# STRATEGIES TO IMPROVE ACCESS TO SURGICAL CARE: AN EVIDENCE REVIEW

## **5 PAGE SUMMARY OF KEY FINDINGS**

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Submitted to:

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#### PURPOSE OF THE REVIEW

In Alberta, despite significant efforts to reduce wait times for elective surgery over the past 10 years, the healthcare system has been unable to keep pace with demand. Therefore, a health evidence review of approaches to improve access to elective surgical care was commissioned through the Alberta Health Evidence Reviews process within Alberta Health. This report presents the findings of the review.

#### METHODS OF THE REVIEW

The review was guided by the following overarching research question: "What approaches have been used in Canada and internationally to improve access to surgical care and what have experiences with them shown?" To address this question, a jurisdictional scan and scoping review were conducted. The jurisdictional scan comprised: 1) key informant interviews with individuals from the jurisdictions listed below and 2) a review of websites of provincial and territorial ministries of health, provincial/regional health authorities, hospitals across Canada, and publicly funded health care systems in 13 countries outranking Canada on performance measures related to access to elective surgery. During the interviews, participants were asked about their experiences with different approaches to reducing wait times in their jurisdictions. The scoping review adhered to internationally accepted published guidelines and captured both scholarly and unpublished literature on approaches to improving access to elective surgery. Results from both the jurisdictional scan and scoping review were compiled and entered into a Microsoft Excel spreadsheet in order to create a single inventory of approaches. Approaches were classified according to type of policy lever for improving wait times: 1) increasing supply, affecting outflows - the rate at which patients are removed from the wait list (supply side strategies); 2) reducing demand, affecting inflows (additions) to the waiting list (demand side strategies), and 3) both – strategies that affect both supply and demand. They were then further classified according their impact on one or more specific wait times. Wait time 1' refers to time from referral by a general practitioner (GP) to first appointment with a specialist. 'Wait time 2' starts when a decision is made to treat surgically and ends when the surgical procedure has been performed. 'Wait time 3' is defined as the time period between the post-surgical stay in hospital and completion of post-discharge follow-up. Since information relating to the effectiveness of each approach originated from a broad range of sources, it was assessed using three criteria: 1) amount of evidence, 2) consistency of evidence, and 3) certainty of evidence. Six 'strength of evidence' categories were created: 1) consistent positive evidence of effectiveness, 2) consistent negative evidence of effectiveness, 3) limited but promising evidence of effectiveness, 4) mixed evidence of effectiveness, 5) not possible to determine implemented alongside other approaches and 5) not possible to determine - no information on impact found. Approaches supported by 'consistent positive evidence of effectiveness or ineffectiveness' were those with at least three sources of information presenting the same

findings in terms of their impact on wait times. Those with 'limited but promising evidence of effectiveness' typically had two sources reporting a positive impact on wait times.

For the purposes of this summary, only approaches found to have 'consistent positive evidence of effectiveness' were selected for inclusion. Further, those relating to general process improvement methods (e.g., LEAN/Six Sigma or operations research) were excluded.

#### FINDINGS

Eleven approaches supported by consistent evidence of effectiveness were found: *Approaches targeting Wait 1* 

## 1) Specialist - GP advice

Specialist advice online or by telephone allows GPs to request advice from a specialist who responds immediately or within a short window of time. These consultations aim to decrease wait times for specialist consultation by reducing the referrals of patients who can be managed in primary care. Consultations may be over the phone or through a web-based portal.

In published studies from New Brunswick, Ontario and Scotland, implementation of a specialist-GP advice service decreased waiting times for treatment, avoided unnecessary referrals and specialist visits, reduced patient travel, improved GP satisfaction, and generated system-level cost-savings. These findings were consistent with those from unpublished sources.

## 2) Remote specialist - patient consultation

Remote physician to patient consultations allow patients to "visit" their specialists using telehealth services. This approach aims to improve timely access for patients in rural and remote locations. Considerations for implementing such an approach include identifying appropriate patients, educating patients about their options, and having staff in place to assist patients when necessary (e.g., for remote examinations).

Published studies conducted in Manitoba and the United States found that remote consultations decreased wait times for both consultations and treatment, and led to more equitable access to services between urban and rural patients. No differences in wait times for surgery and follow-up between rural patients accessing a specialist via telehealth and urban patients seeing a specialist in-person were found. Unpublished sources consistently reported reductions in travel for rural and remote patients.

## 3) Standardized specialist referral

Standardized referral forms provide a common template for all referrals (to specialists or for diagnostic testing), increasing the likelihood that information required to process the referral is captured. They may be electronic or paper-based, and are often implemented alongside other

wait time initiatives, including standardized care pathways and pooled referrals (also called central intake).

Across published studies from Saskatchewan, Australia, New Zealand, England and Scotland, standardized referral protocols, alone, were shown to reduce wait times for diagnosis and treatment. Similarly, unpublished sources consistently reported less variation in and time taken to vet referrals with the use of standardized referral forms, which led to more efficient scheduling of patient appointments.

#### 4) Pooled referrals

Pooled referrals refers to a single point-of-entry to receive and triage referrals and arrange for service provision. It aims to address long waiting lists by distributing patients more equally amongst providers and avoiding multiple referrals to different specialists for a single patient. Pooled referrals are commonly implemented with pooled waiting lists, which allow patients to see the 'first available' surgeon, improving the distribution and flow of patients. Patients still have the opportunity to specify a surgeon, and in some jurisdictions, the hospital, consultation and/or surgery date. Choice of date aims to reduce cancellations or no-shows.

