



# CorHealth COVID-19 Vascular Stakeholder Forum #9

July 15, 2020 8:00-9:00 am

Teleconference: (647) 951-8467 / Toll Free: 1 (844) 304-7743

Conference ID: 9295169#

# Agenda

TIME	DISCUSSION	ACTION REQUIRED	LEAD
8:00	1. Welcome <ul style="list-style-type: none"> <li>• System Updates</li> <li>• Forum Objectives</li> </ul>	Information	Sheila Jarvis
8:05	2. Vascular Activity Report <ul style="list-style-type: none"> <li>• Highlights / trends from current reporting period</li> </ul>	Information & Discussion	Mirna Rahal
8:10	3. Vascular Backlog Modelling <ul style="list-style-type: none"> <li>• Approaches for waitlist management</li> </ul>	Information & Discussion	Mirna Rahal
8:40	4. Open Discussion <ul style="list-style-type: none"> <li>• Vascular program/clinic backlog challenges and opportunities</li> </ul>	Discussion	Dr. Sudhir Nagpal
8:55	5. Next Steps	Discussion	Mike Setterfield



# Welcome

**SHEILA JARVIS**

# COVID-19 System Planning Updates

- Meetings with Dr. Chris Simpson will be reinstated next week to discuss gradual ramp up/ramp down activities as COVID-19 progresses.
- Dr. Sudhir Nagpal and Dr. Tom Forbes will be participating in these meetings.

# Meeting Objectives

1. To review vascular backlog modelling and discuss potential waitlist management approaches
2. To have an open discussion around current vascular program/clinic backlog challenges and opportunities



# Vascular Activity Report Highlights

MIRNA RAHAL



# Vascular Activity

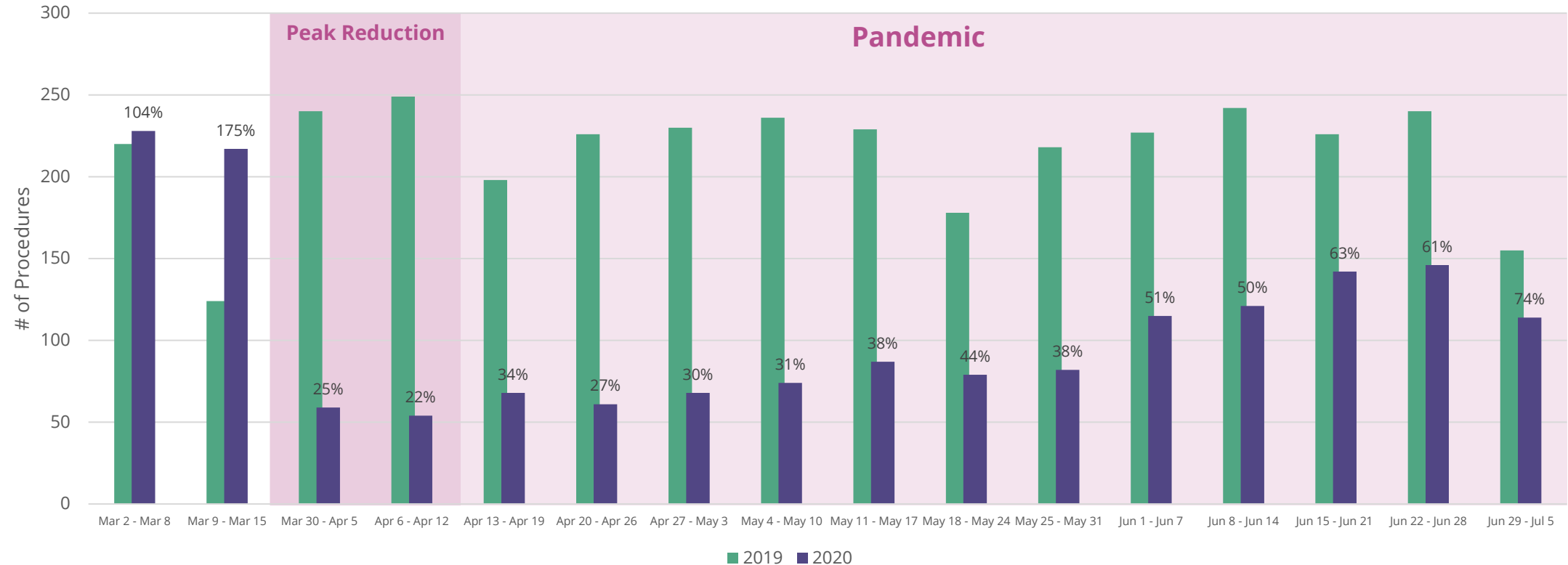
**ACCESS TO CARE WAIT TIMES INFORMATION SYSTEM (ATC-WTIS)**

# Vascular Activity Report Update

- There has been an update to the data displayed in the Vascular activity report for scheduled vascular surgeries
- Previous reports displayed data from mid February to most recent week
- As of this week's Vascular Activity Report, the activity graphs will display:
  - pre-pandemic weeks (March 2<sup>nd</sup> – March 15<sup>th</sup>)
  - peak reduction weeks (March 30<sup>th</sup> – April 12<sup>th</sup> )
  - rolling 12 weeks post April 12<sup>th</sup>

