A struggling system
Understanding the health care impacts of the pandemic

November 2021
Overview

The COVID-19 pandemic has had an impact on the health of Canadians that is broader than the effects of contracting the virus itself. The backlog in hospital procedures is growing, and numerous forms of care have been delayed, cancelled or otherwise affected by the pandemic throughout 2020 and 2021.

A new study commissioned by the Canadian Medical Association (CMA) looks at seven health indicators to gauge access to care during the pandemic and the potential impact of the pandemic on the health care system and on the wellness of Canadians.

The demand for extra capacity poses a significant risk to the sustainability of the health care system at a time when health care workers are burned out, exhausted and demoralized, and the pressures on the system are being exacerbated by the increasing shortage of health human resources.

This report quantifies the backlog in eight procedures, provides evidence of the impacts the pandemic has had on health and aims to inform policy-makers and governments about pressing issues and the funding required to alleviate them.

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Key drivers of future health demand due to pandemic

- More than 60,000 missed full home care assessments between March and June 2020
- More than 4,000 excess deaths not related to COVID-19, due to delayed care
- 20%-35% decrease in food insecurity in the first two months of the pandemic
- 68%-94% decrease in in-person visits for chronic disease care visits between April 2019 and April 2020
- 70% increase in opioid-related deaths from 2019 to 2020
- High levels of anxiety among Canadians peaked at 27% in June 2021
- Cancer screenings remained 20%-35% below pre-pandemic levels as of January 2021
- 39% increase in food insecurity in the first two months of the pandemic
Growing health challenges

Mental health disorders

Self-reported mental health challenges increased during the pandemic. The latest data suggest this trend may reverse slightly, but a significant challenge remains.

An increase in the incidence of mental health disorders has coincided with pandemic-induced hardship. The increase may be driven by heightened risk factors like financial insecurity and the erosion of protective factors, such as social engagement, daily routine and access to health services, driven by public health requirements, such as the closure of health services, stay-at-home orders and other physical distancing measures.

Direct drivers that may explain the changes in mental health during the pandemic include anxiety related to contracting the virus, access to vaccinations or vaccine hesitancy.

The Centre for Addiction and Mental Health increased its virtual care visits by 750% – from 350 to 3,000 online consultations – during the first wave of the pandemic.

We can measure the impact of the pandemic on mental health disorders through the self-reported prevalence of various conditions including depression and anxiety.

Note: Data on mental health in Canada are insufficient. Mental health statistics often rely on infrequently collected self-reported data and the availability and use of mental health services are difficult to assess.
Trends in mental health disorders throughout the pandemic:

- In April 2020, at the onset of the pandemic, roughly 20% of Canadians reported high levels of anxiety. By June 2021, this had increased to 24%.

- In the same period, the percentage of Canadians reporting high levels of depression increased from 10% to 15%.

- Self-reported high levels of anxiety and depression peaked at 27% and 17%, respectively, but have since fallen slightly. Although this trend is promising, it is too soon to say whether levels of anxiety and depression will return to pre-pandemic levels or remain elevated for some time.

Problematic substance use

Emergency department (ED) visits and hospitalizations for substance use disorders increased during the pandemic.

Problematic substance use can lead to a host of short- and long-term physical and mental health complications, including loss of life.

Canada has been struggling with a challenging opioid epidemic, and pandemic-related stress — emotional strain, changes in routine, closure of services like detox and rehab centres — may have increased substance use.

Nearly 17 opioid-related deaths occurred per day in Canada in 2020, an increase of roughly 70% from 2019.

This rate increased to nearly 20 deaths per day in the first three months of 2021.

Substance use may have become more dangerous during the pandemic as individuals have been potentially consuming harmful substances in isolated settings more frequently, there has been less access to public health services, and the drug supply has reportedly become more toxic.
Trends in substance use throughout the pandemic:

- Except for the peak lockdown period (April 2020), monthly ED visits and hospitalizations due to substance use were higher in each month of the pandemic in 2020 than in the same month in 2019. This is in contrast to the volumes of ED visits and hospital admissions for any reason, which have been lower throughout the pandemic.

- Inpatient hospitalizations and ED visits for alcohol, opioids, cannabis and stimulants (excluding cocaine) increased by between 5% and 8% in 2020, with the exception of alcohol-related ED visits, which dropped by 11%.

Social determinants of health

As with delayed or missed care, worsening social determinants of health brought on by the pandemic can lead to increased demand for health care services.

The social determinants of health, such as education, safety, food and nutrition, inclusion and income all contribute to overall health.

Stress brought on by the pandemic, the closure of public health services and schools and isolation as a result of physical distancing measures have all had a negative impact on the social determinants of health.

Trends in social determinants of health throughout the pandemic:

- The food insecure population in Canada grew by 39% in the first two months of the pandemic.
- The perceived threat of race or ethnicity-based harassment of Chinese, Korean and Southeast Asian minorities increased by 30%, 27% and 19% respectively.
- Kids Help Phone saw an increase in calls about physical abuse and isolation by 28% and 48% respectively.
Excess deaths

Although it is not surprising that more Canadians died in 2020 than in a typical year, the number of excess deaths was greater than can be explained by COVID-19 alone.