Published studies conducted in Alberta, British Columbia, Ontario, Nova Scotia, Australia, New Zealand and Norway found that wait times for consultation and diagnosis decreased following implementation of pooled referrals and waiting lists. Also, regional variation in wait times decreased, and the proportion of patients receiving surgery with their maximum recommended wait time increased.

## Approaches targeting Wait 2

## 5) Publicly funded, privately delivered services

To increase capacity, a number of jurisdictions have provided publicly funded surgical services in private facilities through contractual arrangements. This approach aims to reduce wait times by increasing surgical capacity.

Published studies from British Columbia, Saskatchewan, England and Scotland all reported that provision of publicly funded surgeries within private facilities decreased wait lists. Evidence from unpublished sources also demonstrated shorter wait times, as well as higher surgical volumes and a reduction in costs resulting from fewer readmissions and productivity gains.(195)

## 6) Streamlined preadmission

Streamlined pre-admission processes are designed to make the pre-admission process more efficient while ensuring the patient is ready for surgery. Approaches include centralized pre-admission clinics (i.e. where all necessary pre-assessment services are provided in a single

location) and telephone pre-admission services (i.e. where pre-admission assessment is performed over the phone for certain patients).

Across peer-reviewed studies from British Columbia, Australia, New Zealand, Norway, England and Scotland, fewer cancellations, shorter wait times for surgery, and increased capacity were reported.

#### 7) Operating room efficiencies

Innovative ways of more efficiently using ORs include parallel processing and concurrently run ORs. These approaches aim to reduce wait times by using the surgeon's time more efficiently and increasing OR throughput. Concurrent ORs (i.e. "swing" rooms or "flip-flop" rooms) allow surgeons to move between surgeries being performed in different ORs as the patients are ready for them. Parallel processing involves sedation of surgical patients in an induction room while the OR is being "turned over".

Published studies from Ontario, Australia and the United States found that parallel processing increased capacity and reduced cancellations, minimizing overruns with consequent overtime staff costs and improving patient flow. Concurrent ORs were also shown to improve OR efficiency.

#### 8) Same day surgery and discharge

Same-day surgery and discharge occurs when the patient is discharged the day he/she received surgery. This approach aims to increase throughput by avoiding overnight hospital stays. It may be used in hospitals or at separate outpatient surgical facilities, but may not be suitable for all surgeries or patients.

In published studies from Quebec and Norway, the number of surgeries performed increased and cancellation rates decreased. Similar findings were reported in unpublished sources.

#### Approaches targeting Waits 1 and 2

#### 9) Appointment reminders

Appointment reminders are notifications sent via phone, text, or email to remind patients about upcoming consultations or procedures. They aim to reduce the number of "no-show" appointments (i.e. when a patient misses his/her appointment with insufficient or no notice to the clinic).

Across published and unpublished sources, appointment reminders decreased cancellation rates and no-show appointments and increased the number of number of surgeries performed.

#### Approaches targeting Waits 1, 2 and 3 10) Standardized care pathways

Standardized care pathways outline the care patients should receive from GP referral through to specialist consultation and diagnosis, onwards to treatment. They aim to reduce wait times by standardizing and streamlining patient care. Some standardized care pathways include fast track programs, which are preferential pathways that help patients move more quickly from referral to diagnosis and treatment. They often target patients with suspected cancer.

Findings from published studies conducted in Alberta, Saskatchewan, Denmark, the Netherlands, Norway, Spain and the United Kingdom demonstrated that standardized care pathways decreased wait times and lengths of stay, reduced cancellation rates, and increased the number of operations performed. Unpublished sources of evidence also reported shorter wait times and lengths of stay, and an increase in the number of surgeries performed, in addition to higher patient satisfaction, shorter wait lists, quicker recovery, fewer complications, and cost savings.

## 11) Innovative/expanded scopes of practice

GPs, nurses (including nurse practitioners and nurse specialists), physiotherapists, podiatrists, speech pathologists, audiologists, sonographers, optometrists and orthoptists have increasingly been involved in performing tasks related to the management of elective surgery patients that 5would have traditionally been viewed as outside of their scopes of practice. For example, GPs have provided direct access to wait lists for diagnostic procedures (e.g. endoscopy) and surgeries, performed non-complex surgery, administered anesthesia, and managed non-surgical complaints that would have normally resulted in a specialist referral. Expanded roles for non-physicians have included triaging patients, conducting patient assessments, providing direct access to care, discharging patients, and completing post-discharge follow-ups.

Across published studies from Ontario, Quebec, Saskatchewan, Australia, England, Ireland and the United States and unpublished sources of evidence, implementation of expanded scopes of practice for healthcare providers decreased wait times for surgery and improved access to care for rural patients. High levels of patient satisfaction were also achieved.

## FUTURE CONSIDERATIONS

Based on feedback from Alberta Health Services' Surgery Strategic Clinical Network, all of these approaches have been implemented in Alberta, but only 'in pockets'. Determining how these may be prioritized for 'scale and spread' across the province will require careful consideration of contextual factors that were not systematically captured in this review.