are discussed by the physicians amongst themselves and most importantly with the patient and their families is an important element in providing appropriate and acceptable care.

1.3 Encourage, Support and Implement Alternative Practice Models
The RebalanceMD model serves as an example of a new model of surgical care through diversion to alternative treatments and supports through surgery to rehabilitation and back to optimal functionality, provided by a team of surgeons working in partnership with a multidisciplinary team of relevant nursing and allied health professionals.

In Regina and Saskatoon surgical and diagnostic capacity has been increased in the publicly funded health system through the use of third-party facilities to offer a range of day procedures in the area of orthopedics, ophthalmology, dental, and ear/nose/throat. Consistently high patient satisfaction ratings illustrate that this service option is embraced by patients.

Team based practice (co-located or virtual), multidisciplinary teams (physician, nursing and allied health), and increased use of contracting (see below) can facilitate improved access and overall quality providing patients with an integrated care pathway.

Health Authorities will work together with surgeons, anesthesiologists, nursing and allied health professionals at a different level of collaboration than experienced to date, to opportunistically and systematically pursue these options as alternates to the current provider centric model.
Tapping into the wisdom of the front line providers to create local solutions is one way to avoid the traditional hierarchical approach to implementing change. True engagement and collaboration is required to bring diverse views together to create a common and shared purpose in order to improve service for patients.

2. Organizational Level

2.1 Patient Engagement
Health authorities will ensure patient advisors or representatives are welcomed as members of the senior level Surgery Committee and Surgery Quality Council in each health authority to add their contribution to planning, implementation, and care delivery improvement. Patients will play an important role by participating as advisors on local quality, planning, service implementation, and care delivery committees. Involve patients in the development of education materials for their surgical care. Ask patients, “What do you need to know?” “How would you like to receive the information?”
2.2 Implement a Patient Centred System for Surgical Care

Health authorities working collaboratively with surgeons, anesthesiologists, nursing and allied health professionals will develop standardized care pathways and evidence-based timelines (including Wait Times One, Two, Three and Four) for specific surgical patient groupings linked to:

- High volume routine surgical procedures
- Complex high resource surgical procedures.

The pathways will underpin and support the initiative to implement a patient and family centred approach to care. They will follow guidelines and protocols for pre-operative testing that have been developed (Doctors of BC, Choosing Wisely Canada).

“As an overarching comment, I feel privileged to live in a province and country where I am able to access excellent medical care such as I have received. In my experience, if there is an area for improvement I would say that it would be in communication – better communication between GP and specialist, specialist and patient, and specialists to each. Better communication would have, in my case, sped up my diagnosis and treatment and removed some of the stress. I have already seen some evidence of improvement in communication. During my last visit to the specialist, he took out a piece of paper and wrote down all of the steps I am to follow until I am finished my treatment. It was very helpful and I was pleased to see it.”

J., PSEC patient representative, November 2014

LEAN methodology will be applied to the patient journey map for surgical care, including all the steps in the process, such as time for diagnostics and laboratory tests, and follow up care after discharge from hospital. The pathways will address patients living in a variety of geographic locations including urban, metropolitan, rural and remote settings. In this complex adaptive system of health, adoption of LEAN methodology must be developed from the ground up and not implemented in a dogmatic top down fashion. Specifically, health authorities will expand the use of tele health services for pre-surgical assessment and consultation, post-surgical follow-up visits, and education for rural and remote areas where possible.

Ensure a system-wide assessment is taken in order to connect all phases of care from the patient’s perspective to align screening programs with GPs and other stages of the diagnosis and treatment journey, including the surgery teams as warranted.
2.3 Optimize Surgical Infrastructure, Eliminating Backlogs, Ensuring Flow Based on Appropriate Timelines

Health authorities will continue to move appropriate surgical procedures from the operating room to procedure rooms, from inpatient care to day care or short stay care, and to private surgical centres using public funds.

Using the tiers of service approach, and recommendations from the recent Review of Cardiac Services in the Lower Mainland, determine the location of surgical procedures in order to optimize patient outcomes and optimally use available resources.

