



# Addressing the Surgery and Diagnostic Backlog: A Path to Recovery

June 17, 2021



# Summary: Surgery & Diagnostic Recovery Plan

The health system's pandemic response has resulted in multiple slow downs of surgical and diagnostic procedures.

**We estimate the backlog is over 110,000 surgical and diagnostic procedures, and growing:**

- **Over 39,000 surgical procedures**
- **Over 44,000 diagnostic imaging tests**
- **Over 32,000 other procedures, including endoscopies, allergy testing and mammograms**

While some progress was made in February and March, the backlog is growing again because of the third wave.

The backlog is having a significant impact on patients who are waiting longer. For patients, this has meant:

- Pain and discomfort with longer waits
- Minor health concerns turning into larger issues that require more complex procedures and treatment
- Patient harm (delayed diagnosis, disability or death)

The surgical slow downs have not only affected quality of life procedures, such as cataract surgeries and hip replacements, but cardiac and cancer surgeries have also been affected.

Doctors Manitoba applauds the government's investments to help address the backlog, including \$2.5 million in contracts and \$50 million announced in Budget 2021. This is a strong start, but a more comprehensive and accountable plan is needed to reassure Manitobans about when and how the backlog will be fully addressed.

## Recommendations

1. **A provincial commitment is needed to fully address the pandemic backlog by a fixed date, including ensuring all the necessary funding is available.**  
*(example, by Dec. 31, 2022)*
2. **Create a Surgery and Diagnostic Recovery Task Force to lead the immediate and sustained task of addressing the backlog. The Task Force should include health system leaders as well as frontline physicians, nurses, technologists and others to collaboratively address barriers, such as the nursing shortage, and consider models of care that support an expedited and safe recovery.**
3. **Provide monthly public reports on progress, including the size of the backlog, a breakdown by procedure, and details on plans and actions to address the issue.**

# Research & Methods

This report relies on extensive research:

- Doctors Manitoba survey of physicians  
Conducted April 1 to 11, 2021  
1,022 responses, including 238 surgeons, radiologists and anesthesiologists.
- Probe Research survey of Manitoba adults  
Conducted April 5 to 14, 2021  
1,000 responses
- Literature Review and Jurisdictional Scan
- Manitoba data and updates, where available



# How Big is the Backlog?



# Pandemic Impact on Surgeries and Diagnostics

Like other provinces, Manitoba postponed many elective and non-urgent surgeries and diagnostic testing during the first wave, as a precaution while experts learned more about COVID-19.

Manitoba was forced to decrease surgery volumes again during the second wave. This time the move was not a precaution, but resources were needed to support a surge in COVID-19 hospital admissions and the need for more critical care capacity. Surgeries are being disrupted again to support the ICU response during the third wave.

Surgery space, such as recovery rooms, have been used for ICU patients and surgical staff have been redeployed to provide care for COVID-19 patients.

Diagnostic imaging was not as significantly affected during the second and third waves.

## ***How big is the backlog?***

Estimating the backlog for surgery and diagnostics is challenging because of inconsistent and incomplete public reporting. Over the next several pages, we estimate the backlog using a variety of sources.



# Estimating the Pandemic Surgery Backlog



**Estimated  
Surgery Backlog:  
39,000  
CASES  
and counting**

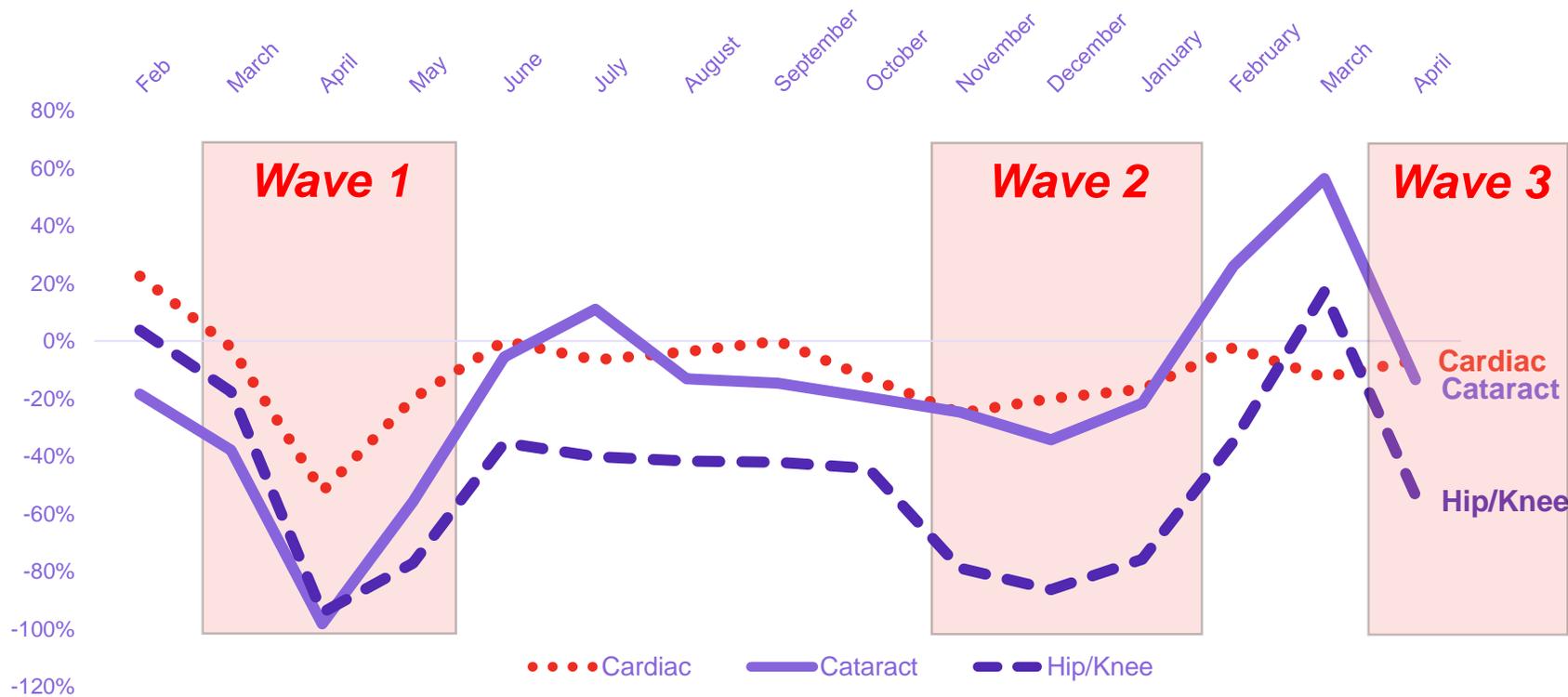
To estimate the full size of the surgery backlog generated during the pandemic, we considered several factors:

- Shared Health’s public statement that the backlog from the first and second waves had reached 16,000 cases.
- CIHI’s [comprehensive reporting on surgery volumes](#) changes during just the first wave of COVID-19, which found a 35% decrease in surgical volumes (12,011 cases) in Manitoba.
- Manitoba Health’s [monthly public reporting](#) of cataract, hip/knee and cardiac procedure volumes (down 32%).
- Surgeons’ estimates of a 40% decrease in surgery volumes, and their estimate of their growing wait list. (estimated at 35,000 – 45,000 elective procedures).
- Physicians’ estimates that they have decreased referrals for surgery by 11% during pandemic. This is a potential “hidden” backlog not captured elsewhere, which we have incorporated into our estimate.

*Pandemic backlog estimate covers March 2020 to May 2021.*

# Surgery Backlog for Cataract, Hip/Knee & Cardiac

Cataract, hip/knee and cardiac procedures are reported publicly, so they offer a view into how surgeries have been impacted by the slow downs. Surgical volumes decreased the most during the first and second waves, but they also never fully recovered between waves. COVID-19 precautions add additional time to each procedure, which means a return to 100% of “normal” OR time does not result in 100% of “normal” surgery volumes.



**Cardiac Surgery**  
Volume: ↓ 13%  
Backlog: ↑ 163

**Cataract Surgery**  
Volume: ↓ 19%  
Backlog: ↑ 3,273

**Hip/Knee Surgery**  
Volume: ↓ 56%  
Backlog: ↑ 6,001

% change in surgery volume compared to same month from pre-pandemic period 2019/2020

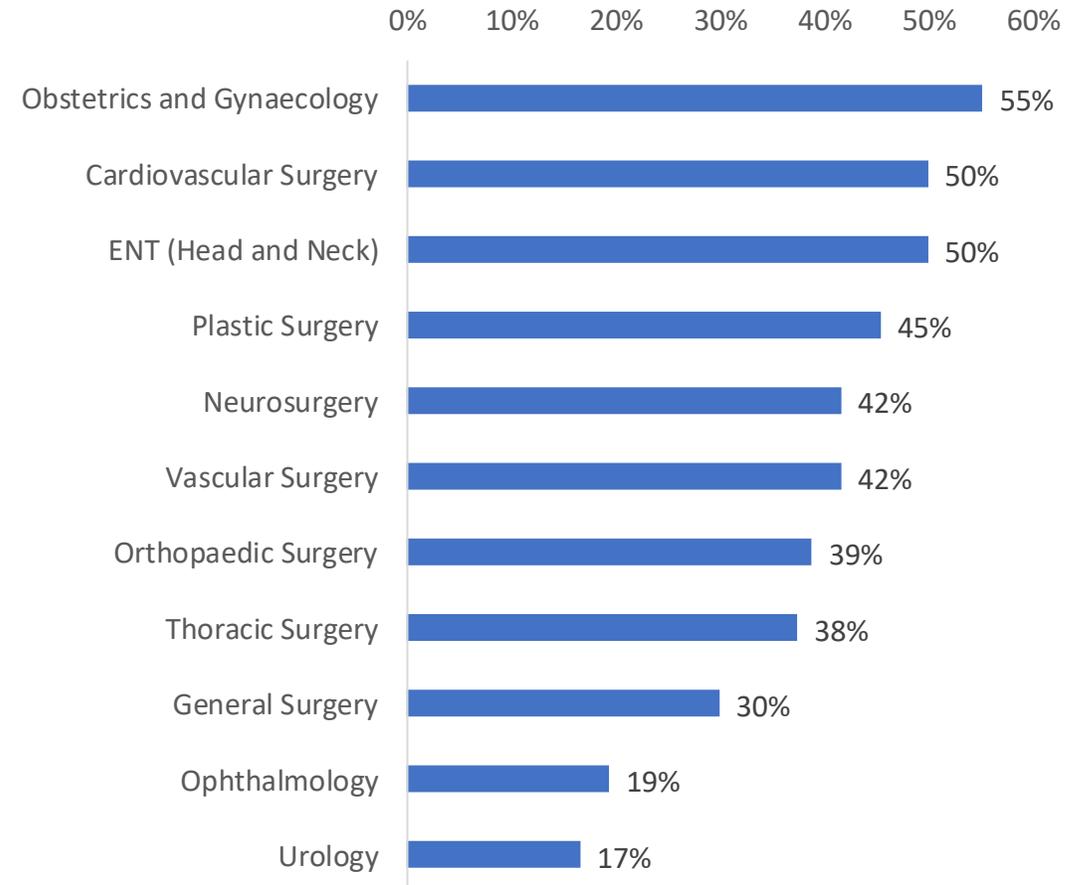
Source: Manitoba Health

# Change in surgery volumes during pandemic

↓ 40%

Surgeons estimate their surgical volumes are down 40% overall

## Reported Decrease in Surgical Volumes



# Estimating the Diagnostic Pandemic Backlog



**Estimated  
Diagnostic  
Testing Backlog:  
44,300  
CASES**

The diagnostic imaging backlog is much easier to calculate as volumes are reported publicly on a monthly basis by Manitoba Health.