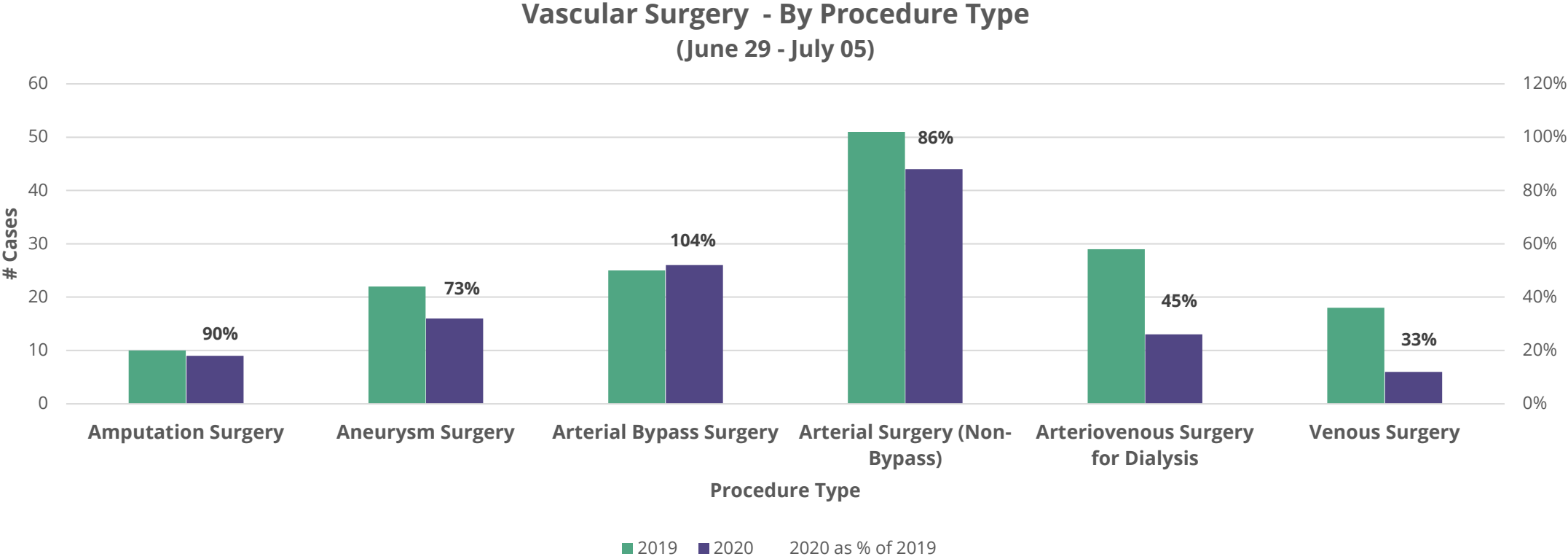


# Overall Scheduled Vascular Surgery Volumes 2020 vs 2019 – Ontario



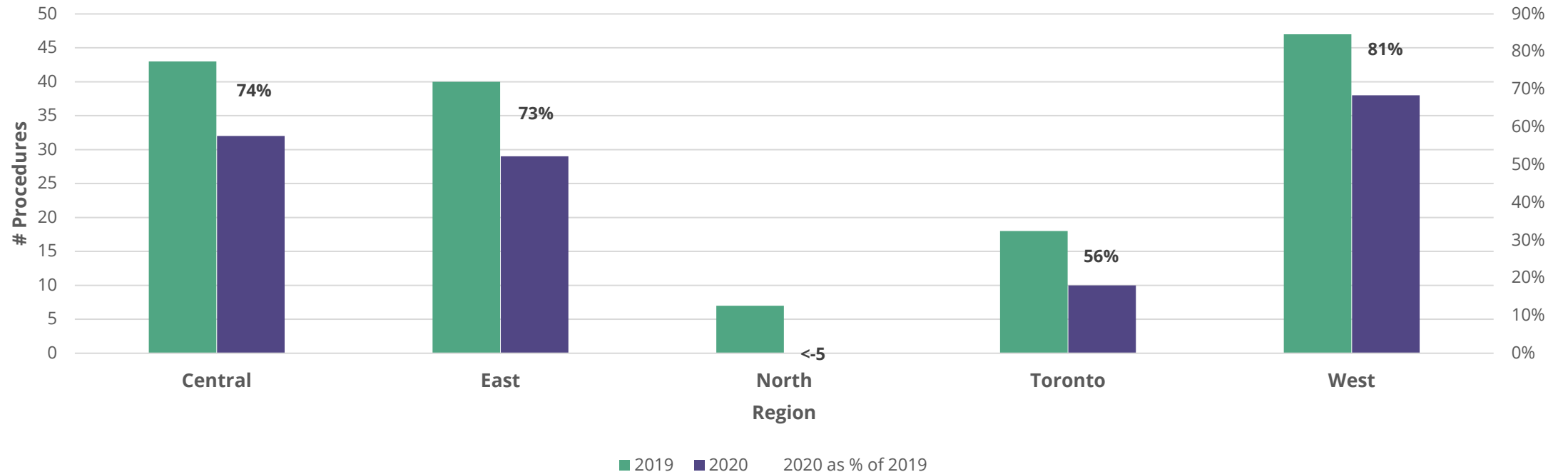
**Notes:** Data are from Access to Care WTIS, CY 2019 and 2020  
 Each 2020 week is shown on the horizontal axis; 2019 volumes represent volumes from the equivalent Monday to Sunday week in 2019  
 Percentage value above each bar is the 2020 volume as a percentage of the 2019 volume, or ≤5 for volumes ≤5.  
 In 2020, March Break occurred from March 16-22, 2020. It was a week earlier in 2019, from March 11-17, 2019.