While there may be several drivers of these excess deaths, delayed or missed care due to shutdowns of services and lack of sufficient capacity in overburdened health systems may be a contributing factor.

The excess deaths include deaths with a direct connection to the pandemic (i.e., people who died after contracting COVID-19) as well as deaths with an indirect connection to the pandemic (i.e., people who died because the care they needed was delayed or missed, because they were more hesitant than usual to seek care, because they were affected by the increased incidence of mental health disorders or, substance use, or because they may have experienced a deterioration in another determinant of health during the pandemic).

Trends in deaths during the pandemic:

- The number of deaths in Canada remained higher than expected from spring 2020 into winter 2021. The number of excess deaths peaked alongside the pandemic waves; however, there were periods where the volume of excess deaths persisted above the volume of COVID-19 deaths, suggesting that either indirect pandemic-related causes or alternative causes led to a spike in deaths.

Delayed and missed health care may have contributed to more than 4,000 excess deaths not related to COVID-19 between August and December 2020.
COVID-19 deaths and estimated excess mortality rates as a percentage of expected mortality, 2020-2021 (percentage of all-cause deaths)

• At their peak in September 2020, the number of deaths not related to COVID-19 was 5% greater than the expected mortality rate for a normal year. This pattern is in line with the excess mortality observed in international jurisdictions during the pandemic.

• Quebec, Ontario, and British Columbia all experienced varying levels of excess deaths during the first wave of the pandemic and a higher share of excess deaths was reported for the elderly (aged 85 years and older).

Note: Excess deaths may not exclusively be due to pandemic-related issues. For example, car accidents, shootings, natural disasters and so on may also lead to higher-than-expected mortality. There are also pandemic-related trends that may have reduced the number of deaths, such as fewer people driving.

Chronic disease assessments

In-person chronic disease management visits in Ontario plummeted in the early stages of the pandemic and have not returned to pre-pandemic volumes.

More than 4.9 million or roughly 73% of Canadians over 65 years of age live with at least one chronic disease. Managing chronic disease often requires frequent use of health care services, including visits with specialists.

During the pandemic, chronic disease management may have been more difficult because of health service closures, the diversion of health care resources to COVID-19 care and patients’ fear of interacting with the health care system because of potential exposure to the virus.

Mismanagement of chronic diseases can lead to both short-term and severe long-term health complications, such as heart attack and death.

Trends in chronic disease assessments during the pandemic:

• In-person specialist visits for chronic disease management have plummeted throughout the pandemic for some of the most common chronic diseases. In April 2020, there were 68%-94% fewer in-person visits than in April 2019.

• As of January 2021, the number of in-person visits remained significantly below the 2019 levels, ranging from roughly 60% below for patients with hypertensive heart disease to 87% for patients with diabetes.
A national survey found that two-thirds of Canadians living with chronic disease had difficulty obtaining care in 2020.

- Data from Ontario confirm there was a significant uptick in virtual care services provided for patients with chronic diseases — more than 42 million specialist consultations — which may have offset the widespread decrease in in-person consultations for these patients. However, virtual visits are not always a good substitute for in-person care.

- Despite this massive shift to virtual care, many patients still reported difficulty accessing chronic disease care during the pandemic.
Cancer screenings

Although cancer screening services have resumed, the number of completed screenings has yet to reach pre-pandemic levels.

Nearly half of Canadians are expected to develop cancer during their lifetime and approximately **one in four Canadians are expected to die from it**. Cancer screenings help detect cancer early, thereby increasing the chance of survival.

**Trends in cancer screening during the pandemic:**

- Before the onset of the COVID-19 pandemic, there were significant year-over-year increases in the number of mammograms, fecal tests and colonoscopies conducted in Ontario, probably as a result of the expanded availability and enhanced convenience of cancer screenings in the province.

- In March 2020, routine cancer screenings were paused because of the COVID-19 pandemic. This resulted in the closure of screening centres across Ontario and a steep decrease in the number of mammograms, fecal tests, colonoscopies and Pap tests conducted.
Although cancer screening services gradually resumed beginning in May 2020, they had yet to reach pre-pandemic levels as of December 2020.

The estimated backlog in Ontario is as follows:

- **389,347** – Pap tests
- **307,617** – mammograms
- **297,299** – fecal tests

Home care assessments

In the early days of the pandemic, the volume of home care assessments plummeted. While the volume of screening assessments has returned to historical levels, the volume of full home care assessments continued to be lower than usual into June 2020.

Home care assessments are an important form of health screening where a home care provider determines the care needs for new and existing clients, including whether they should be referred to long-term care facilities.

Home care assessments help identify health issues early and ensure that patients are receiving necessary preventive care and that they have the right resources and knowledge to manage existing health issues.

**Screenings** are shorter assessments used to identify urgent needs.

**Full assessments** are more comprehensive assessments of care needs.

Early in the pandemic, home care providers changed their assessment methods to avoid close contact with clients and limit their contact with different households. In addition, some clients cancelled assessments to avoid contact with others.
Trends in home care assessments during the pandemic:

- The total number of home care assessments completed declined significantly during the first wave of the pandemic.
- The number of full assessments completed declined by 44% from March 2020 to April 2020.