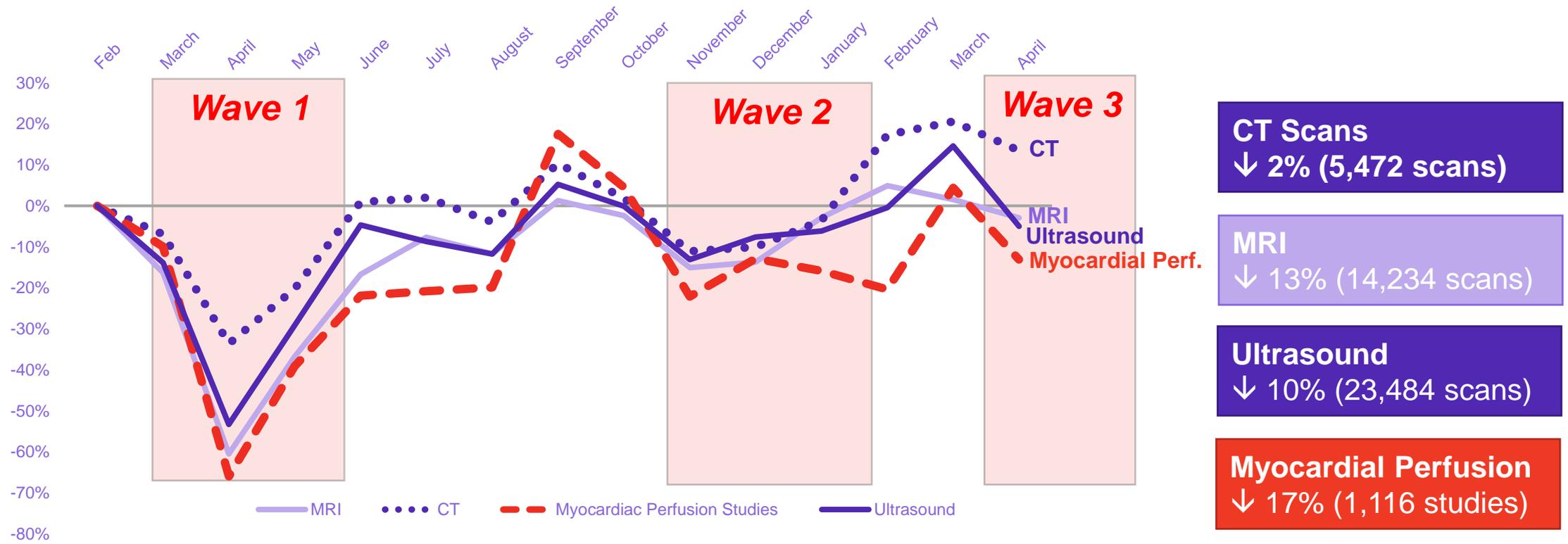
The decrease in volume during the pandemic includes:

- 5,472 CT Scans
- 23,484 Ultrasounds
- 14,234 MRI Scans
- 1,116 Myocardial Perfusion Studies (heart stress tests)

*Pandemic backlog estimate covers March 2020 to April 2021.*

# Diagnostic Volume Changes

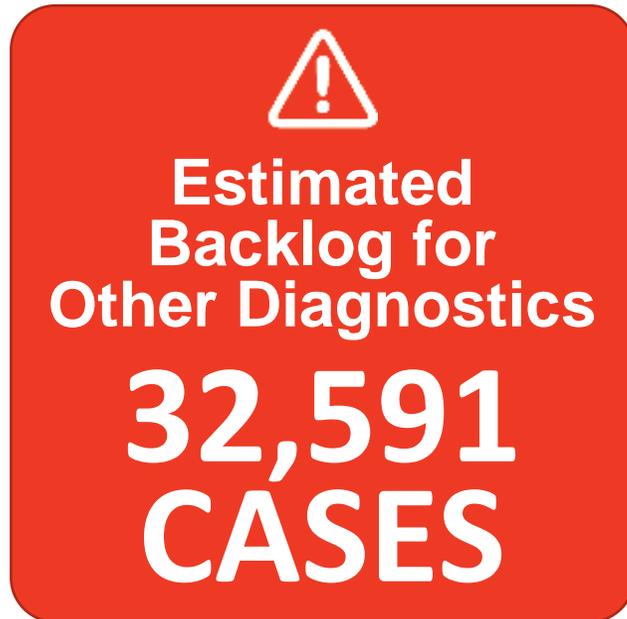
Diagnostic volumes dropped significantly during the first wave, but they recovered more over the summer than surgery and they were less impacted by the second wave. There is still an enduring net loss in diagnostic volumes during the pandemic, however, and it is unclear how the third wave will impact on efforts to catch up.



% change in diagnostic imaging volume compared to same month from pre-pandemic period 2019/2020

Source: Manitoba Health

# Pandemic Backlog for Other Procedures



There are several other diagnostics that have been impacted. The following estimates were developed based on issues identified by physicians.