# Vascular Surgery Volumes 2020 vs 2019 – By Procedure Type



# Overall Scheduled Vascular Surgery Volumes 2020 vs 2019 – By Region

Overall Vascular Surgery - By Region  
(June 29 - July 05)





# Vascular Activity

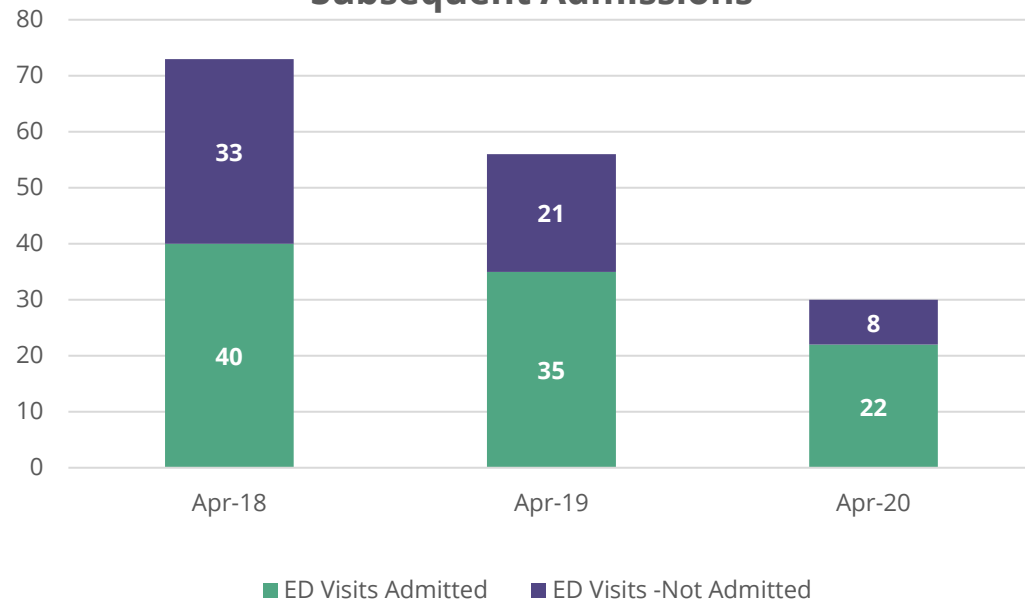
**IDS - Hamilton**

# Vascular Data in IDS Hamilton

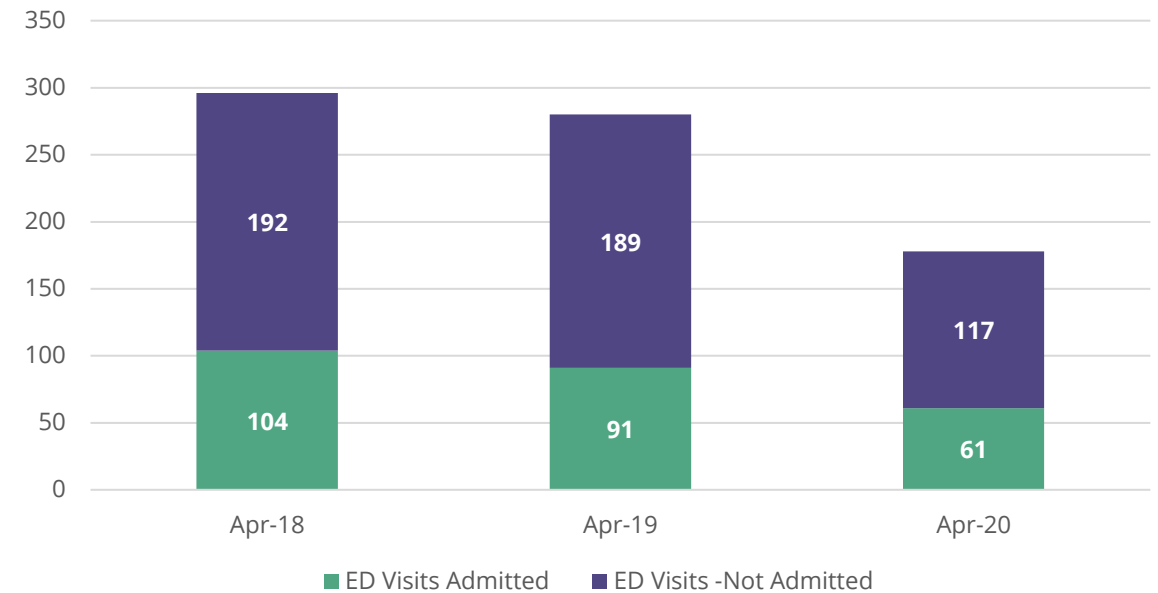
- Integrated Decision Support Business Intelligence Solution, Hamilton Health Sciences supports planning, system improvement & performance monitoring, outcome measurement, and population health equity across the continuum of care
- Hospital ED visits and Admissions from 7 LHINs (~50% of provincial volumes)
  - West Region: Erie St Clair, HNHB, South West and Waterloo Wellington LHINs (~31% of provincial vascular volumes)
  - Toronto Region: TC LHIN (~9.4% of provincial vascular volumes)
  - Central Region: William Osler (CW) & MH LHIN (~9% of provincial vascular volumes)
  - North East LHIN: Health Sciences North (Beta)
- Data is completed within 60 days of month end
  - March data is completed by end of May and April data will be completed by end of June

# Change in ED Visits and Resulting Hospitalizations Aortic Aneurysm and Peripheral Artery Disease, April (2018, 2019 and 2020)

**Aortic Aneurysm ED Visits and Subsequent Admissions**



**Peripheral Artery Disease ED Visits and Subsequent Admissions**



*Data Source: IDS Hamilton*

Vascular activity for April 2020 compared to April 2019:

- 46% decline in Aortic Aneurysm related ED visits and 37% decline in associated hospital admissions
- 36% decline in Peripheral Artery Disease related ED visits and 33% in in associated hospital admissions
- % admissions from ED went from 63% to 73% among AA patients and remained around 33% among PAD patients

