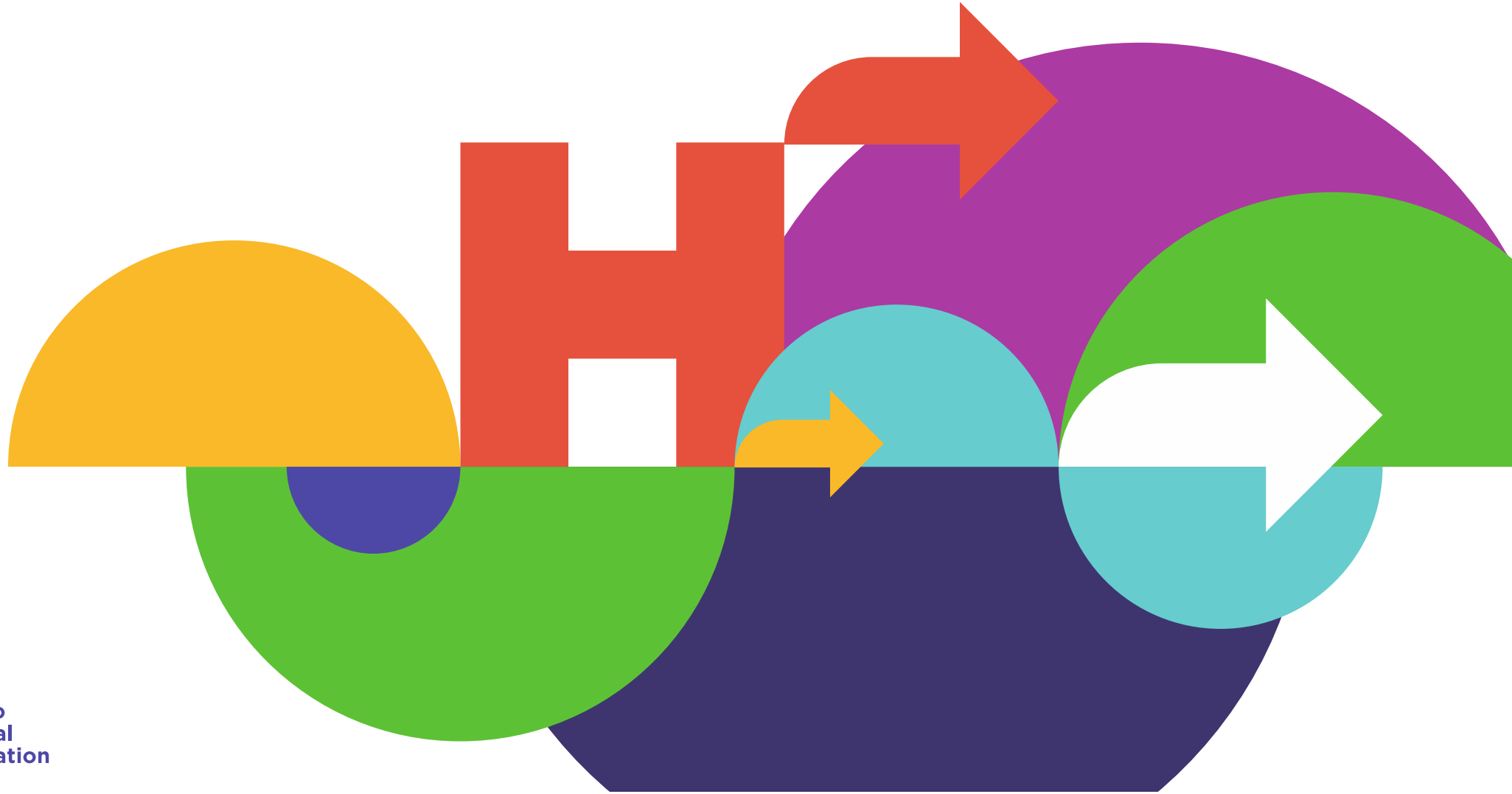
COVID-19 Hospital Capacity

Thursday, February 3, 2022



Ontario Hospital Association

Hospital Capacity: Critical Care

Data source: Critical Care Information System
All data as of **February 2, 2022**

Total Funded* ICU Bed Capacity			Critical Care Census**			% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	(Adult)	1599 Vented 744 Non-Vented	1820	(Adult)	527 CRCI 1293 NON-CRCI	77.7% (Adult)	523 (Adult)
105	(Paediatric)	78 Vented 27 Non-Vented	56	(Paediatric)	8 CRCI 48 NON-CRCI	53.3% (Paediatric)	49 (Paediatric)