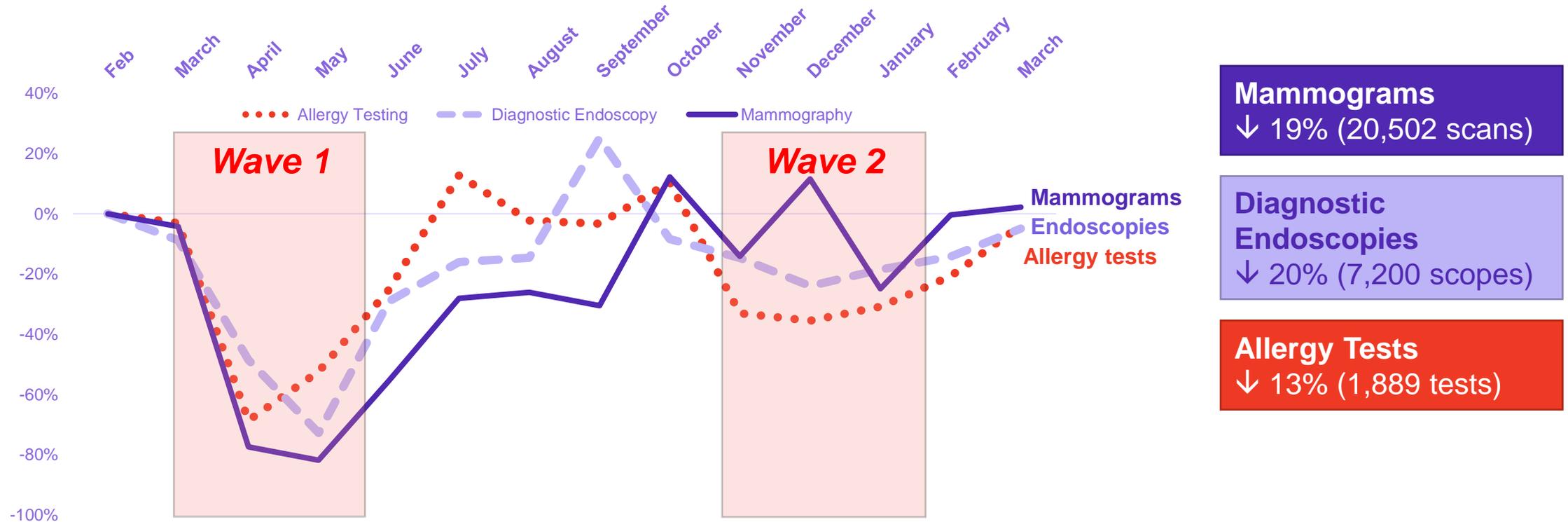
The pandemic backlog based on decreased volumes and wait list analysis includes:

- 1,889 Allergy Tests
- 10,200 Endoscopies
- 20,502 Mammograms

*Pandemic backlog estimate covers March 2020 to March 2021 for allergy tests and mammograms. For endoscopies, it covers March 2020 to May 2021.*

# Other Procedures Volume Changes

Other diagnostics, including mammograms, diagnostic endoscopies and allergy tests, saw sharp decreases in volume during the first wave, with some recovery over the summer and smaller decreases during the second wave.



% change in diagnostic volumes compared to same month from pre-pandemic period 2019/2020  
 Source: Doctors Manitoba review of physician claims data

# Impact of Backlog

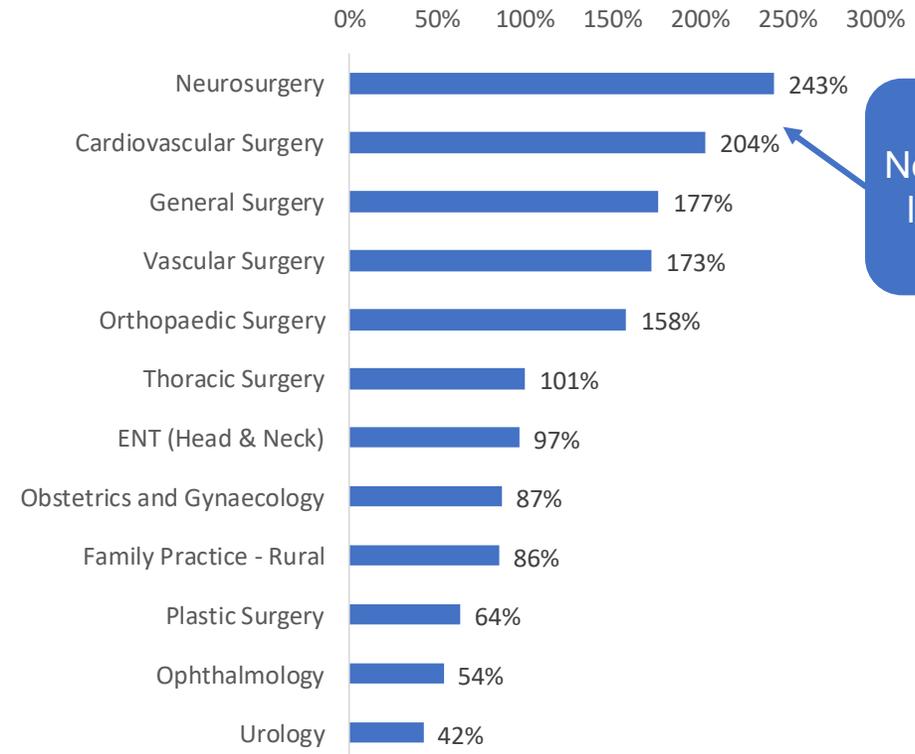


# Surgery Wait Lists More Than Double

WAIT LIST  
↑ 108%

Surgeons estimate their wait lists have **more than doubled** during the pandemic, up 108%.

Reported Change in Wait List



*Estimate is based on survey of surgeons conducted in April 2021*

# Impact on Patients

Physicians described a wide range of impacts the backlog and growing wait is having on their patients. This includes:

- Prolonged pain and discomfort with longer waits
- Minor health concerns turning into larger issues that require more complex procedures and treatment
- Patient harm (delayed diagnosis, disability or death)
- Negative impacts on:
  - Quality of life
  - Physical health (decreased mobility)
  - Mental health (stress, anxiety, depression and suicidal ideation)

“My patients live with debilitating pain. Everyday month that their surgery is delayed, is another month longer they have to suffer, avoid activity, and be non-productive in society.”  
(Orthopedic Surgeon)

“I currently spend more time talking to patients about wait times than I do actually caring for them.” (Surgeon)

“My patients are going blind, losing the ability to live independently, enjoy activities, drive and take their medications safely.” (Ophthalmologist)

“The uncertainty and frequent cancellations are causing anxiety. Patients are depressed not knowing when their wait will be over.” (Family Physician)

“Patients are experiencing decreasing mobility with impacts on health and major decrease in quality of life. Some are turning to narcotics.” (Surgeon)

# Concerning Impacts

When most surgeries were paused due to the pandemic, provincial officials have repeatedly stressed that only non-urgent and elective procedures would be affected.

