

Surgical wait list management in Canada during a pandemic: many challenges ahead

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Accepted May 4, 2020

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DOI: 10.1503/cjs.006620

SUMMARY

The coronavirus disease 2019 (COVID-19) pandemic has had a massive impact on waits for elective operations, with tens of thousands of scheduled surgeries being cancelled or postponed across Canada. Provincial governments will likely not only reopen elective surgical capacity when it is deemed safe, but also target new funding to address the backlog of cases. There is a dearth of research on whether the provinces' approaches to managing wait lists are equitable from a patients' needs perspective or if they are associated with patients' perception of outcomes. The surgical cost models used in the past won't be useful to governments and hospital managers. New models based on hospitals' marginal costs, associated with running on weekends or off-hours and social distancing parameters, will be needed. Surgeon input, collaboration and leadership during the strategy development, implementation and management of surgical wait lists postpandemic will be imperative, as these decisions will significantly affect the health and lives of many Canadians.

The coronavirus disease 2019 (COVID-19) pandemic did not cause long waits for elective surgeries — provinces have long had delayed access to nonurgent surgery. But now, with the exceptions of all but the most emergent “life-or-limb” procedures, time-sensitive urgent surgical conditions or cancers, surgical wait times will be prolonged, affecting many Canadians.

With tens of thousands of scheduled surgeries being cancelled or postponed across Canada owing to the COVID-19 pandemic, the outlook for patients waiting for elective surgery is very uncertain. In fact, with cancellations still occurring across the country, the final number of cancelled elective operations is yet to be determined. The British Columbia Ministry of Health announced that for the period between Mar. 16 and May 18, 2020, there were 30 298 elective nonurgent operations that were either postponed or not scheduled because of the COVID-19 pandemic.¹ They also estimated there were an additional 24 000 patients who were not added to the provincial surgical wait list, who normally would have been added, because of COVID-19-related system slowdowns.¹ The Financial Accountability Office of Ontario recently released a report that estimated from Mar. 15 to Apr. 22, 2020, there were 52 700 hospital procedures cancelled or avoided, and up to 12 200 more procedures are delayed each week that the province's hospitals continue to postpone elective surgery.² With careful monitoring of disease epidemiology; accumulating experience, research and evidence; and protocols to protect the safety of both patients and health care teams, hospitals will gradually resume performing elective operations — even though it is unclear if they will ever be able to return to their previous levels of case volumes.

The American College of Surgeons (ACS) has recommended that resumption of elective surgery should not occur until there has been a

decrease in measures of COVID-19 incidence for at least 14 days, the maximum estimated incubation period before symptom development.³ The Royal College of Physicians and Surgeons of Canada has not yet issued guidelines for the resumption of elective surgeries.

Provinces have traditionally managed surgical wait lists with principles of equitable access, with first-in first-out practices overlaid with a multilevel triage system. With these policies governing timeliness of access, depending on a person's condition, health authorities have established target wait times for each elective operation. Unfortunately, there is a dearth of research on whether the provinces' approaches to managing wait lists are equitable from a patients' needs perspective or if they are associated with patients' perception of outcomes.⁴ The pandemic-related cancellation of elective surgeries has created an urgent need for provinces to re-evaluate how they manage their wait lists. While the World Health Organization has recommended that a recovery plan for health systems should be developed to facilitate postpandemic recuperation,⁵ and the ACS has just recently provided a guideline focused on a set of principles to assist hospitals plan for resumption of elective surgical care,³ no province has yet announced a recovery plan for elective surgery. The pressing importance of establishing an effective postpandemic surgical triage protocol is amplified by the real risk of subsequent surges of COVID-19, with further interruptions of elective operations.

Health authorities will not only gradually resume elective surgical capacity, but some provincial governments may also target new funding to address the growing backlog. With available funds, the responsibility to mitigate the impact of newly prolonged waits falls to regions, hospitals and surgeons, and established processes will determine how resources to reduce wait times are used. With thousands of local decisions being made rapidly regarding surgical access, thoughtful high-level principles are needed to serve as guardrails for regional and local decision-makers allocating hospitals' operating room resources in the face of surgeon and patient demands.

The traditional approach to managing the wait lists for elective surgeries based on equity of access may have to be sidelined temporarily in a postpandemic world. Surgical prioritization levels currently used by several health authorities were never developed to function either during or after a pandemic. Instead, triaging the wait list may have to be based on patients' needs; prolonged waits may affect patients' ability to return to work or accelerate the deterioration in symptoms, resulting in more complicated and advanced surgical conditions. Elderly patients and those who have comorbidities that make them more susceptible to viral infection may find themselves waiting even longer owing to their own postpandemic anxiety or to surgical triage strategies. Consequently, triage govern-

ing access to elective surgery should expand to include coordination between hospitals and surgeons to carefully evaluate patients' vocational, health, symptom and adverse event risks. Such coordination will likely need to be region- and centre-specific because of differences in hospital priorities, resources and patient needs.³ Transparency is also an important principle to uphold during process development.

Assuming that provincial governments will be footing hospitals', physicians' and post-acute-care providers' bills for expanding elective surgery capacity, many hospitals may have a capacity to increase elective surgeries. For other hospitals, however, capacity will have many limitations, including manpower, physical space and bed availability. Hospital capacity for surgical patients also depends on adequate supports from many other services, such as diagnostic imaging, clinical laboratories, sterile processing and postanesthesia care units. Surgical capacity may also be limited by out-of-stock supplies, including personal protective equipment, or by pandemic-related staff burnout. The role of public-private partnerships and privatized health care (e.g., ambulatory surgical centres traditionally used for nonmedically essential surgical procedures) for wait list cases postpandemic also requires serious consideration.⁶

The surgical cost models used in the past won't be useful to governments and hospital managers. New models based on hospitals' marginal costs, anticipated with running on weekends or off-hours and social distancing parameters, will be needed.⁷ Surgical suppliers may not be able to respond to a surge in demand from hospitals. Hospital managers and surgeons must consider the value of the operation and patients' trajectories to maximize patients' likelihood of benefiting from surgery. This represents a very major challenge.

For many surgeries, there is a relationship between volume and quality. Where there is evidence of such a relationship, it should be exploited with an aim to deliver safe care that is of high quality and value. Moreover, remuneration, scholarship and quality of life will be important to surgeons and other medical staff as hospitals tactically resume elective operations. Finally, the pandemic may open the door to proposing creative alternate funding models that include an income "floor" for surgeons to reduce their financial exposure during future outbreaks.

CONCLUSION

It is extremely likely that provincial governments, possibly with an influx of federal funding, will soon develop and support strategies to address the huge burden of surgical disease that is currently accumulating because of the COVID-19 pandemic. In postpandemic Canada, thoughtful, novel and creative evidence-based strategies for allocating elective surgical resources are critical.

Surgeon input, collaboration and leadership during the strategy development, implementation and management of surgical wait lists postpandemic will be imperative, as these decisions will significantly affect the health and lives of many Canadians.

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Competing interests: None declared.

Contributors: All authors contributed substantially to the conception, writing, and revision of this article and approved the final version for publication.

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