



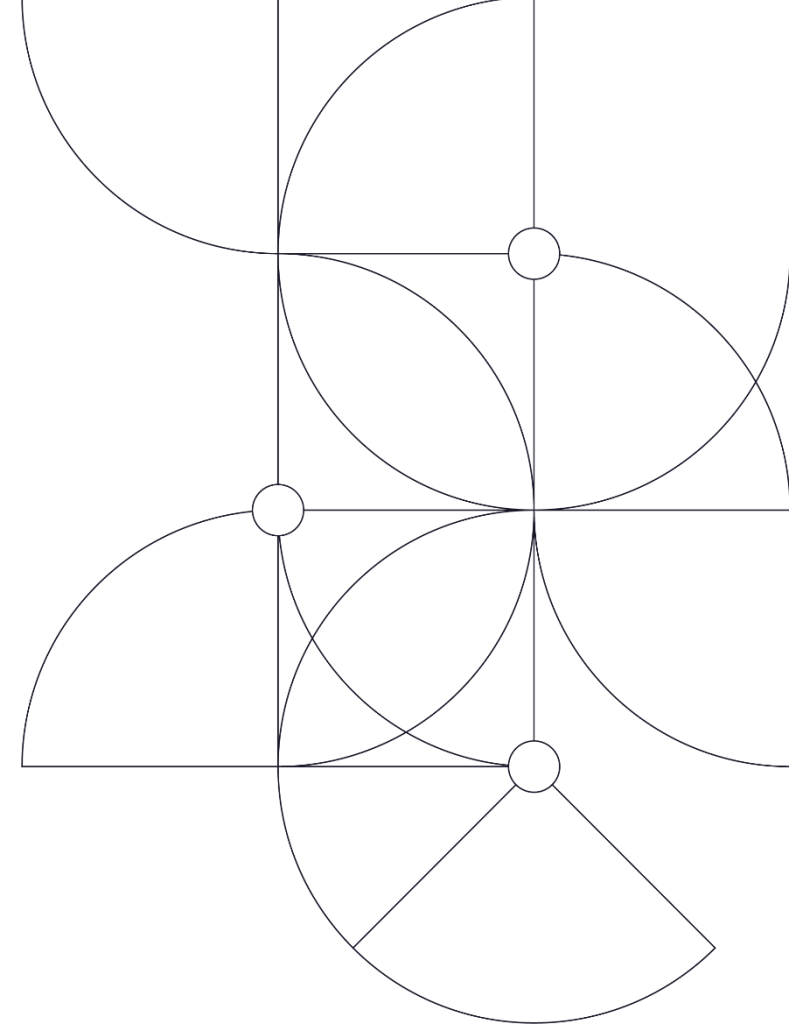
Evaluating the impact of COVID-19 among prostate and colorectal cancer patients in Canada

ISPOR Europe

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Impact where it matters.



This study aims to investigate the impact of COVID-19 among prostate and colorectal cancer patients in Canada



Situation

- Suspension of cancer screening and treatment activities during the COVID-19 have generated an unprecedented impact on cancer management and control in Canada