Optimize the use of existing resources by analyzing the findings of the operating room utilization report as well as other surgical resources. Given the assessment that there is available unused capacity, extremely limited future capital investments, and in some cases underutilized physicians, it is imperative to use existing resources to the best advantage to improve access. Shift the thinking from the resources being owned by the providers, to viewing the resources as available to serve patients.

For some surgical services and locations, a case may be made for greater concentration of surgical services, in turn supporting more standardization and optimal use of available resources. To bring safe access closer requires analysis between consolidation and distribution of services, with the “reasonableness” lens applied. Getting clear on what service is appropriate to be provided where is a difficult conversation that needs to occur.

The surgical infrastructure will build on and support successful prototypes (e.g., Enhanced Recovery After Surgery, Fractured Hip collaborative) and alternative practice models identified above. Introduce pooled referrals, central intake for referrals, and first available surgeon models in health authorities.

Further analysis will be completed of the inpatient cases that are one, two or three day length of stay for suitability for procedures to be provided through publicly funded private surgery centres. Methods used in Australia to develop a 23-hour service model of care for elective surgery could be followed to assist with determining suitability. In that model, high volume procedures, which were those occurring more than a minimum of 200 times over the course of a year and having a length of stay less than 48 hours 50 per cent of the time could be identified as procedures suitable for an extended day surgery model.
The range of options adopted must address timely access, eliminate backlogs and mitigate over-capacity pressures from emergency departments and medical inpatient units that result in cancelling scheduled surgery.

2.4 Optimizing Surgical Supply Costs
Further leverage the use of Health Shared Services BC given the high importance of procurement of surgical supplies in service delivery.

2.5 Improve Quality Monitoring and Reporting
Introduce the National Surgical Quality Improvement Program (NSQIP) to all hospitals in British Columbia. Consistently report and monitor the quality indicators pertaining to surgery at the local and health authority level and provide provincial level reports to PSEC.

As NSQIP is just one source of quality outcome data relevant to surgical patients, it is prudent to introduce other available or emerging sources of data to enhance the picture of quality of care.

3.0 Provincial Level – System Based Enabling Support

3.1 Optimize Wait List Management
Determine how best to prepare and develop plans for the next five years, given the population growth projections, impact of an aging population, impact of managing patients who have complex chronic conditions, and the effect of advances in technology. Is this through more day surgery, reducing inpatient surgical care, or deeply engaging in a conversation about appropriateness?

Determine the optimal goal(s) and targets for wait time performance that will be in achieved within five years.

Define and rename “wait times” by using words that mean something to the patient such as “waiting to see my GP”, “waiting for tests”, “waiting to see the surgeon”, “waiting for my surgery” and “waiting until I can drive my car after surgery.”

The renamed wait times must be linked to data in order to provide meaningful information on access to surgery.

Rename surgery procedures as either “scheduled” or “unscheduled” events to more accurately reflect the nature of the procedures as experienced by the patients.
Determine optimal ways to best manage the surgical patient wait lists and introduce a standardized approach by 2016, such as the New Zealand model to triage patients. Review and revise the wait list management policy in 2016.

Adopt standardized wait list definitions and processes across all health authorities and surgeons’ offices to allow for comparability by 2016.

Complete the diagnosis prioritization code review work in 2015; plan for an audit of procedure codes to occur in late 2016.

Leverage the prioritization code information to determine the most appropriate locations for consolidation of specialized services.

3.2 Develop and Implement a Comprehensive Performance Measurement, Reporting, and Accountability Framework for Surgical Services
Define the optimal state of quality performance for surgical services, meaning “what will it look like in five years?” Use plain, easily understood language so that the general public and everyone in the health system understand what it means. This includes accurate, comprehensive, transparent performance data, including what the patients and providers say. The performance framework will outline how to use the data to ensure progress.

The Ministry of Health in collaboration with PSEC will establish public reporting, monitoring and impact/outcome assessment mechanisms for full deployment starting April 2016.

