



Estimating Planned Surgical Cancellations Due to COVID-19 Using Historical Data

Issue

To create capacity for an anticipated surge of COVID-19–related hospital admissions, provincial and territorial ministries of health announced that planned surgeries would be cancelled. These announcements were made between March 15 and 23, 2020.^{1–5}

The Canadian Institute for Health Information (CIHI) has not yet received data from hospitals on surgeries that are being done during the COVID-19 pandemic and therefore cannot assess the current situation. However, understanding the number and type of planned surgeries that were done in spring 2019 can help inform the scope of efforts to restart planned surgeries.

In this analysis, we provide data and information on planned surgeries that happened in hospital operating rooms and day surgery clinics between February 1 and April 30, 2019.

It is important to note that not all planned surgeries are being cancelled during the pandemic, as those that are urgent or that become urgent continue to happen.^{1–5} Finally, many factors beyond the scope of this analysis will contribute to when and how planned surgeries can take place again, including the trajectory of the pandemic and the availability of personnel and protective equipment.

Key findings

- Between February 1 and April 30, 2019, there were approximately **100,000 planned inpatient surgeries** and **375,000 day surgeries** in all provinces and territories, excluding Quebec.
- About 250,000 of the inpatient and day surgeries took place between March 15 and April 30, 2019.
- Approximately 16,000 (16%) inpatient and 18,000 (5%) day surgeries were for patients who had **cancer** as their main diagnosis.
- About 6,300 (6%) inpatient and 10,000 (3%) day surgeries were **cardiac procedures**.
- Common inpatient procedures have different impacts on hospital resources. Among the **top 15 inpatient** surgeries, length of surgery varied from 1 to 4.5 hours. The most common inpatient surgeries were hip and knee replacements.





Highlights

- For the **top 15 day** surgeries, all surgeries took less than 1.5 hours. The most common day surgery was cataract removal.
- Almost all inpatient and day surgeries happened on weekdays: 98% of inpatient and 99% of day procedures.
- Similarly, most surgeries started between 7 a.m. and 3 p.m., with less than 2% starting outside that period.

Notes and limitations

- There are 2 general settings for surgeries:
 - **Inpatient** surgeries: Patients are admitted and spend at least one night in the hospital. These are typically more-complex surgeries.
 - **Day** surgeries: Patients come to the hospital or ambulatory care clinic for their surgical procedures and return home the same day.
- Surgeries performed in Quebec were excluded from the analysis as data for 2019–2020 was not available.
- Fetal and obstetrical interventions were excluded from the analysis as they are generally continuing during the COVID-19 pandemic.
- Each jurisdiction defines day surgery differently. This affects the comparability of both day surgeries and inpatient surgeries between provinces/territories.

References

1. Angus H, Williams D, Anderson M. [Memorandum to Ontario Health and Hospitals: Ramping Down Elective Surgeries and Other Non-Emergent Activities](#). March 15, 2020.
2. British Columbia Ministry of Health. [Joint statement on B.C.'s COVID-19 response and latest updates](#). Accessed May 10, 2020.
3. Government of Manitoba. [COVID-19 bulletin #23](#) [media release]. March 20, 2020.
4. Government of Alberta. [Update 5: COVID-19 pandemic in Alberta \(March 18 at 4:30 p.m.\)](#). Accessed May 10, 2020.
5. Newfoundland and Labrador Department of Health and Community Services. [Public advisory: COVID-19 restrictions imposed for regional health authority facilities](#) [media release]. March 15, 2020.

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