7-day average CRCI patients in ICU (Adult)	562
7-day average New CRCI Admits (Adult)	44
7-day average New CRCI Admits (Paediatric)	1

% Pts in ICU who have CRCI	
29.0%	(Adult)
14.3%	(Paediatric)

% vented pts who have CRCI	
64.3%	(Adult)
100.0%	(Paediatric)

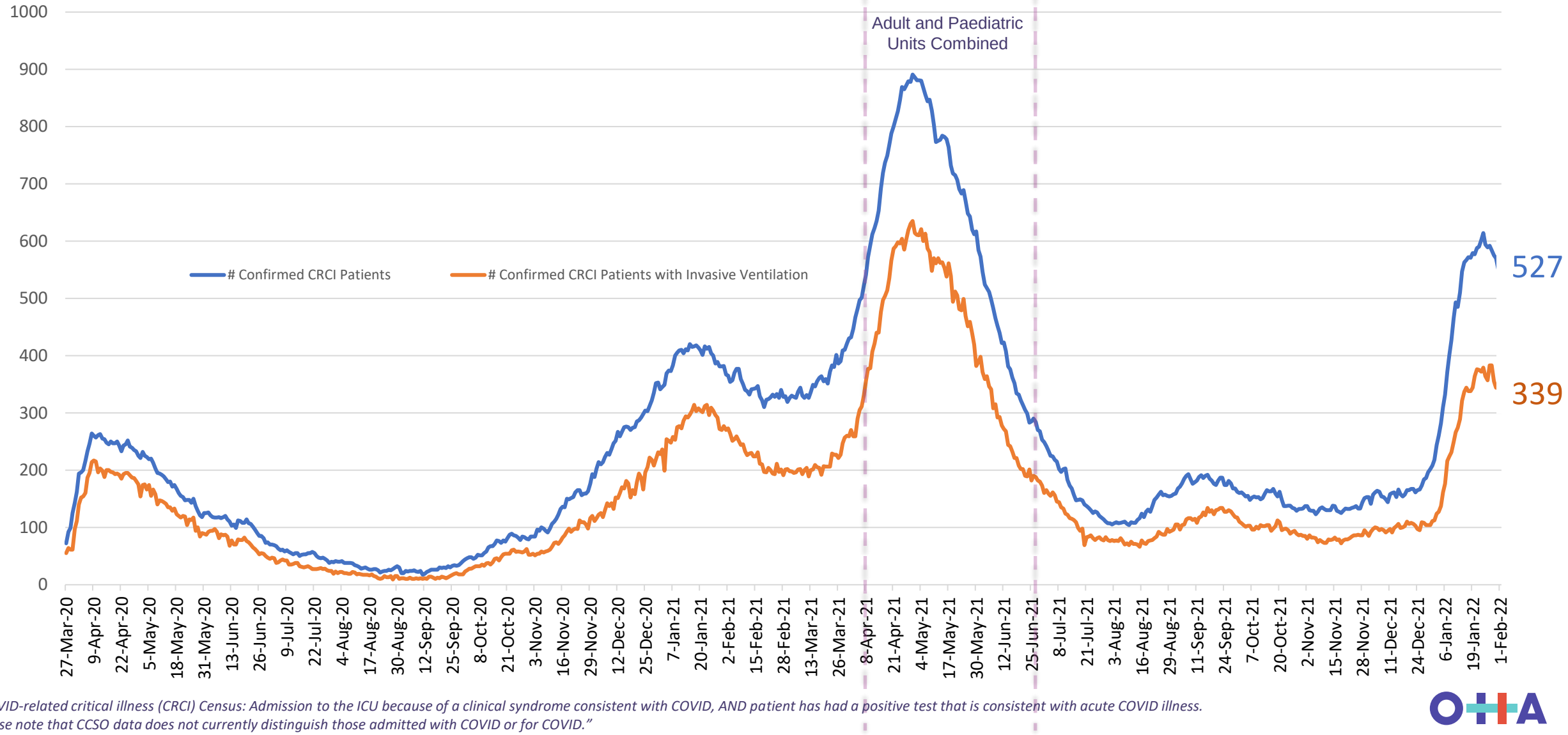
Region	Adult Funded* beds	Current Adult CRCI census	% Adult pts in ICU who have CRCI	% Adult ICU occupancy	Funded* Adult ICU Bed Capacity Remaining	(+/- change from previous day)
West	694	181	31.4%	83.1%	117	↑ 1
Central	477	128	34.5%	77.8%	106	↑ 2
Toronto	464	77	22.5%	73.7%	122	↑ 15
East	574	112	26.2%	74.4%	147	→ 0
North	134	29	28.2%	76.9%	31	↓ -2

Definition: COVID-19 pts are represented by CRCI (COVID-Related Critical Illness and is defined as: Admission to the ICU because of a clinical syndrome consistent with COVID, AND the patient has had a positive test that is consistent with acute COVID illness).Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID.
*Staffing pressures may reduce funded bed capacity. Please see view the OHA resource page for more details.
There were **8 paediatric CRCI cases, **8** vented. There were no neonatal CRCI cases.