Objectives

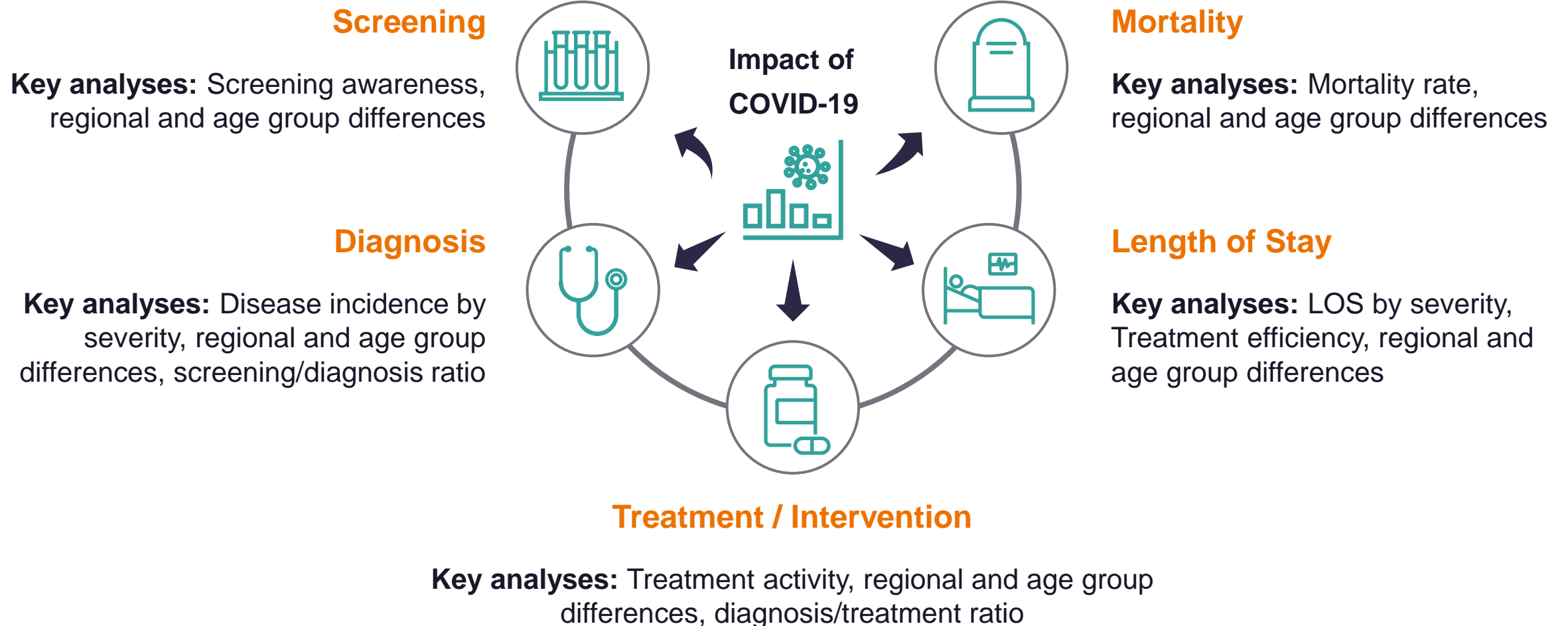
- To provide the public and scientific community with insight into the impact of COVID-19 on screening, diagnosis, and treatment activities for two of the most prevalent cancers today – prostate and colorectal
- To identify immediate and long-term implications of COVID-19 on the Canadian oncology health system



Key Questions

1. What do the baseline screening, diagnosis, and treatment activities look like for prostate and colorectal cancer before the COVID-19 period?
2. What is the impact of COVID-19 on screening, diagnosis, and treatment activities for prostate and colorectal cancer?
3. What are the short-term and long-term implications of COVID-19 on the oncology health system?






Leveraging CIHI's data, we conducted a national assessment of the patient journey for patients with prostate and colorectal cancer



Source: Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS)

Throughout the cancer patient journey, we identified the various segments for our datasets in this study

Analysis was first carried out using data from April 2010-March 2020 to understand baseline outcomes

Dataset Category	Time Periods (2010 April-2020 March, 2020 April-2021 March)	Age Group (<40, 40-59, 60-79, 80+)	Region (AB/MB/SK, ON, ATL)	Treatment Class (Imaging, Surgical, Radio, Pharmaco)	Disease Stage (Metastatic, Non-Metastatic)
 Screening (# of events)	✓	✓	✓		
 Admissions (# of admissions based on Most Responsible Diagnosis code)	✓	✓	✓		✓
 Intervention (# of events)	✓	✓	✓	✓	
 Length of Stay (# of days)	✓	✓	✓		✓
 Mortality (# of expirations)	✓	✓	✓		

Due to COVID-19 shutdowns, there is a “debt” of unperformed screening and interventions across the CRC landscape

April 2010 – March 2020

The Canadian colorectal cancer landscape has been marked by decreasing LOS (15%) and mortality (6%) over the past decade