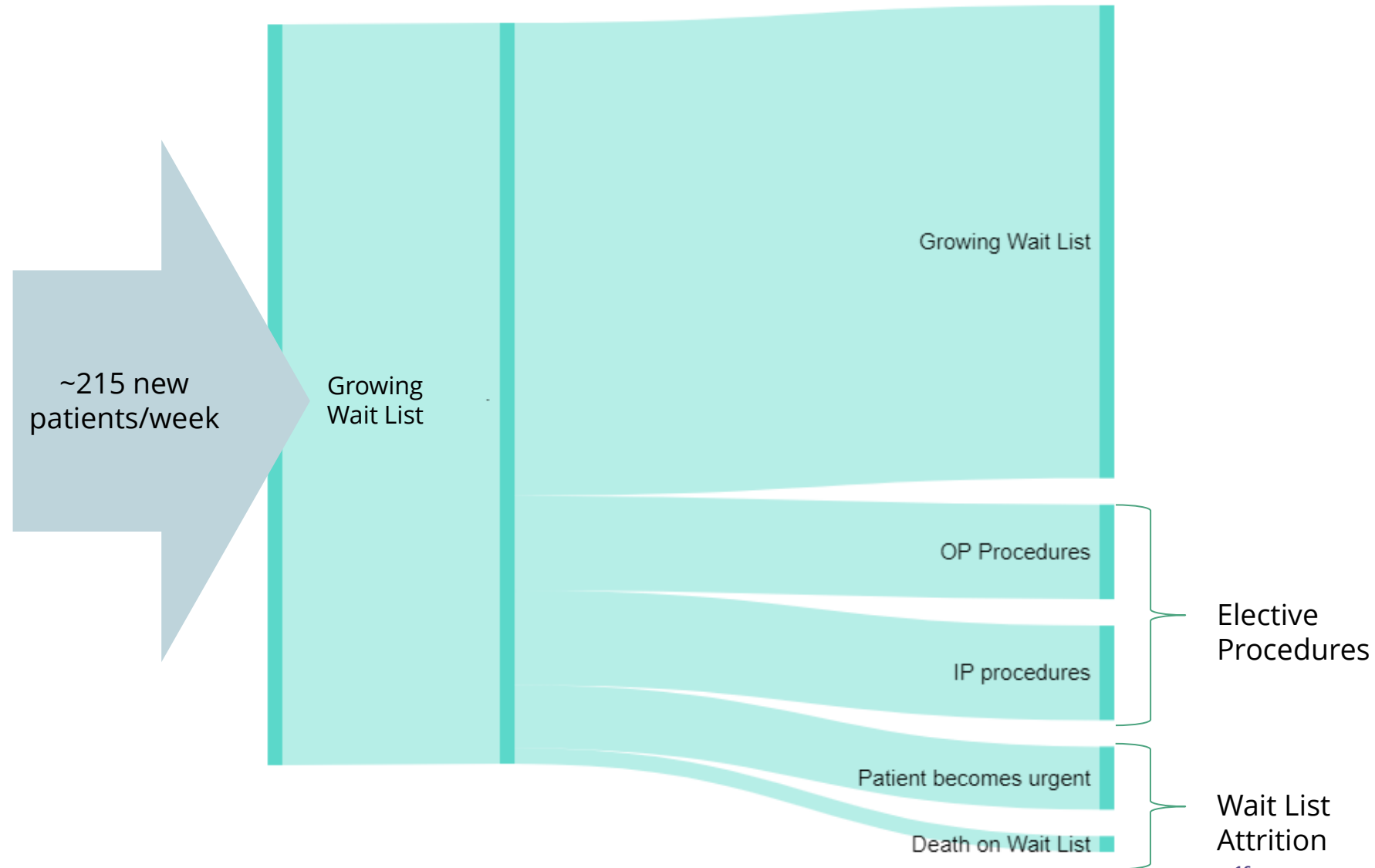


# Vascular Backlog Modelling

MIRNA RAHAL

# Objective

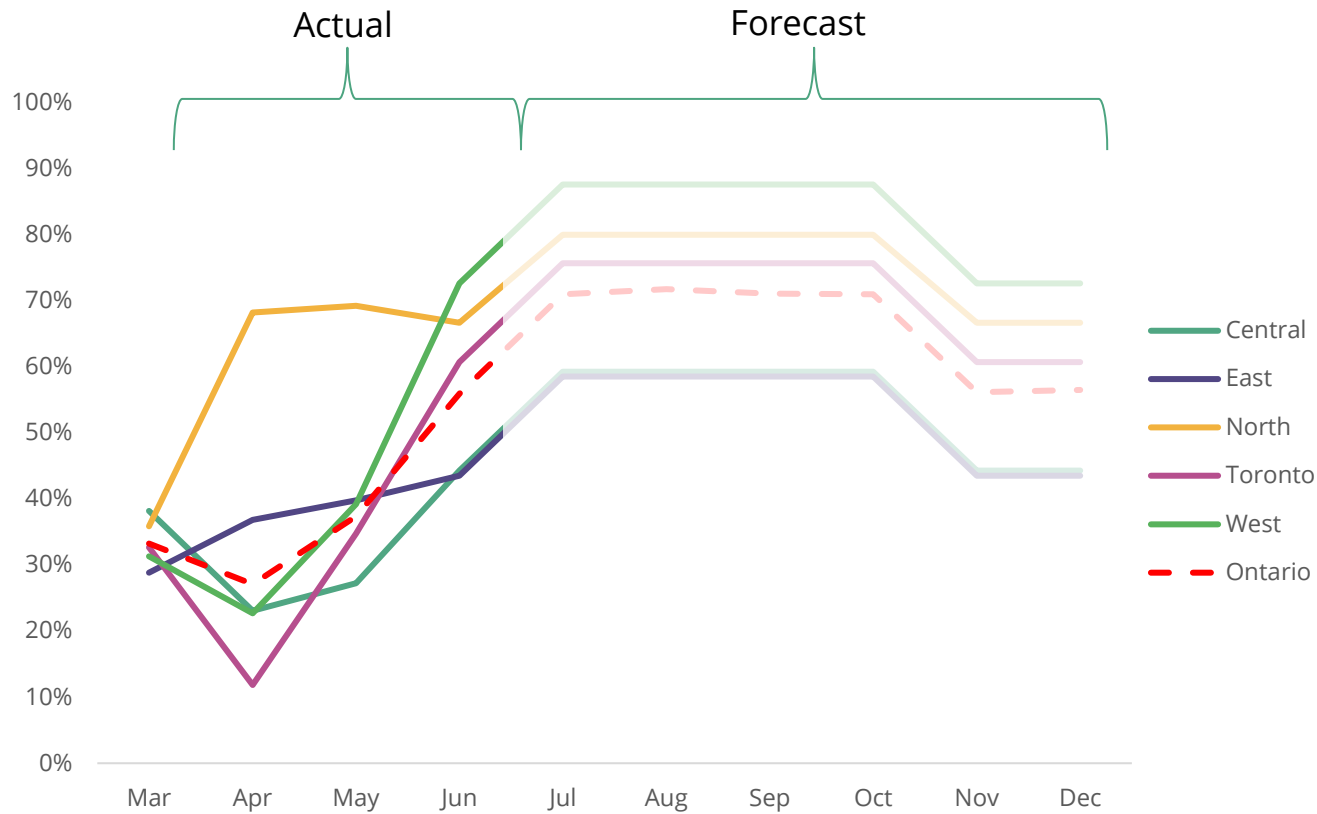
- Review updated model of accumulated unmet demand for non-urgent (scheduled) vascular procedures in a scenario of continued capacity restrictions until the end of 2020
  - Model has been updated with volumes data from May 10<sup>th</sup> to June 28<sup>th</sup>
- Review and discuss potential solutions and mitigation strategies to optimize resources within the existing capacity constraints





