Using pathology data to evaluate surgical backlogs: considerations for resource planning

Wang and colleagues provided valuable insight into the impact of coronavirus disease 2019 (COVID-19), estimating a backlog of 148 364 surgeries in Ontario from March to June 2020.[1] Expanding on the issues they raised, we would like to highlight important additional considerations.

We reviewed surgical pathology and Cancer Care Ontario summary data from the London Health Sciences Centre and St. Joseph's Health Care in London, Ontario. In April 2020, compared with April 2019, the total number of specimens received decreased by 67.5% (2820 v. 8668), and resection specimens decreased by 51.4% (524 v. 1078). Cancer Care Ontario report submissions, largely reflecting newly staged cancer cases, decreased by 30.5% (169 v. 243). The relatively modest drop in resections and Cancer Care Ontario submissions relative to total specimens likely reflects efforts to prioritize cancer surgeries.

In the period from April to June 2020, compared with 2019, the gap decreased as surgeries resumed. Total specimens were reduced by 47.4% (13 842 v. 26 303), compared with 30.9% for resections (2304 v. 3335) and 11.3% for Cancer Care Ontario submissions (643 v. 725). Of note, reductions in Cancer Care Ontario submissions varied between disease sites. Although volumes were comparable for breast cancer (170 v. 171) and colon cancer (73 v. 76), there were drops of 71.6% (19 v. 67) and 53.2% (29 v. 62) for lung and prostate cancers, respectively. These differences may be a result of triaging based on patient, clinical, safety and resource factors.[2] We suspect that regional variations and surgery reductions have limited cancer procedures to high-risk cases and may have resulted in underserviced areas.

It is important that biopsy services are maintained, to identify patients who require prompt treatment. Depending on the disease and site, biopsies may be performed in a variety of settings, such as endoscopy suites, operating rooms and clinics. As such, biopsy volumes in April to June were variably decreased between disease sites, with colorectal biopsies down 63.7% (2013 v. 5553), compared with 24.4% for breast biopsies (374 v. 495) and 23.9% for prostate biopsies (730 v. 959).

Service reductions owing to COVID-19 resulted in decreased surgical resection, cancer reporting and biopsy volumes. Variable effects between disease sites may highlight gaps in care; resource planning to address such gaps should ensure patients have fair and equitable access to health care resources. The impact of the surgical backlog also extends beyond operating rooms and the health care sector, including pressures on primary care, long-term care homes and ability to return to work. We recognize that COVID-19 will continue to affect surgical activity, particularly when pressures on the acute sector grow from COVID-19–related outbreaks and admissions. As system leaders grapple with hospital capacity and demand, we encourage that system-wide risk assessments be undertaken. Prompt and targeted investments to expand diagnostic and surgical activity through all possible care settings will likely pay long-term dividends. Delays in addressing this challenge until after the COVID-19 pandemic is over not only allow for symptoms to escalate, but will also be costly.

Christopher Tran MD MSc
Resident physician in anatomical pathology, Department of Pathology and Laboratory Medicine, Western University; London Health Sciences Centre, London, Ont.

Mike Kadour PhD
Director for pathology and laboratory medicine, Department of Pathology and Laboratory Medicine, Western University; London Health Sciences Centre, London, Ont.

Matthew J. Cecchini MD PhD
Assistant professor and anatomical pathologist, Department of Pathology and Laboratory Medicine, Western University; London Health Sciences Centre, London, Ont.

Ken A. Leslie MD
Professor, chair/chief, and general surgeon, Department of Surgery, Western University; London Health Sciences Centre, London, Ont.

David K. Driman MBChB
Professor and anatomical pathologist, Department of Pathology and Laboratory Medicine, Western University; London Health Sciences Centre, London, Ont.

■ Cite as: *CMAJ* 2021 March 8;193:E343. doi: 10.1503/cmaj.77883

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Competing interests: None declared.