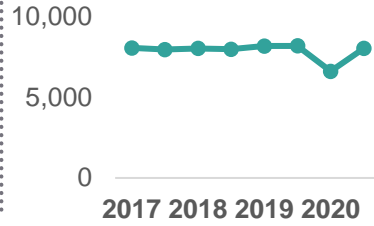
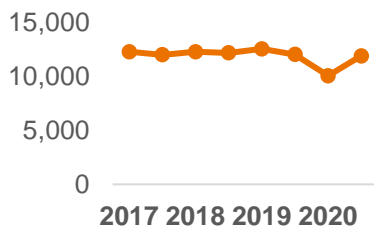
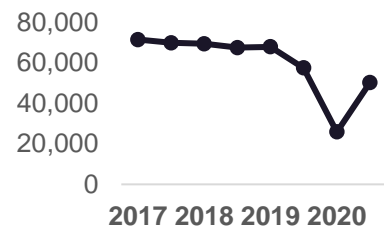
Numbers during the first wave of COVID-19 (April 2020 – Sept 2020)

When compared to the same period in the previous year

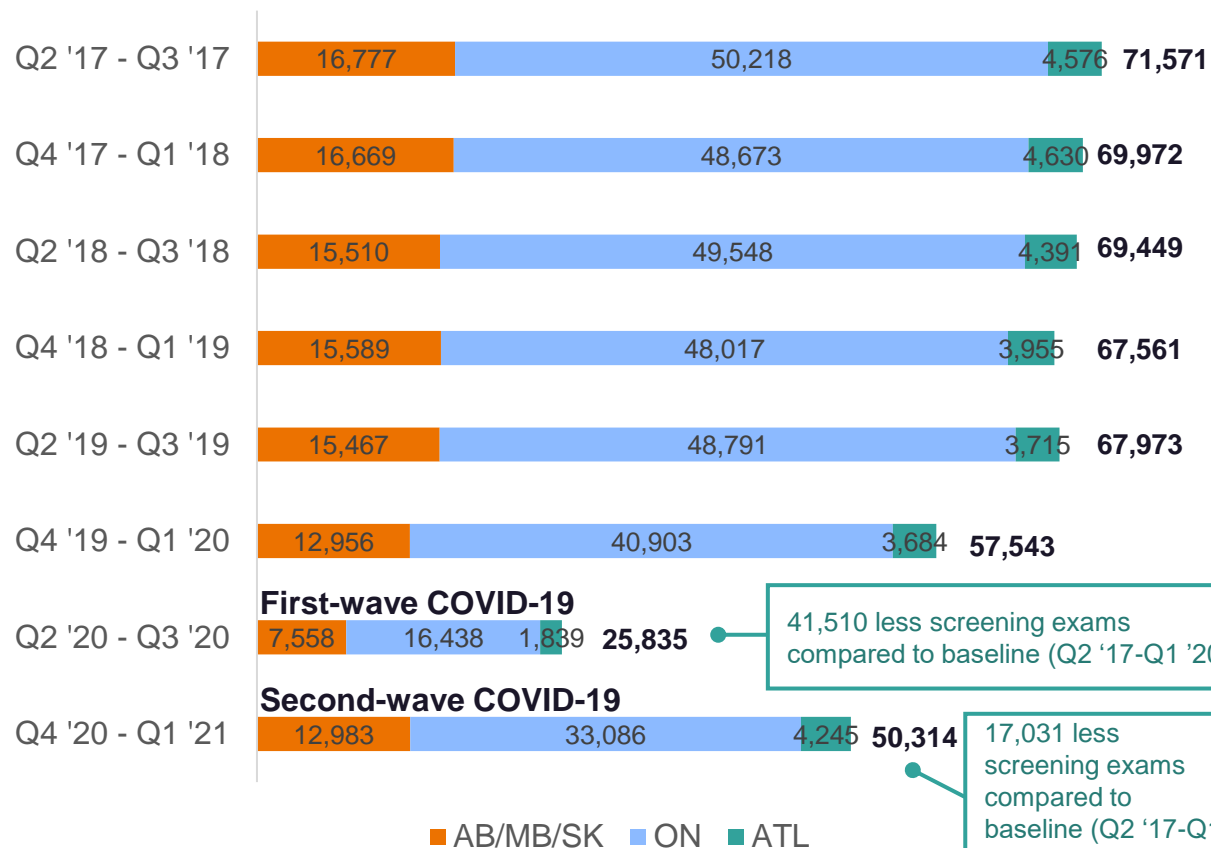
62% Decrease in hospital screening

18% Decrease in hospital admissions

19% Decrease in hospital interventions



Although a quick rebound in hospital screening was observed, an estimated 58k colonoscopies are missing