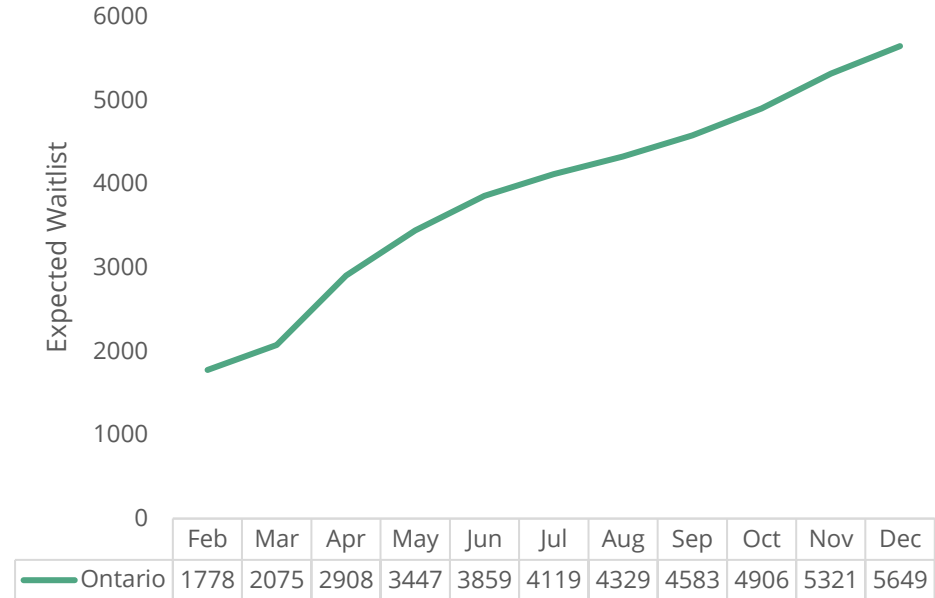
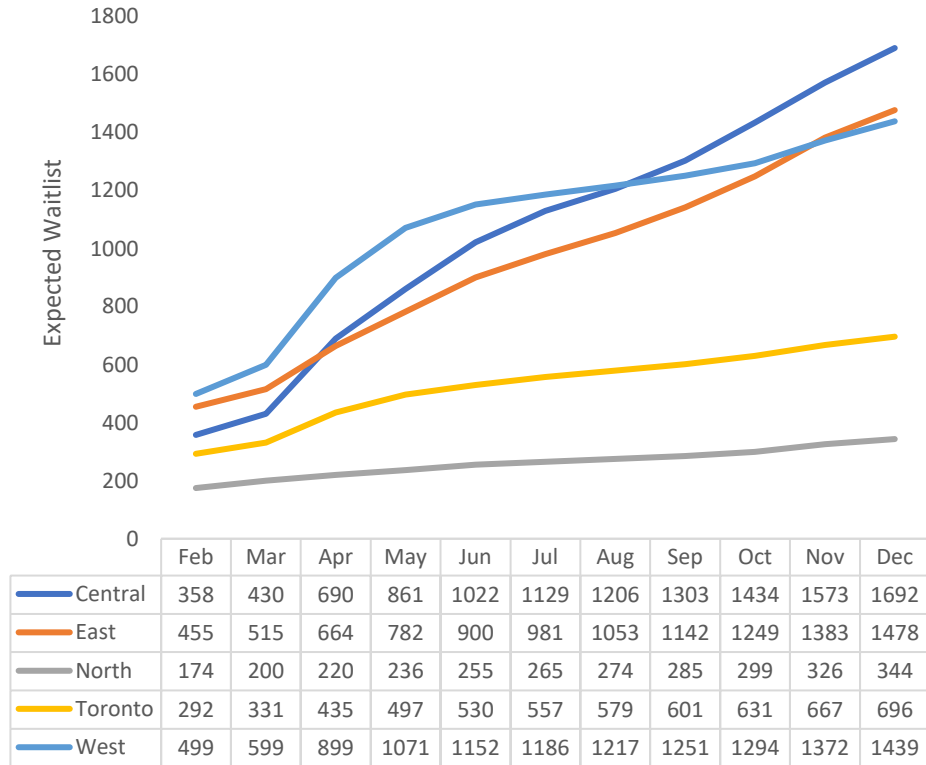
# Slowdown by Region