Adult Critical Care Units COVID Related Critical Illness (CRCI) Patients

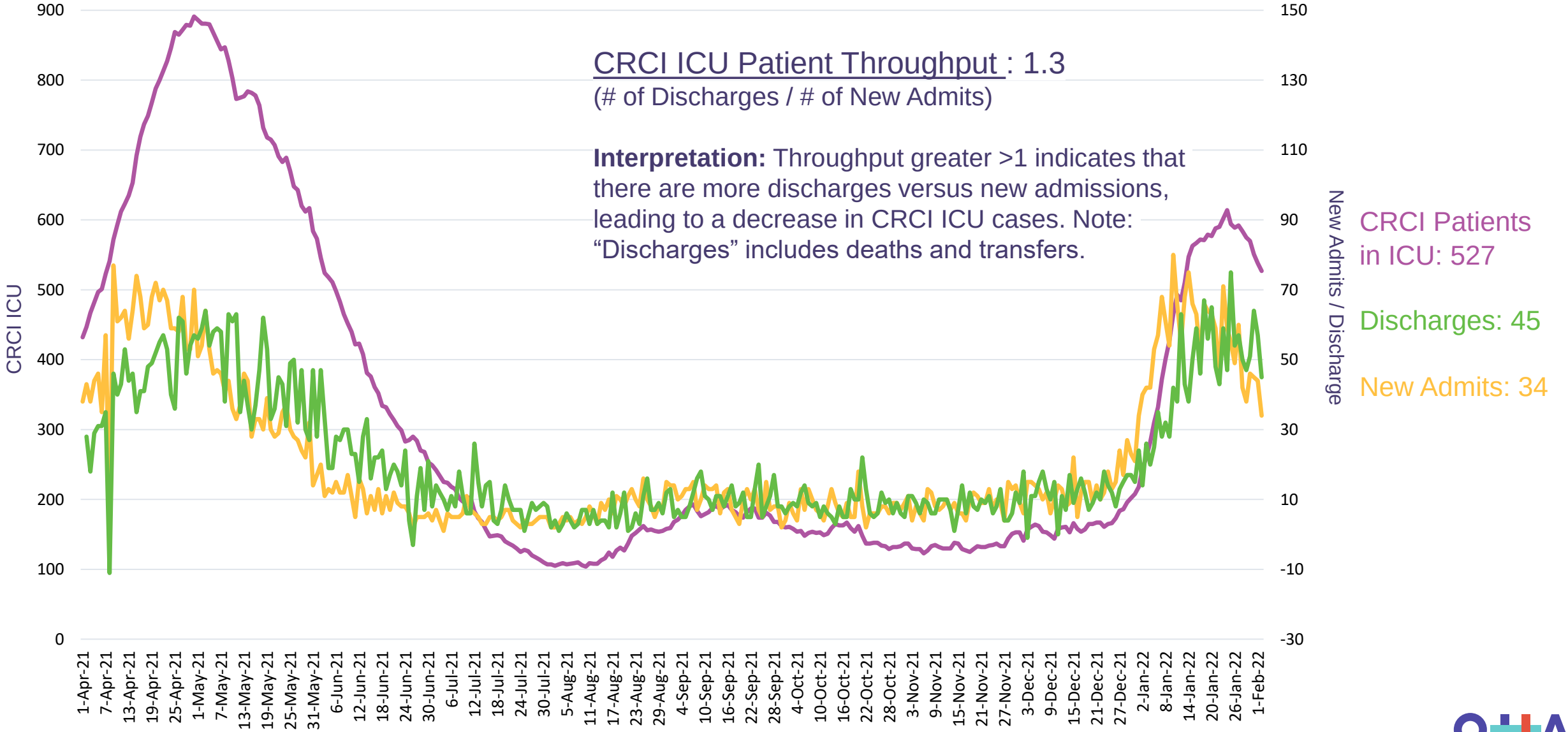
(Source: Critical Care Services Ontario)

(Data as of February 2, 2022)



"COVID-related critical illness (CRCI) Census: Admission to the ICU because of a clinical syndrome consistent with COVID, AND patient has had a positive test that is consistent with acute COVID illness. Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID."