However, some physicians have reported concerning cancellations and delays for cardiac and cancer surgeries.

For cardiac patients, physicians have identified significant deterioration among patients waiting for heart surgery, including at least two patient deaths on the wait list.

For cancer patients, physicians provided many examples of delayed biopsies and surgeries, resulting in cancers advancing in stage, spreading, and requiring additional treatments.

CIHI's analysis of surgical impacts from the first wave found a 16% decrease in cardiac surgeries and a 9% decrease in cancer surgeries.

"Patients are waiting longer for bladder cancer surveillance and surgery." (Urologist)

"We have had deaths on the waitlist and an alarming number of patients over waitlist benchmarks with symptomatic deterioration." (Cardiac Surgeon)

"My patient has endometrial cancer and her surgery was delayed. She started on chemotherapy which should not have been the case. Patient very distraught and depressed for fear of cancer spread." (Family Physician)

"Some patient cancers are not confirmed and operated on in time." (Family Physician)

"We have seen a stage shift where cancers have progressed. That leads to having to treat more patients with radiotherapy or chemo." (Family Physician)

# Impact on Children

**We estimate the surgery backlog for children and youth to be 3,500 to 5,000 cases.**

Pediatric specialists have reported extended delays for many procedures, with many children waiting well-beyond the [recommended wait times](#).

For some children, the delays lead to more complex surgeries which, in turn, require much longer hospital stays for recovery. In some cases, this has led to cancer advancing and spreading.

While most children's hospitals across Canada were able to address their backlogs by increasing their capacity above 100%, Manitoba's Children's Hospital hasn't been able to get above 60-80% of normal capacity due to ongoing nursing shortages.

Prioritizing surgeries will be a critical part of recovery, and [an emerging framework from Pediatric Surgical Chiefs of Canada](#) can be used to help guide the process.



# Impact on Women's Health

Physicians raised serious concerns about the impact on Women's Health. For example:

- Obstetrician/gynecologists estimate a 55% decrease to their surgical volumes during the pandemic.
- Many surgical procedures have been postponed, including a 40%-70% drop in uro-gynecology surgeries and a 24% drop in hysterectomies.
- Surgeries for pregnancy loss or fetal demise have been delayed, as has surgical abortion.
- Women have experienced delays in diagnosing and treating cancers, leading to spread and more difficult treatments. In some cases, surgery was no longer a treatment option.
- There have been 20,000 fewer mammograms during the pandemic.

Surgical slow downs at Women's Hospital have been extensive. This is also the case at St. Boniface, which became the centre for uro-gynecology after hospital consolidation, leaving women languishing with pain and incontinence issues.



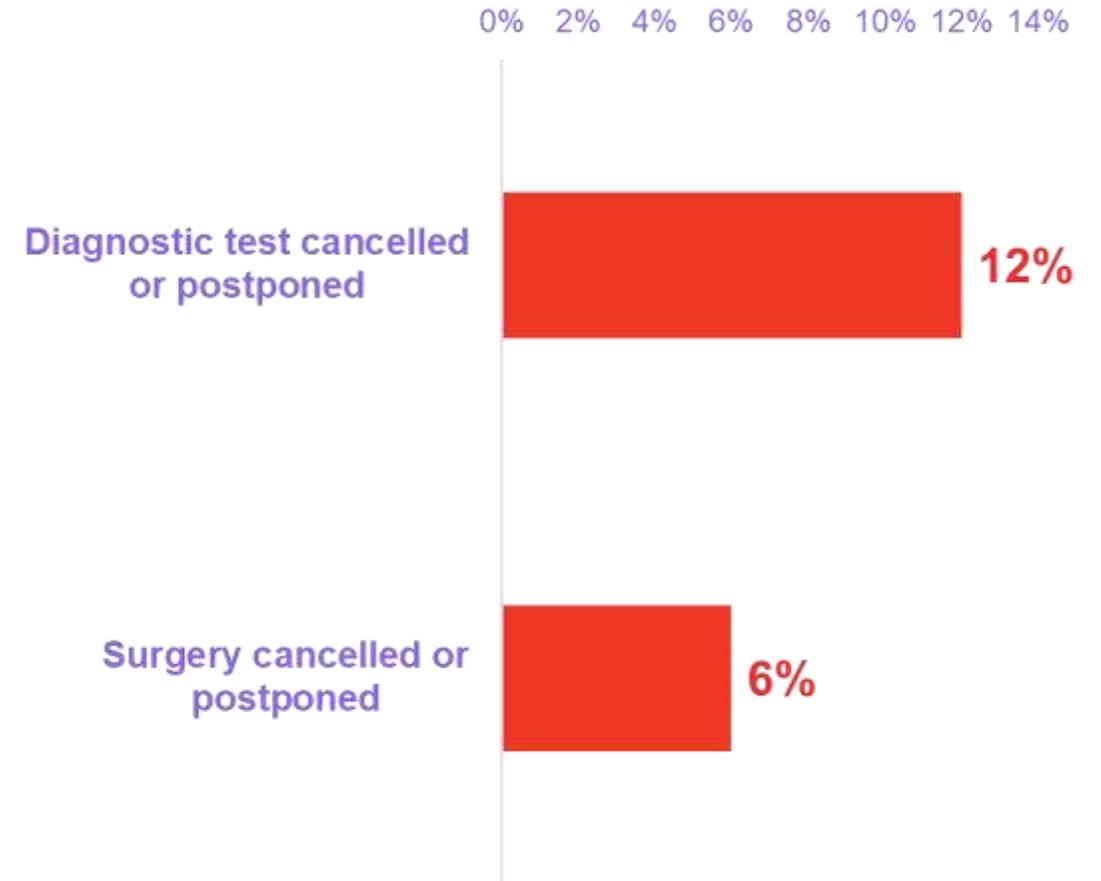
# Manitobans are concerned, too.