## % of historical P2-4 vascular volumes



- Ontario regions are currently performing ~45% to 75% of historical (CY 2019) scheduled vascular surgeries per week (P2-P4)
- Toronto and West regions resumed volumes in June at a higher rate than initially assumed based on May data.
- Forecasted volumes assume increase in summer months, plateau in fall, and decrease in winter due to flu season and possible second wave of COVID-19

# Expected Wait List Volumes



- The vascular wait list is expected to grow to 5,600 by the end of this year
- Assuming an accumulating backlog throughout 2020, and ramp up to 120% of historical volumes starting 2021, and no change to current care delivery models, it would take **2.2 years** to return to **pre-COVID baseline wait list volumes (~1800)**

# Strategies to Address COVID-Related Vascular Waitlist

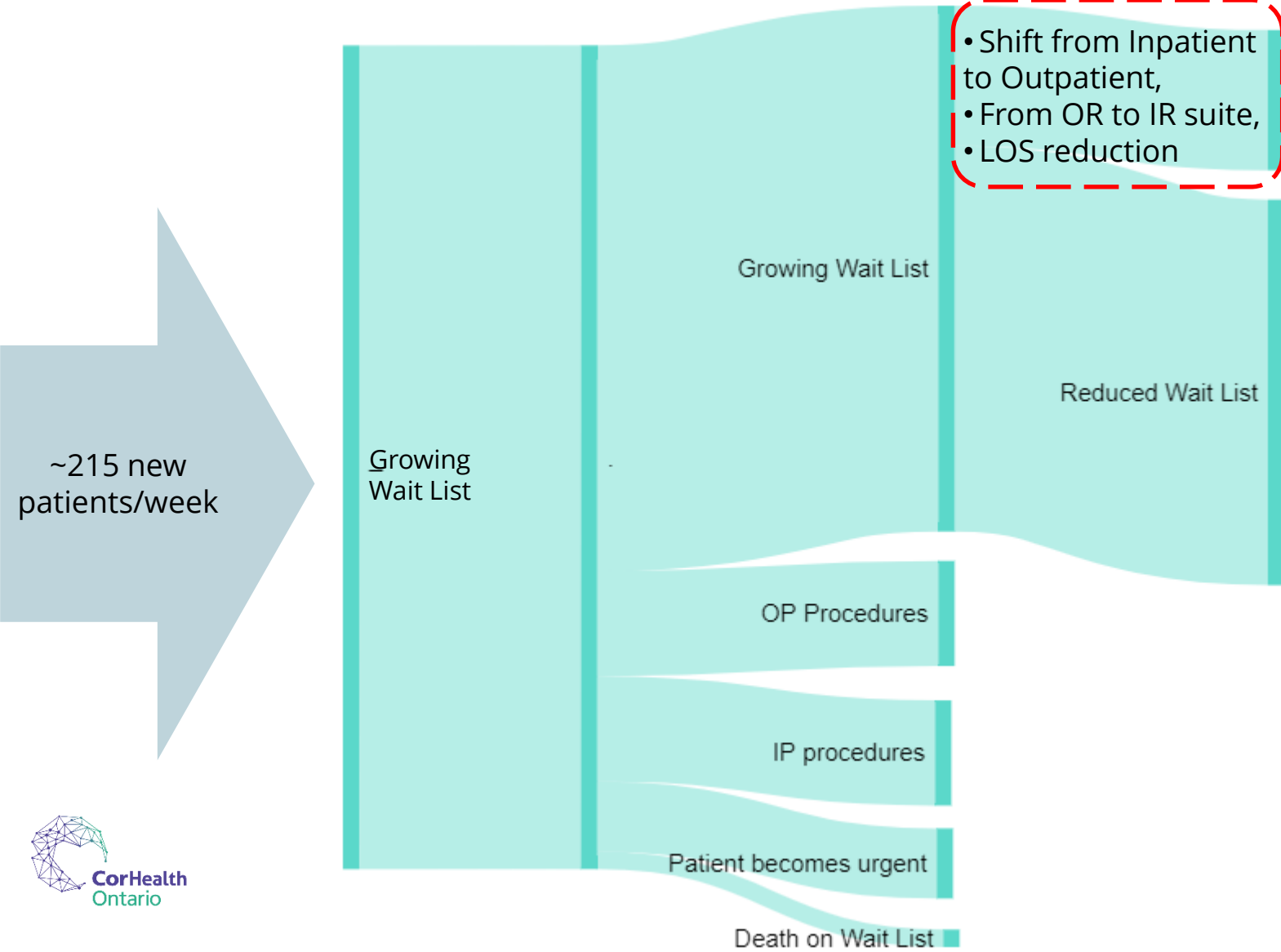
Strategy to Expand Access	Approach	Risks/Considerations
Increase Supply	Open Operating Rooms on Weekends	Might not have the human resources or bed resources; Restrictions may continue with subsequent COVID waves
Optimize Service Use	Shift procedures from inpatient to Day Surgery	Potential negative impact on QBP funding
	Shift procedures away from OR to IR Suites	Assumes additional IR suite capacity is available Patients might need subsequent procedures
	Reduce inpatient length of stay	
Reduce Demand	Deprioritize certain procedures (e.g. Venous Surgeries)	Negative impact on patients