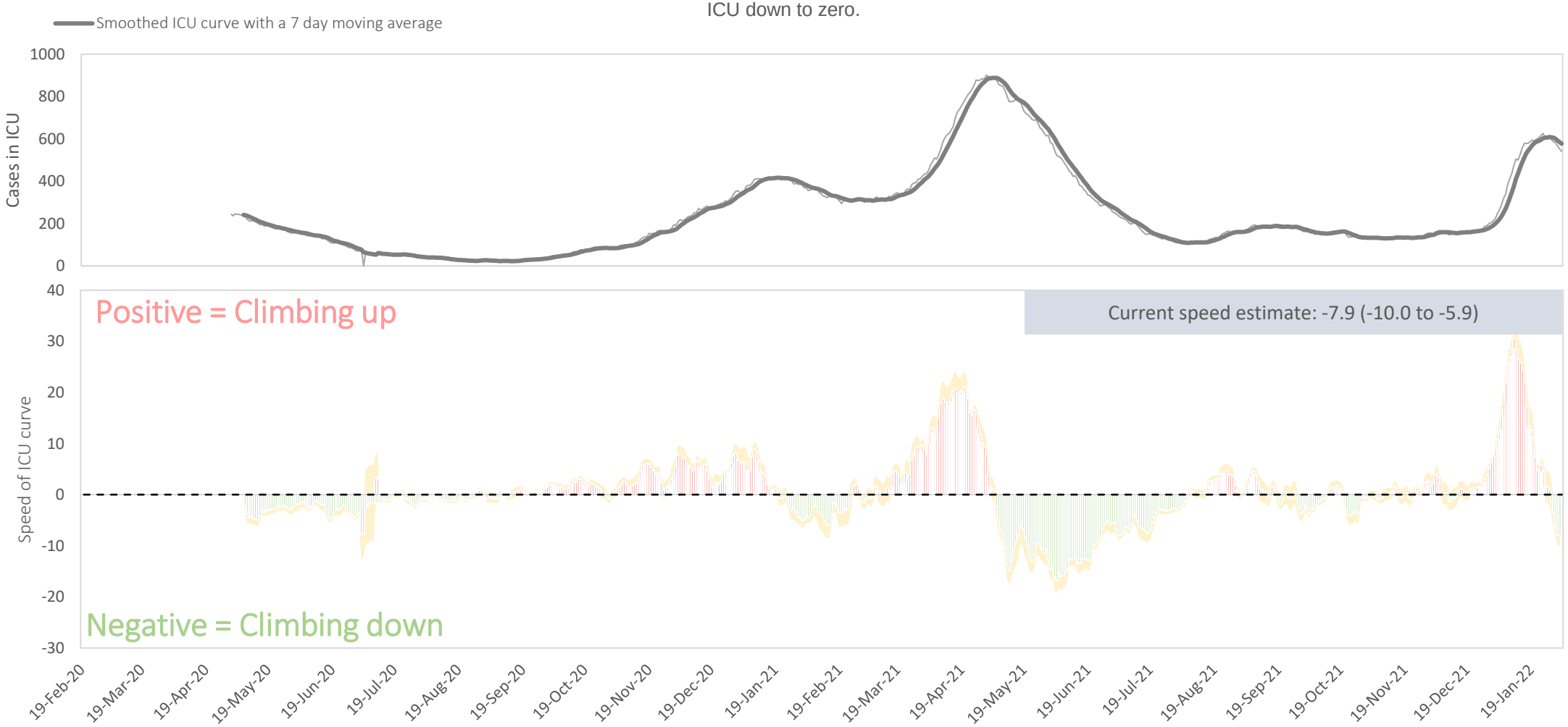
CRCI ICU Patient Throughput (starting April 2021 onward) (Data as of February 2, 2022)