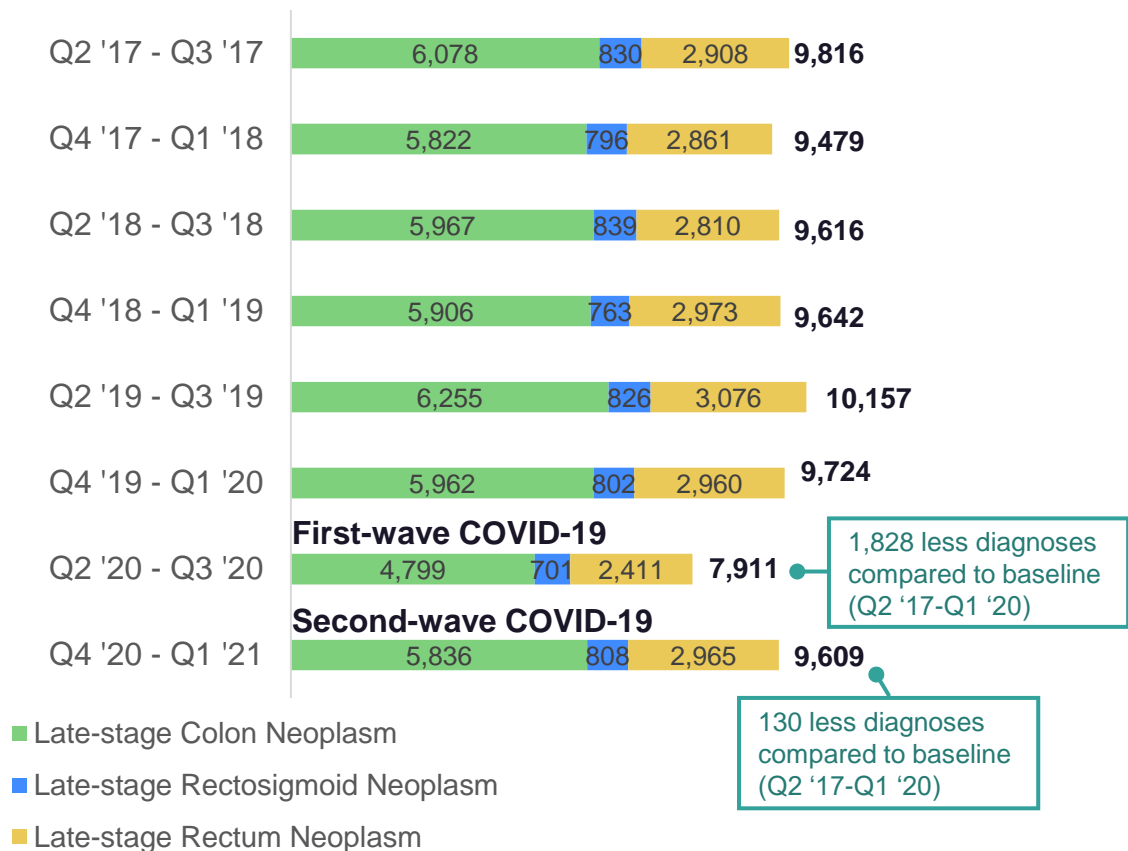


Missing colorectal cancers: our healthcare systems will likely face a surge of advanced cancer cases in the years to come