## Discussion:

Are there any other approaches to consider?

What strategies /approaches hold the most promise?

# Optimizing Service Use?



Is there an opportunity to shift procedures from open surgery to endovascular and from inpatient (IP) to outpatient (OP) where appropriate so that more patients can receive timely care while reducing resource requirements and decreasing the wait list?

What is the effect on the backlog of modest shifts towards less resource-intensive modalities?

# Potential Approaches to Optimize Resource Use

To support discussions on optimized resource use in vascular procedures, we have modelled the effects of the following scenarios:

Procedure Category	Cases to be shifted from OR to IR suite	Ward Utilization Reduction	Ward LOS Reduction
Aneurysm Surgery	10%	10% (96% IP to 87% IP)	3.8 days to 3 days
Arterial Bypass Surgery	10%	10% (96% IP to 86% IP)	5.7 days 4.7 days
Arterial Surgery (Non-Bypass)	10%	10% (61% IP to 55% IP)	3.9 days to 2.9 days

## Discussion:

Are these reasonable and achievable changes to consider?

# Potential Savings from Resource Optimizations

- OR days required to address the backlog could be reduced by 5%
  - ~100 OR days could be saved out of a total requirement of 2000 OR days
- Ward beds required to address the backlog could be reduced by 18%
  - ~2000 bed days could be saved out of a total requirement of 11,000 bed days
- The table on the right shows the magnitude of these savings based on how quickly the backlog is addressed

	Time to clear Ontario backlog and return to pre-COVID wait list volumes		
	6 Months	1 year	2 years
Additional OR days needed per week	81	38	19
With efficiencies	77	36	18
Additional ward beds needed	59	29	15
With efficiencies	49	24	12



# Open Discussion

## Current Vascular Backlog Challenges and Opportunities

**DR SUDHIR NAGPAL**

# Discussion

1. What are the challenges and key learnings as your program/clinic deals with the backlog of vascular patients?
2. What potential efficiencies or new approaches are you considering to optimize resources within existing capacity constraints?





# Wrap Up & Next Steps

**MIKE SETTERFIELD**

# Wrap Up & Next Steps

- Next COVID-19 Vascular Forum Meeting:
  - **TBD August 2020, 8:00-9:00am**
- Please send your requests for agenda topics to [mike.setterfield@corhealthontario.ca](mailto:mike.setterfield@corhealthontario.ca)



# Appendix

# Model Assumptions

## Capacity restrictions:

- Hospitals will likely operate at 75-80% of their baseline capacity, at least for the remainder of the calendar year
- This level of capacity translates into 100% of urgent/emergent cases plus roughly 40-60% of scheduled (P2-P4) cases
- Assumes modest ramp-up in volumes in 2020, post-rescinding of MOH Directive #2 and decrease in volumes in the winter to account for flu/second wave of COVID
- January 2021: 120% ramp-up
- No change in disease prevalence and service demand relative to 2019

Capacity reduction assumptions (% of CY 2019 Volumes)					
Month	Central	East	North	Toronto	West
<b>Jul</b>	59%	59%	80%	76%	88%
<b>Aug</b>	59%	59%	80%	76%	88%
<b>Sep</b>	59%	59%	80%	76%	88%
<b>Oct</b>	59%	59%	80%	76%	88%
<b>Nov</b>	44%	44%	67%	61%	73%
<b>Dec</b>	44%	44%	67%	61%	73%

# Number of Weeks to return to pre-COVID wait list under 20% surge scenario starting January 2021

## # of Weeks Required to Return to Pre-COVID State

Slowdown Lasts Until End Of	Central	East	North	Toronto	West
Jul	66	60	45	65	54
Aug	72	68	50	71	56
Sep	80	78	55	76	59
Oct	91	90	62	84	62
Nov	103	105	75	93	68
Dec	113	115	84	100	73