Technical Note: Patient Throughput based on Ontario Health - CCO methodology

COVID-19 ICU curve and speed of ICU curve: as of February 2, 2022 in Ontario

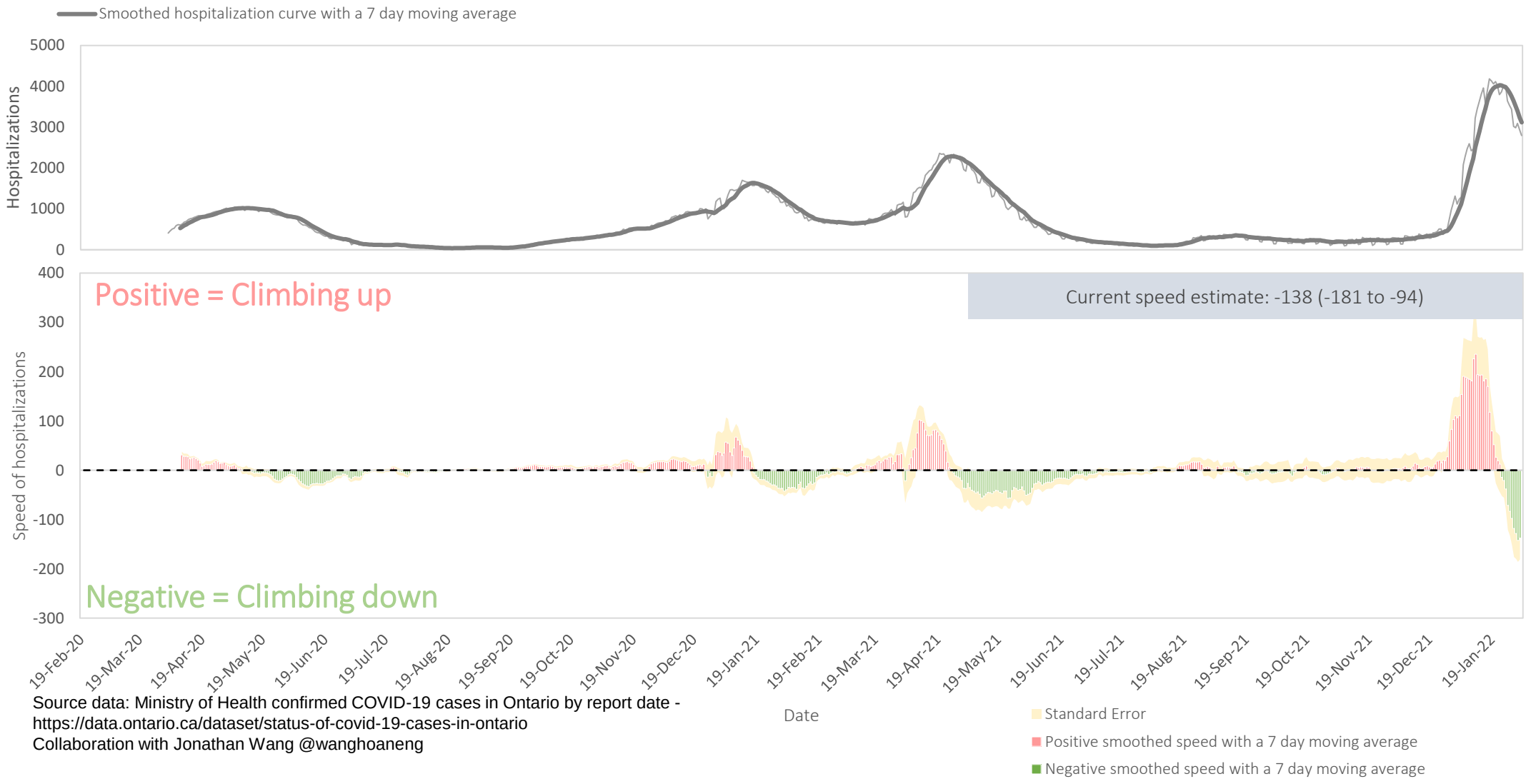
The speed of COVID-19 spread is measured as the slope of the ICU curve. When the **speed > 0**, then the trend of cases in ICU is speeding up. When the **speed < 0**, then trend of cases in ICU is slowing down. When **speed = 0**, then the cases in ICU have plateaued. The goal is to drive cases in ICU down to zero.



Source data: Ministry of Health confirmed COVID-19 cases in Ontario by report date - https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario
Collaboration with Jonathan Wang @wanghoaneng

COVID-19 hospitalizations curve and speed of hospitalizations: as of February 2, 2022 in Ontario

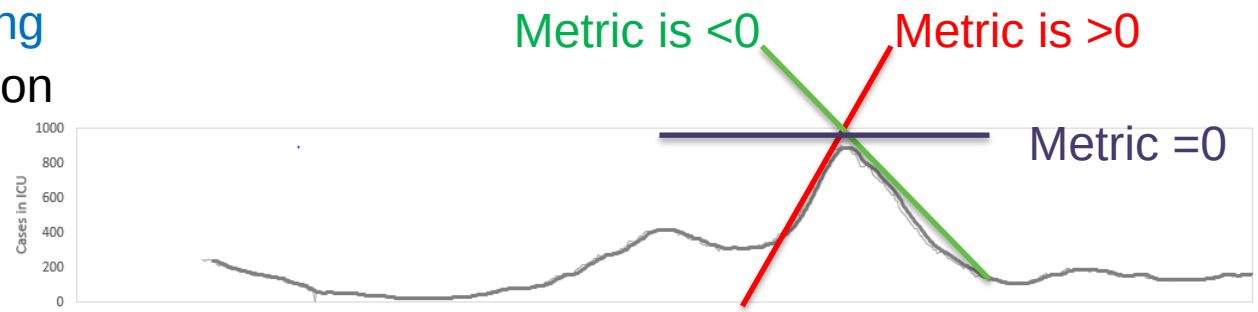
The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed > 0**, then the trend of hospitalizations is speeding up. When the **speed < 0**, then trend of hospitalizations is slowing down. When **speed = 0**, then the hospitalizations have plateaued. The goal is to drive hospitalizations down to zero.