In Alberta, British Columbia, Ontario and Newfoundland and Labrador, nearly **60,000 fewer** full home care assessments were completed between March and June 2020 than in the same period in 2019.

Between April and June 2020, hospital screening assessments completed by phone increased by 53% compared with the same period in 2019.

By June 2020, screening assessments had rebounded to March 2020 levels; however, full assessments still remained **60% below** their February 2020 levels.

After March 2020, the majority of screening assessments moved to virtual appointments in an effort to limit contact between patients and staff.
Correcting for the negative impacts of the pandemic on the health care system will take years.

The broader health impacts of the pandemic could have severe long-term consequences for the health care system and the Canadian economy.

- Missed or delayed chronic disease management can lead to serious and expensive complications, like heart attacks or even death.
- Inaccessibility of cancer screenings can delay cancer diagnoses and reduce the likelihood of successful treatment or increase the likelihood of harmful lasting impacts on patients with cancer and their loved ones.
- An increase in mental health disorders can lead to increased unemployment and increased spending on mental health programs and other social services.
- Increased substance use and mental health disorders may increase the costs of managing the health system in the future.

These dynamics are adding to health care demand at a time when the system is already under significant stress and Canada is experiencing a health workforce crisis. Without additional resources and strategies to efficiently manage these added demands, correcting for this build-up may take years.
A significant procedural backlog – to the tune of 327,800 procedures – remains in Canada.

During the pandemic, scheduled procedures and care were disproportionately cancelled or delayed across Canada. This study also estimates the backlog for eight selected procedures, as well as the costs associated with clearing the backlog by June 2022.

Across the eight selected procedures, the number of days lost to perform procedures throughout the pandemic ranges from at least 46 days for breast cancer surgeries to at least 118 days for hip replacement surgeries.

Backlog accumulated due to COVID-19 (April 2020-June 2021)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Days, Provincial Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Cancer Surgery</td>
<td>46</td>
</tr>
<tr>
<td>CABG</td>
<td>63</td>
</tr>
<tr>
<td>CT Scan</td>
<td>64</td>
</tr>
<tr>
<td>MRI Scan</td>
<td>69</td>
</tr>
<tr>
<td>Colectomy</td>
<td>72</td>
</tr>
<tr>
<td>Knee Replacement</td>
<td>104</td>
</tr>
<tr>
<td>Cataract Surgery</td>
<td>105</td>
</tr>
<tr>
<td>Hip Replacement</td>
<td>118</td>
</tr>
</tbody>
</table>

Source: Deloitte. September 2021
• At least $1.3 billion in additional funding is required to return wait times to their pre-pandemic levels. This number may be even higher when additional procedures and the cancellation of non-urgent surgeries in several provinces during the fourth wave are factored in.

• Overall, cataract surgeries, MRI scans and CT scans account for 70% of the additional costs to clear the backlog, given the large volumes of these procedures.

• Cataract surgeries are the third most common procedure. Volumes went to near zero in April 2020 and this procedure has been among the slowest to return to pre-pandemic volumes, resulting in a particularly large backlog.

• Despite relatively low volumes, colorectal and breast cancer surgeries and coronary artery bypass graft (CABG) surgery account for the largest proportion of additional funding, given the high costs of these surgeries and the number of outstanding procedures.

Note: The pandemic is not yet over. Our analysis assumes procedures continue to take about 10% longer than normal. If the pandemic worsens significantly and health care resources are again diverted to COVID-19 care, this assumption may not hold and the backlog, and associated costs, could continue to grow.

These added demand pressures come at a time when many health care workers are burned out.

For example, 72.9% of physicians in Ontario reported feeling some level of burnout in 2021, up from 66% in 2020.

72.9%
66%
Summary

The pandemic remains a key concern because of the growing health workforce crisis, increasing procedural backlog and broader health impacts, which represent significant and growing risks to the sustainability of Canada’s health systems.

Canada’s health care system will require federal funding commitments of at least $1.3 billion to return to pre-pandemic levels of patient care.

In addition, health leaders will need to find system efficiencies and employ strategies to address capacity optimization—like virtual care and patient prioritization—to clear the current backlog in procedures.

Decisive action must be taken to address workforce shortages, particularly in nursing, to ensure the health system is able to operate efficiently.

Creating a safe, robust and healthy workforce can’t wait. An integrated health human resources strategy is necessary to protect health care and to chart a sustainable course for the future.

Canadians want to know that the procedural delays and worsening health conditions they’ve endured have not gone unnoticed and that investments in improved patient care are a priority for the federal government. The CMA is eager to collaborate with the government to address these pan-Canadian health priorities and enable our health system to recover from the pandemic.

Note: The impact of the pandemic on Canada’s health care system may be larger than outlined in this report. While Canada has made improvements in tracking and reporting data, there are still gaps in the availability of public and timely health data, making it difficult to adequately understand the full breadth of the health care challenges.