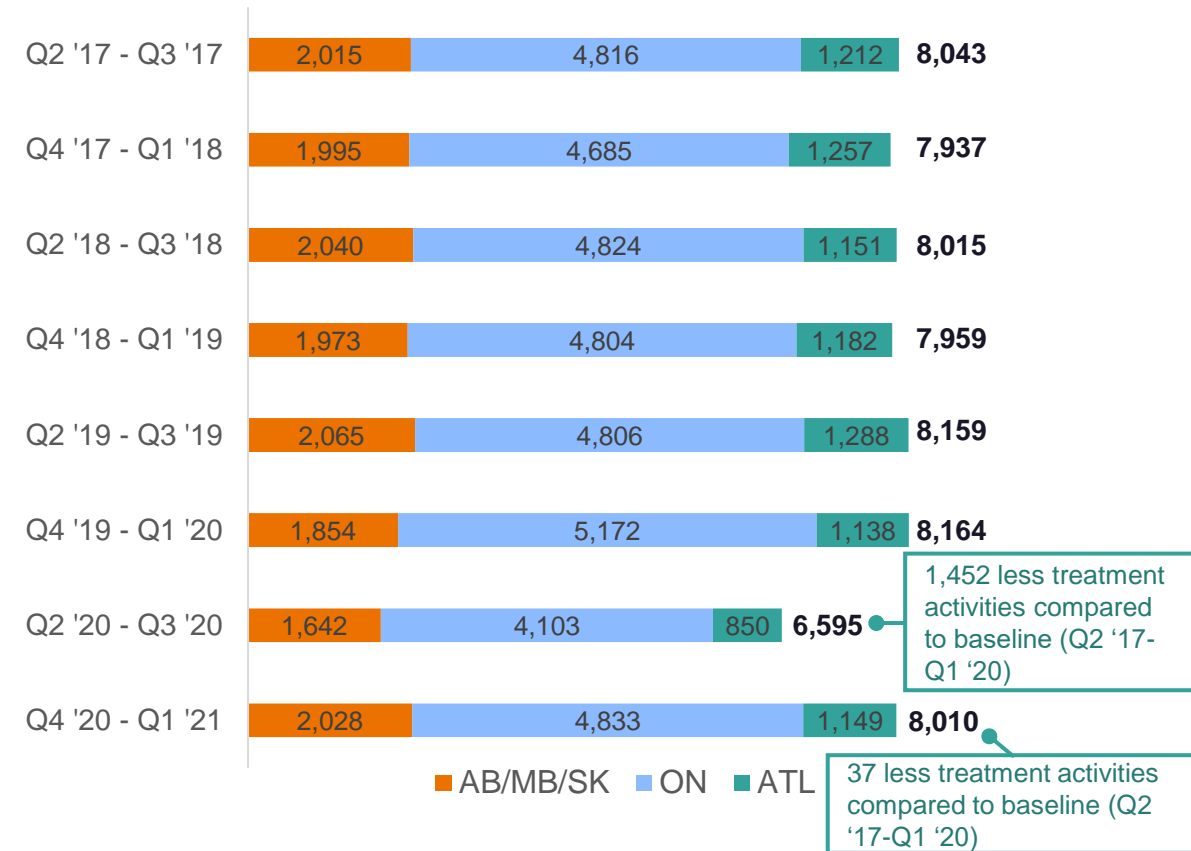
An estimated 2,000 late-stage, non-metastatic colorectal cancer cases are missing

Treatment activities were impacted more in Prairies (-20%) and ATL (-34%) compared ON (-15%) during the first wave of COVID-19