Source data: Ministry of Health confirmed COVID-19 cases in Ontario by report date - https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario
Collaboration with Jonathan Wang @wanghoaneng

Interpretation of the “Speed Signal” Graphs

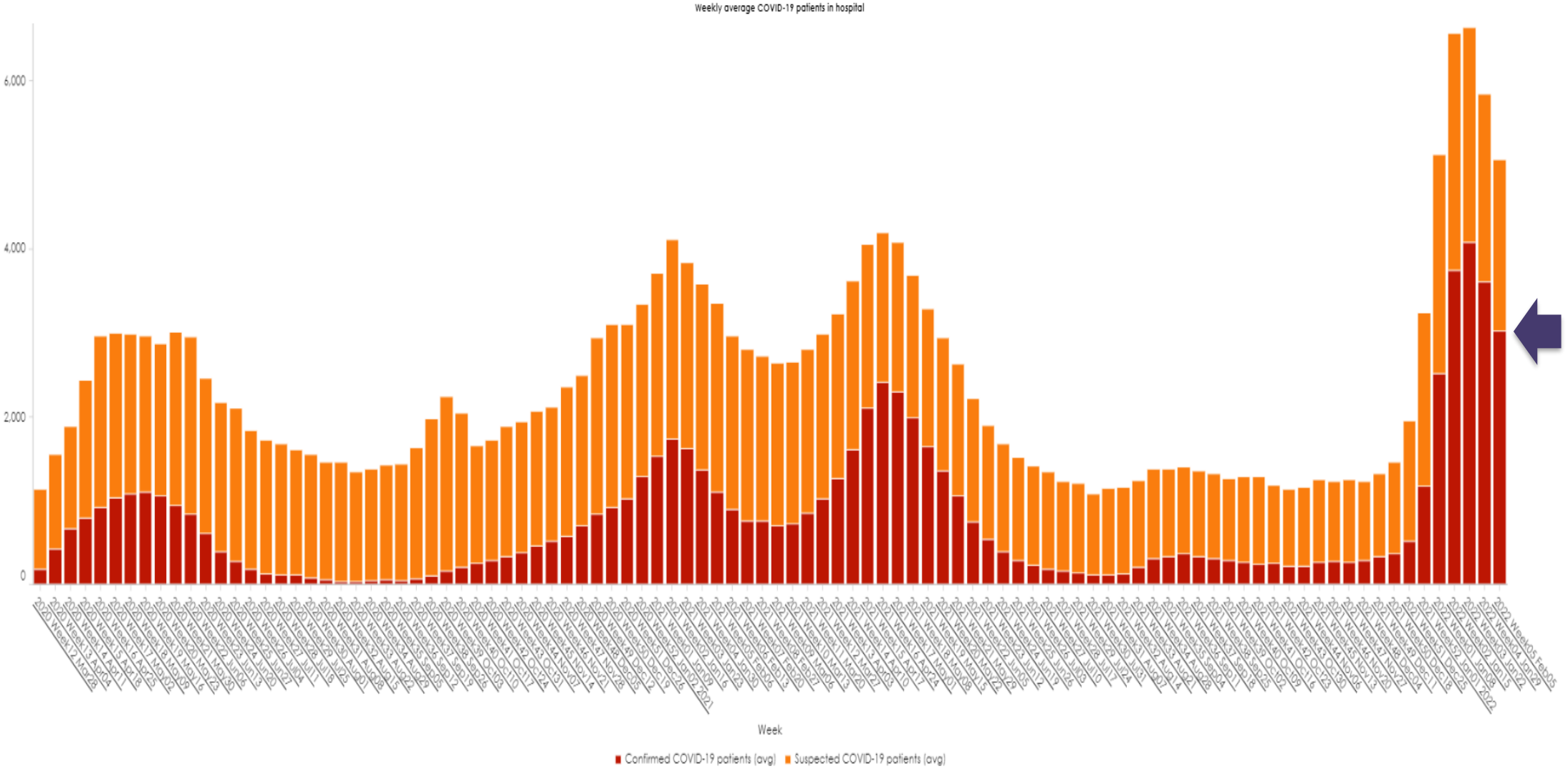
- The “speed signal” metric, developed by Jonathan Wang - Twitter: @wanghoaneng in 2020, is a simple calculation method with intuitive explanatory power for rates and spread.
- The speed signal can be considered as the number of hospitalization or ICU cases per day that can be expected if the current 7-day trend continues.
- The directionality (positive or negative) of the metric provides insight into the rate of increase of cases per day.
- This metric only provides information on the slope of the hospitalization/ICU curve and should be read in conjunction with the hospitalization or ICU case curve (i.e., zero slope does not mean there are no more daily cases, just that the rate of change in cases per day is zero over a 7-day period).
- The red bars in the graph show rates increasing and the green bars show rates decreasing.