**81%** of Manitobans are concerned the pandemic might delay a medical test or surgery if they need one.

Manitobans are feeling the impact of the disruptions, with 12% reporting they had a diagnostic test cancelled and 6% reporting a surgery cancellation.

Source: Probe Research Survey

Incidence of cancellations among Manitobans



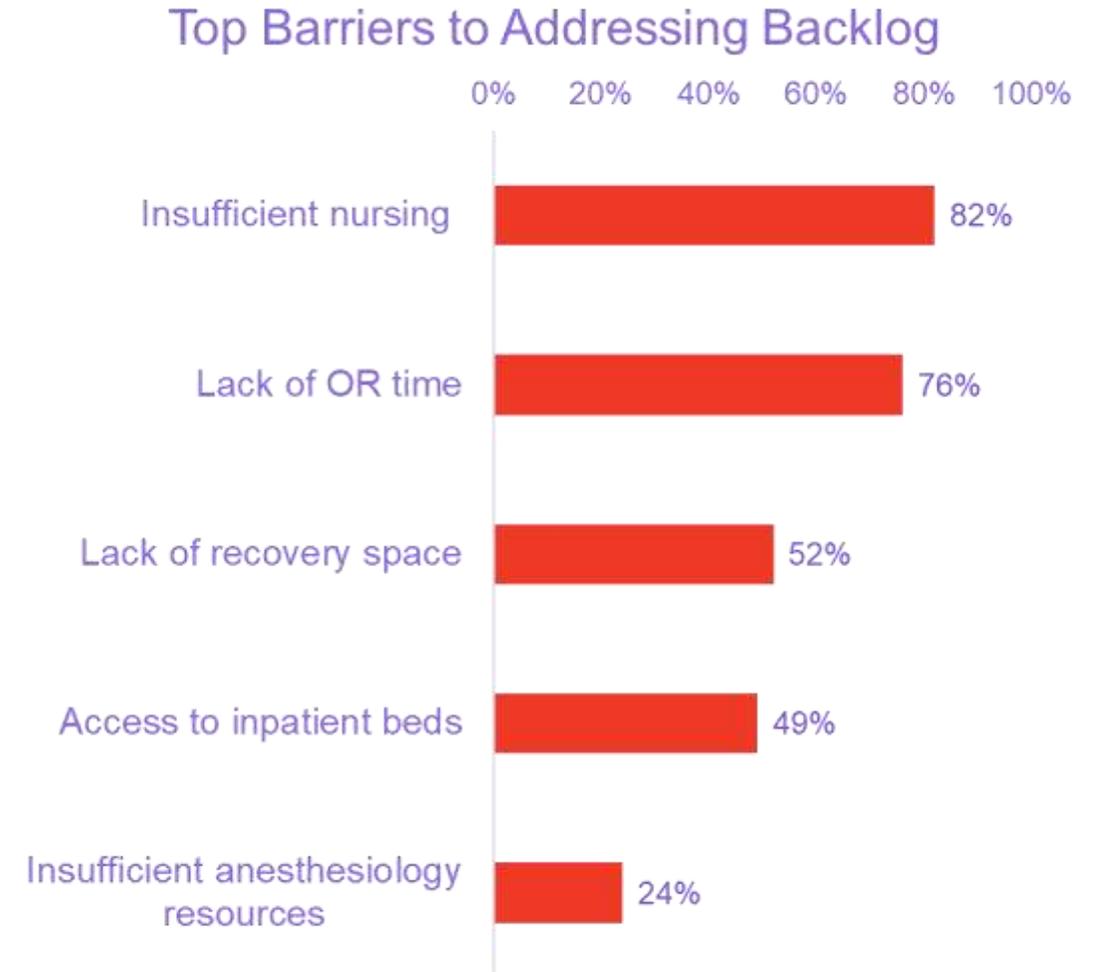
# Addressing the Backlog



# Barriers to Addressing Surgery Backlog

While the provincial government has pledged \$50 million to address the backlog in surgeries, the barriers to addressing it require thorough planning and collaboration.

In addition to sufficient funding, the barriers to addressing the backlog include insufficient nursing resources and a lack of OR time and recovery space. These issues were identified before the third wave arrived in Manitoba, and they have only been exacerbated as recovery space and surgery nurses were redirected to support expanded critical care capacity.