3.3 Implement a Surgical Health Human Resource Strategy
The Ministry of Health, in collaboration with PSEC and Health Employers of BC (HEABC), will develop and implement a provincial surgical health human resources strategy. The strategy will need to use accurate data, and include the productive capacity of the members of the health care team (not simply raw numbers) by taking into account age, demographics, stages in career, location (urban/rural, etc.), and practice supports. The strategy will examine college regulations and scope of practice as warranted in order to enhance the use of available health human resources (e.g., anesthesia assistant scope and oversight; nurse practitioner scope of practice; registered nurse surgical first assist scope, specialty nurse scope, physician assistants)...

The strategy will implement alternative funding approaches for physician services in support of alternative practice models. In addition to the clinical care providers, the strategy needs to highlight the requirements for data analysts, quality leaders, and front line leadership in all venues that provide surgical services such as ORs, ambulatory clinics, and inpatient care areas.
It is critical that population health needs, as the core, will drive the health human resources strategy more so than has occurred in the past.

3.4 Implement a Provincial Surgical IM/IT and Technology Strategy
Establish the Surgical Enterprise Architecture model in 2015 as the solution for surgical wait list management, surgical booking, and synchronization of wait list data between the various stakeholders to create a single and reliable source of information for surgical services.

Complete the implementation plan to have a fully functional interoperable electronic health record across the province, including patients having access to their own records, in order to support patients and their care team, regardless of location.

Expand the use of tele health services for pre-surgical assessment and consultation, post-surgical follow up visits, and patient education.

Prototype electronic referrals between family physicians and surgeons.

Ensure alignment of the new vision and policy framework for surgical services with the Health Technology Review, an evidence-informed process used to assess and evaluate clinical health technologies (devices, diagnostics, and procedures) for use within health authorities.

The process scope includes the assessment and reassessment of technologies, including those relating to surgical services. Consistent with the vision of increasing value for patients by providing patient-centred, high quality care and services, the process helps ensure that providers are using technology that is proven to be safe and effective for patients.

Continue to strengthen the quality, robustness, and access of health related data in B.C. that results in evidence to improve policy, make health care stronger, and enhance the health of the population.

3.5 Align Funding and Costing Strategies to Support Policy Directions
Building on the analysis of the existing funding approaches currently underway (Population Needs-Based Funding, Activity Based Funding, and Pay for Performance), align funding methods to support the policy directions. Over the next two years analyze options where funding follows the patient or where the patient directs the funding.

Introduce a costing methodology in B.C. to quantify costs of care along the surgical care continuum. This methodology will inform decision making and support planning for future services.
3.6 Align Legislation, Regulation, and Policy

In an effort to support select surgical services being performed outside of the acute care hospital setting by private surgery centres using public funds, changes will be required to the *Hospital Act*. Improved access to surgical services may include performing select surgical procedures which have length of stay up to three days, in private surgery centres using public funds. These changes will require regulatory/legislative amendments.

Establish a link with the private surgery facilities to enhance dialogue and planning as it pertains to surgical services and options available to patients to support their own choices.

3.7 Provincial Surgery Executive Committee (PSEC) Role

PSEC will drive a common vision and a comprehensive policy framework, inclusive of the entire surgical care continuum, that gives priority to improving the quality of surgical services and embed the philosophy of patient centred care into strategic and operational processes. It will facilitate a cross health authority network of administrators, physicians, patients, nurses and allied health professionals to share lessons, spread improvement and drive innovation.

PSEC will lead a consultation process on this paper, and by June 2015, develop through the Standing Committee on Population and Health Services reporting to Leadership Council, an initial two year action plan to make substantive progress on the final set of policy directions, including milestones, targets, objectives and outcomes for the directions set out in the final version of this paper. It will report out on progress in April of the two subsequent years. In March 2017, PSEC will set out a three year action plan on the next steps and targets to continue to improve surgical services in British Columbia.

The Ministry of Health will establish a Surgical Services Secretariat to support and facilitate this direction.