- The speed of COVID-19 spread is measured as the slope of the hospitalization/ICU curve.
- When the **speed metric is > 0**, then the trend of hospitalizations/ICU cases is speeding up.
- When the **speed metric < 0**, then the trend of hospitalizations/ICU cases is slowing down.
- When **speed = 0**, then the hospitalizations/ICU cases have plateaued.
- The goal is to drive COVID-19 hospitalizations and ICU cases down to zero.

Weekly average COVID-19 patients in hospital (Data extracted on February 1, 2022)

Source: MOH VA Tool
Data extracted on February 2, 2022



2814 confirmed COVID-19 patients (February 1, 2022)
Source: MOH VA Tool

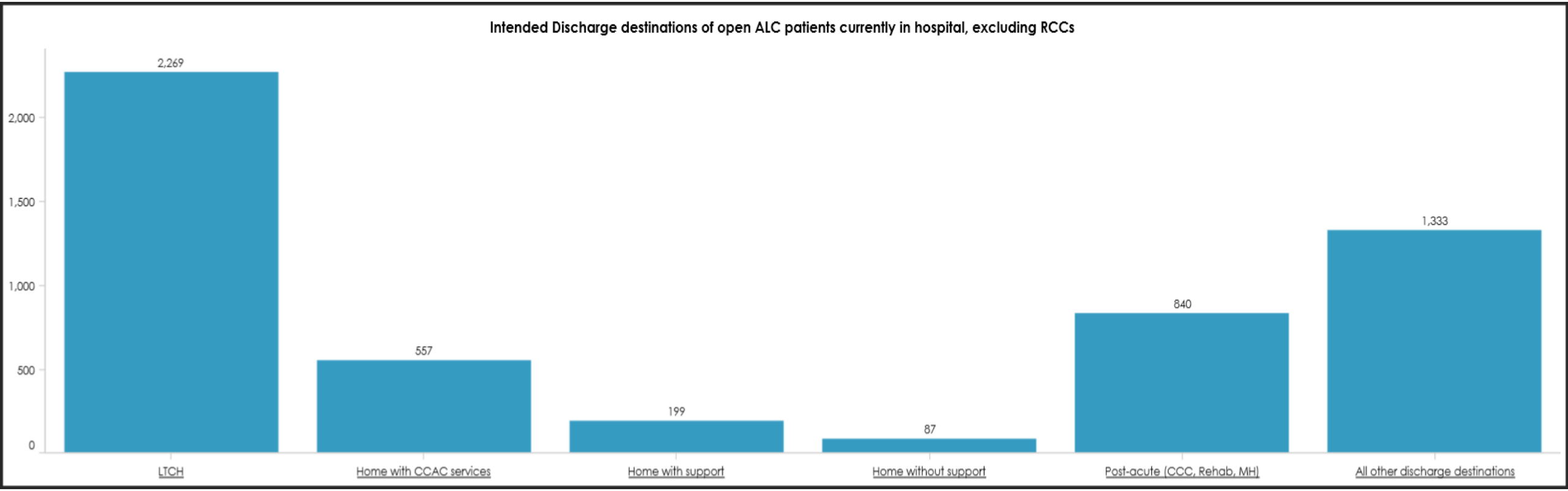
Hospital Occupancy (Data as of February 1, 2022)

Source: MOH VA Tool
Data extracted on February 3, 2022

All Beds (Total)	Acute	Post-acute
93.1%	96.6%	86.8%
+/- from previous day 1.1	+/- from previous day 1.7	+/- from previous day 0.0
2,383	750	1,616
Available beds	Available beds	Available beds

5,285	10.5%	42.9%
ALC Open Cases Excludes RCCs	% waiting for homecare	% waiting for LTC