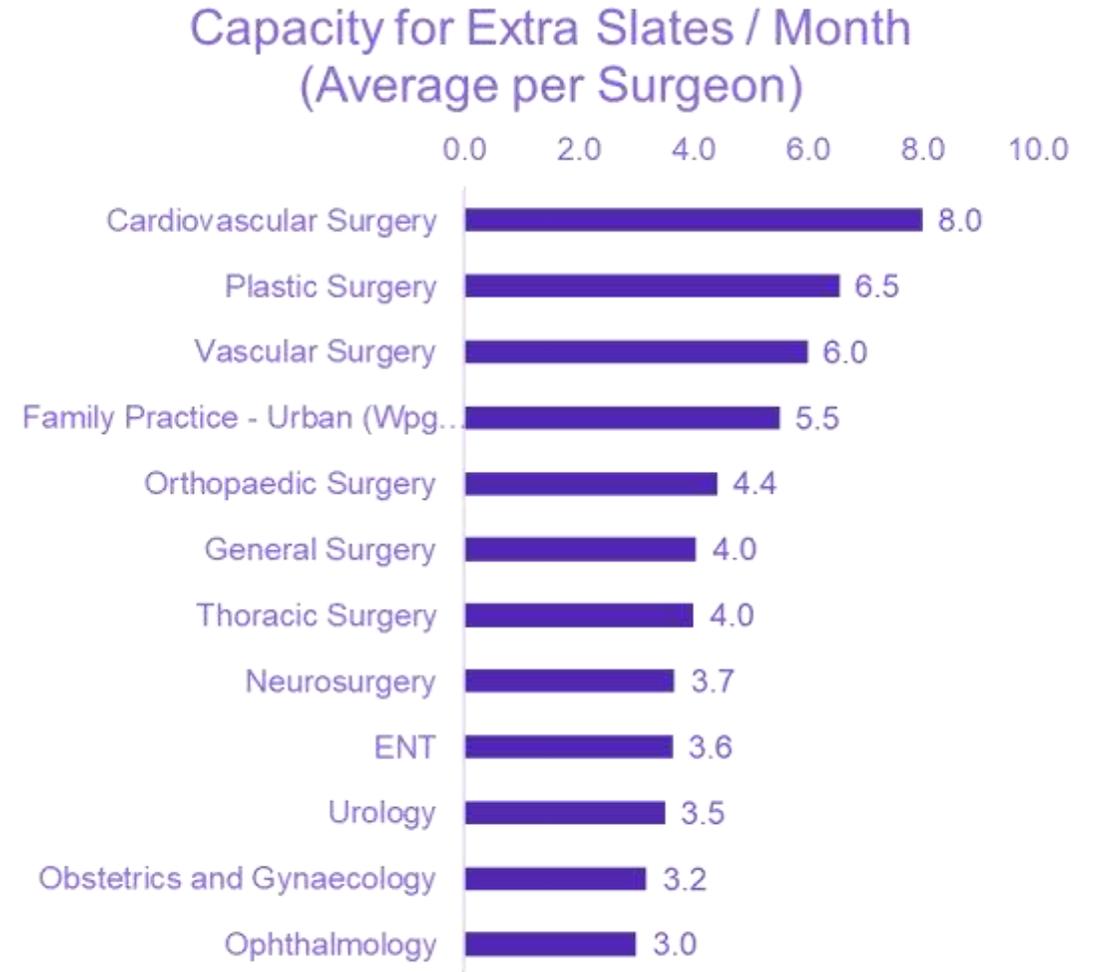


# Physician Capacity to Help with Recovery

**97%** of surgeons surveyed are able to pick up additional slates to help address the backlog.

On average, surgeons indicated they have capacity to pick up 4 to 5 slates each per month.

**100%** of anesthesiologists surveyed are able to pick up additional slates as well.

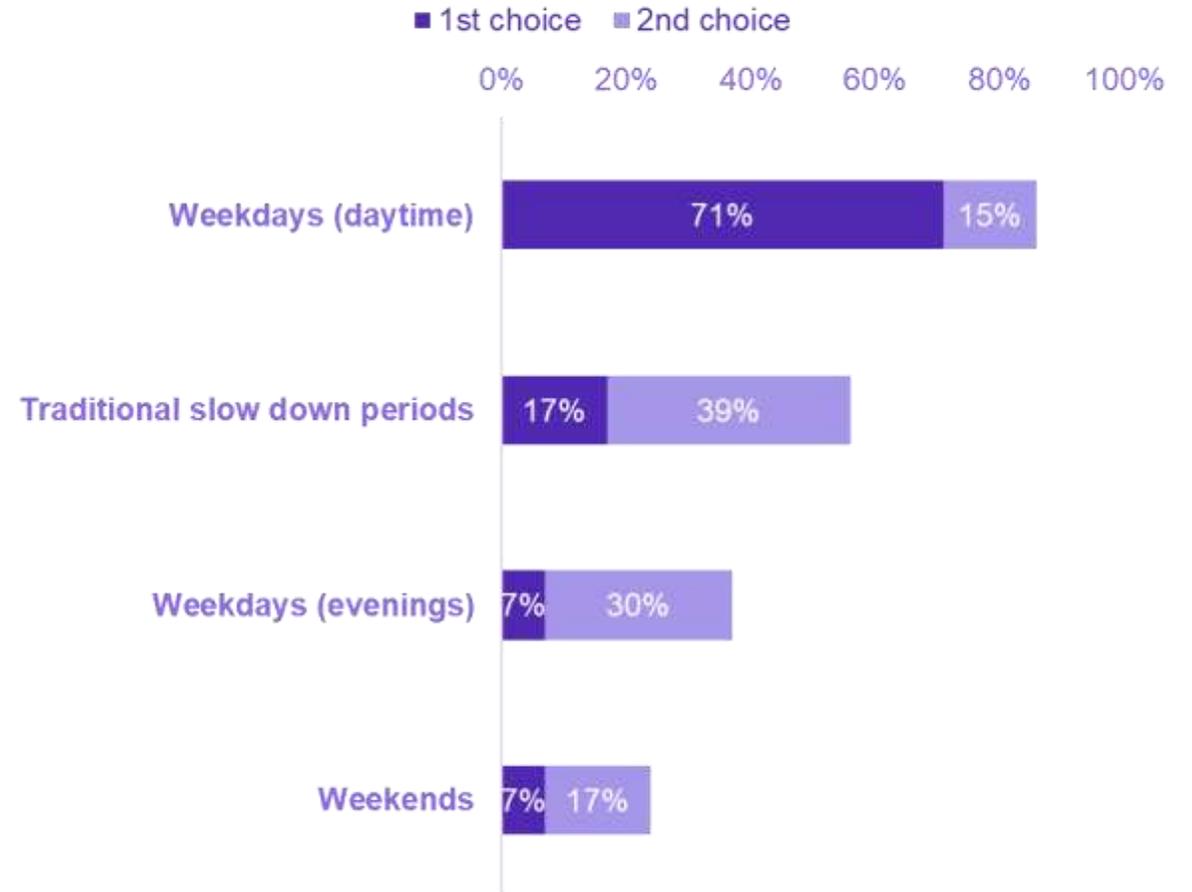


# Flexibility for Additional Slates

Surgeons would prefer to pick up additional slates during weekdays and during traditional slowdown periods, preferred by 86% and 66% respectively.