Hospital Admissions by Colorectal Cancer Cohort

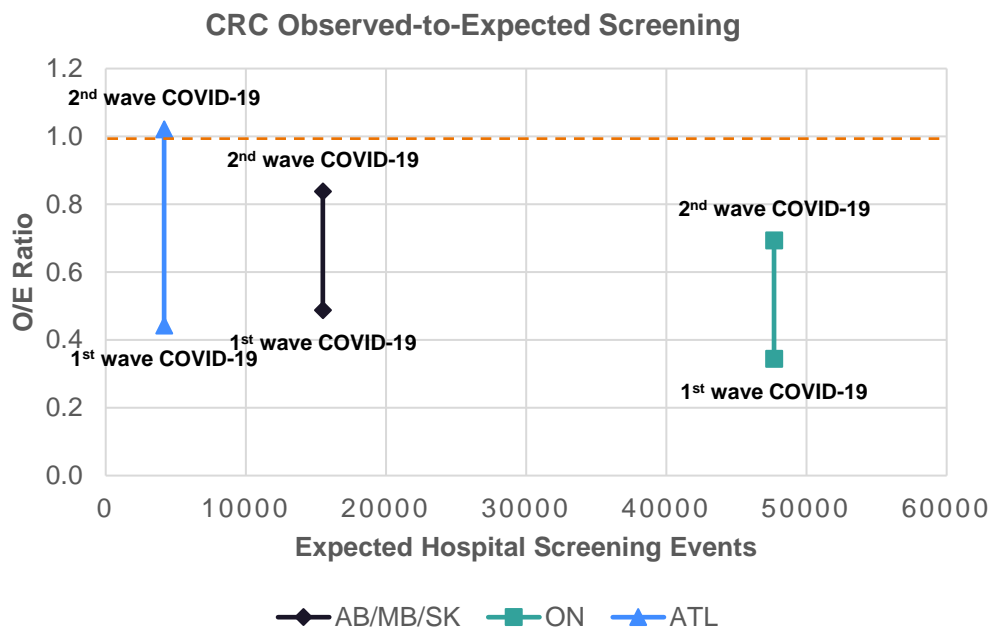


Treatment Activities by Province



What's the impact of delayed CRC detection and diagnosis to our healthcare systems?

Recovery in CRC screening events varies by province

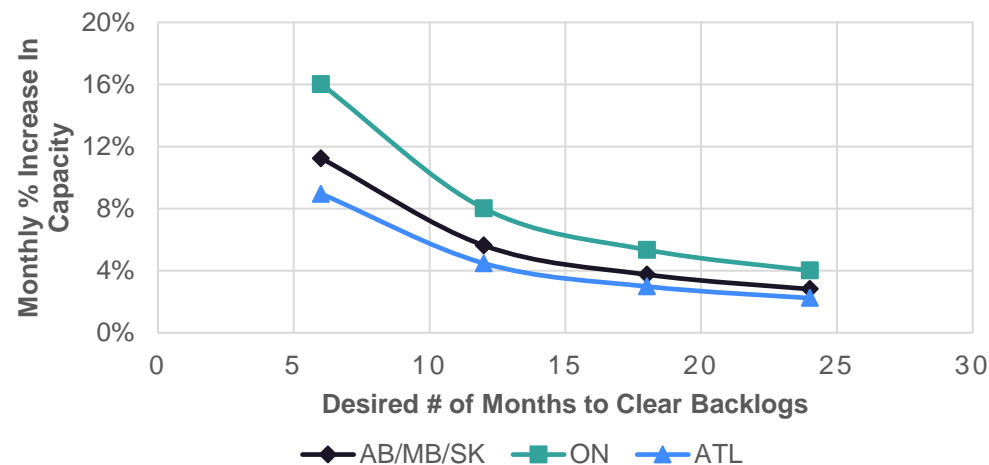


What's the time to impact and do we have the capacity to handle the incremental workload?

An estimated 4% - 8% increase in monthly capacity is required to clear backlogs of colonoscopies in 12 months

Baseline (April 2017-March 2020)	Colorectal Cancer Cohort					
	AB/MB/SK		ON		ATL	
COVID-19 (April 2020-March 2021)	10,448		45,859		2,233	
Total Unperformed Screening during COVID-19	10,448		45,859		2,233	
Desired Months to Clear Backlogs	6	12	6	12	6	12
Monthly % Increase Above Baseline	11%	6%	16%	8%	9%	4%
Monthly Increase in Volume Above Baseline	1,742	871	7,644	3,822	373	187

Potential Monthly Capacity Increase Required to Clear Backlogs of CRC Screening



Summary – Key insights and implications from the study

Key Study Findings	
1	For prostate cancer, a 12% decrease in hospital diagnoses and a 5.3% decrease in treatment activities were observed during COVID-19 between April 2020 and March 2021
2	A 43% reduction in hospital colonoscopies , 11% decrease in hospital diagnoses and 10% decrease in treatment activities were observed for colorectal cancers
3	An estimated 1,438 prostate and 2,494 colorectal cancer cases were undiagnosed, resulting in a total of 620 and 1,487 unperformed treatment activities for prostate and colorectal cancers, respectively



Insights	
1&2	<ul style="list-style-type: none"> Hospitals will likely face a surge of advanced prostate and colorectal cancer cases that would've been diagnosed at an earlier stage Hospitals are facing massive backlogs of unperformed treatment interventions, further exacerbating hospital capacity challenges An increased patient hospital length of stay due to complex disease cases
3	<ul style="list-style-type: none"> An estimated 4% - 8% increase in monthly capacity is required to clear backlogs of interventions over the next 12 months



Thank you!

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