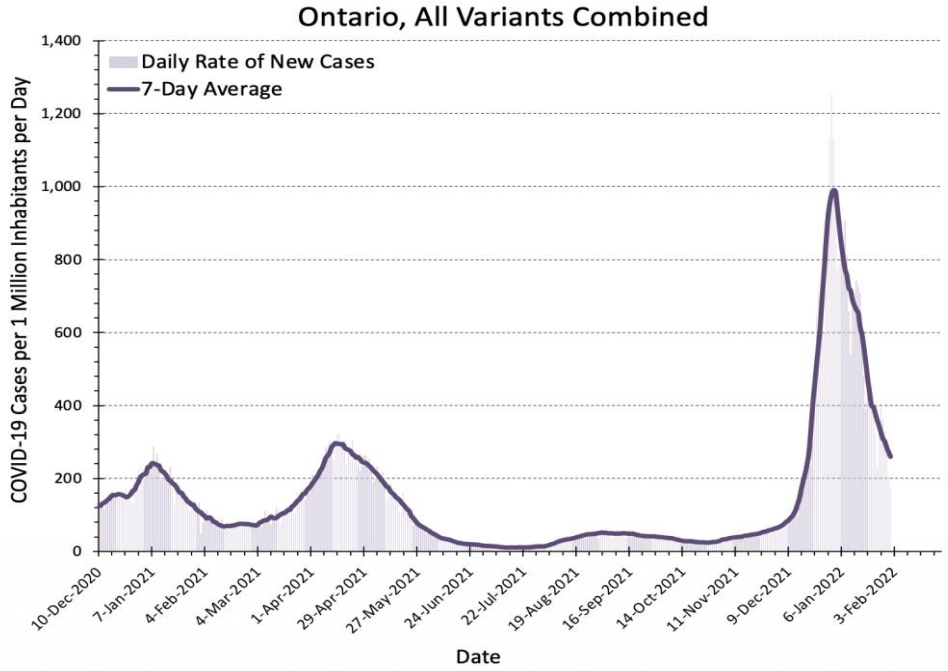
As of February 1, there were **371** ALC patients in RCC beds, where 1 out of 2 intended to be discharged to LTCH.



Highlights: COVID-19 Science Table Ontario Dashboard

Key Indicators for Ontario	
Effective Reproduction Number R(t) Based on COVID-19 Cases	-*
Estimated Number of COVID-19 Cases per Day, on 02-Feb-2022	3,680
Change per Week	-1,386
Halving Time (Days)	14.9
Estimated Percentage Caused by Omicron	99.9%
Standardized Wastewater Signal, on 27-Jan-2022	0.60
Change per Week	-0.27
Halving Time (Days)	13.8
Test Positivity	14.5%
Change per Week	-1.5%
COVID-19 Hospital Occupancy, on 02-Feb-2022	2,972
Change per week	-1,075
Halving Time (Days)	23.8
COVID-19 ICU Occupancy, on 02-Feb-2022	555
Change per Week	-53
Halving Time (Days)	88.8
Estimated Number of COVID-19 Deaths per Day, on 30-Jan-2022	59
Change per Week	-3
COVID-19 Cases per 1 Million per Day, on 02-Feb-2022	249.7
Among Unvaccinated People	511.0
Among People Vaccinated with at Least 2 Doses	198.0
Reduction Associated with at Least 2 Vaccine Doses	-61.3%
COVID-19 Hospital Occupancy per 1 Million, on 02-Feb-2022	201.7
Among Unvaccinated People	862.9
Among People Vaccinated with at Least 2 Doses	147.4
Reduction Associated with at Least 2 Vaccine Doses	-82.9%
COVID-19 ICU Occupancy per 1 Million, on 02-Feb-2022	37.7
Among Unvaccinated People	248.4
Among People Vaccinated with at Least 2 Doses	21.6
Reduction Associated with at Least 2 Vaccine Doses	-91.3%
COVID-19 Vaccination in Ontario, on 01-Feb-2022	
Number of People Vaccinated With at Least 1 Dose	12,475,207
Change per Week	+43,469
Percent of People Aged 5+ Vaccinated With at Least 1 Dose	89.0%
Change per Week	+0.3%
Number of People Vaccinated With at Least 2 Doses	11,756,159
Change per Week	+111,359
Percent of People Aged 5+ Vaccinated With at Least 2 Doses	83.9%
Change per Week	+0.8%
Number of People Vaccinated With 3 Doses	6,457,714
Change per Week	+310,428
Percent of People Aged 18+ Vaccinated With 3 Doses	53.9%
Change per Week	+2.2%

Estimated Rate of COVID-19 Cases per 1 Million Inhabitants per Day in Ontario



Current COVID-19 Risk in Ontario by Vaccination Status