87% are willing to work at other hospitals within their primary health region, and 74% would pick up additional slates in private surgical facilities if needed.

## Preferred Extra Slate Times



# Addressing the Diagnostic Backlog

While diagnostic tests and procedures saw significant volume decreases during the first wave, they recovered more than surgery over the summer, and they have been less impacted by the second and third waves.

Radiologists identified three significant barriers to addressing the backlog for diagnostic imaging:

- 83% identified insufficient technologists.
- 88% agree that additional equipment will be needed, and/or there may be opportunities to expand operating hours for some existing equipment.

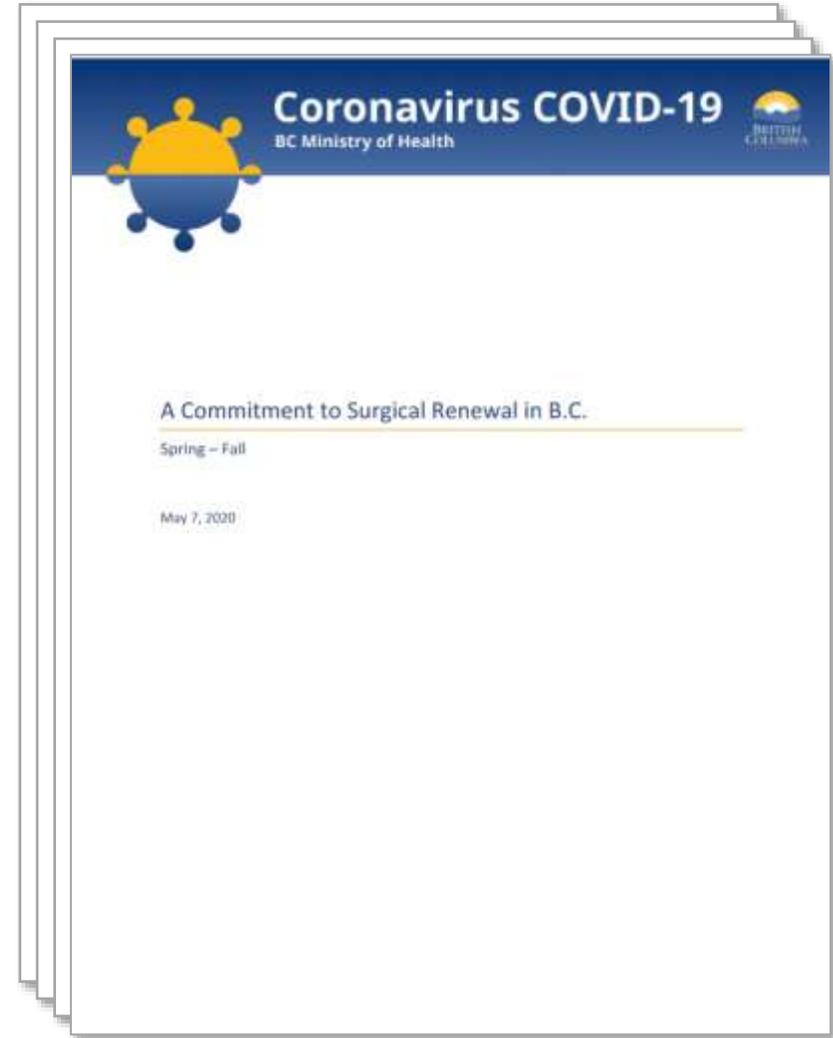
Radiologists are willing to increase their workload to address the backlog.

# What is Needed?

All provinces had to suspend surgeries and diagnostics due to the pandemic. However, the plans to address the resulting backlogs vary greatly by province.

In BC, for example, a comprehensive surgery renewal plan was launched in May 2020. The plan was upfront, noting it could take 17-24 months to address the backlog.

Regular public progress reports followed, and in March 2021, the province reported that 95% of the backlog in cases had already been completed.



# Addressing the Backlog

*Doctors are ready. They are willing to work more to address the backlog in surgery and diagnostic procedures, and they're ready now.*

Manitoba is now in its third wave of COVID-19, and surgical services are now facing their third disruption. The backlog for surgery and diagnostics is over 110,000 cases and catching up is a mammoth task.

Doctors Manitoba offers the following recommendations to help chart a constructive path for surgical and diagnostic recovery:

- 1. Commit to fully addressing the pandemic backlog by a fixed date (e.g. Dec 31, 2022), including ensuring all the necessary funding and resources are available.**

The government has committed funding to start addressing the backlog, though more may be needed. The next step is to get specific, with a commitment to fully address the backlog by a specified date. The date and required funding should be decided following further planning by health system leaders.

- 2. Create a Surgery and Diagnostic Recovery Task Force to lead the immediate and sustained task of addressing the backlog. The Task Force should include health system leaders and frontline physicians, nurses, technologists and others to work collaboratively on this priority.**

The backlog is massive. It will require strong leadership and collaboration to ensure this issue becomes a top priority. It will require addressing the nursing shortage and revisiting models of care. Health system leaders must work with those on the front line to identify and address the barriers together.

- 3. Provide monthly public reports on progress, including the size of the backlog, a breakdown by procedure, and details on plans and actions to address the issue.**

Accountability and transparency are essential for a plan to have credibility with the thousands of patients waiting for a surgery or diagnostic test.