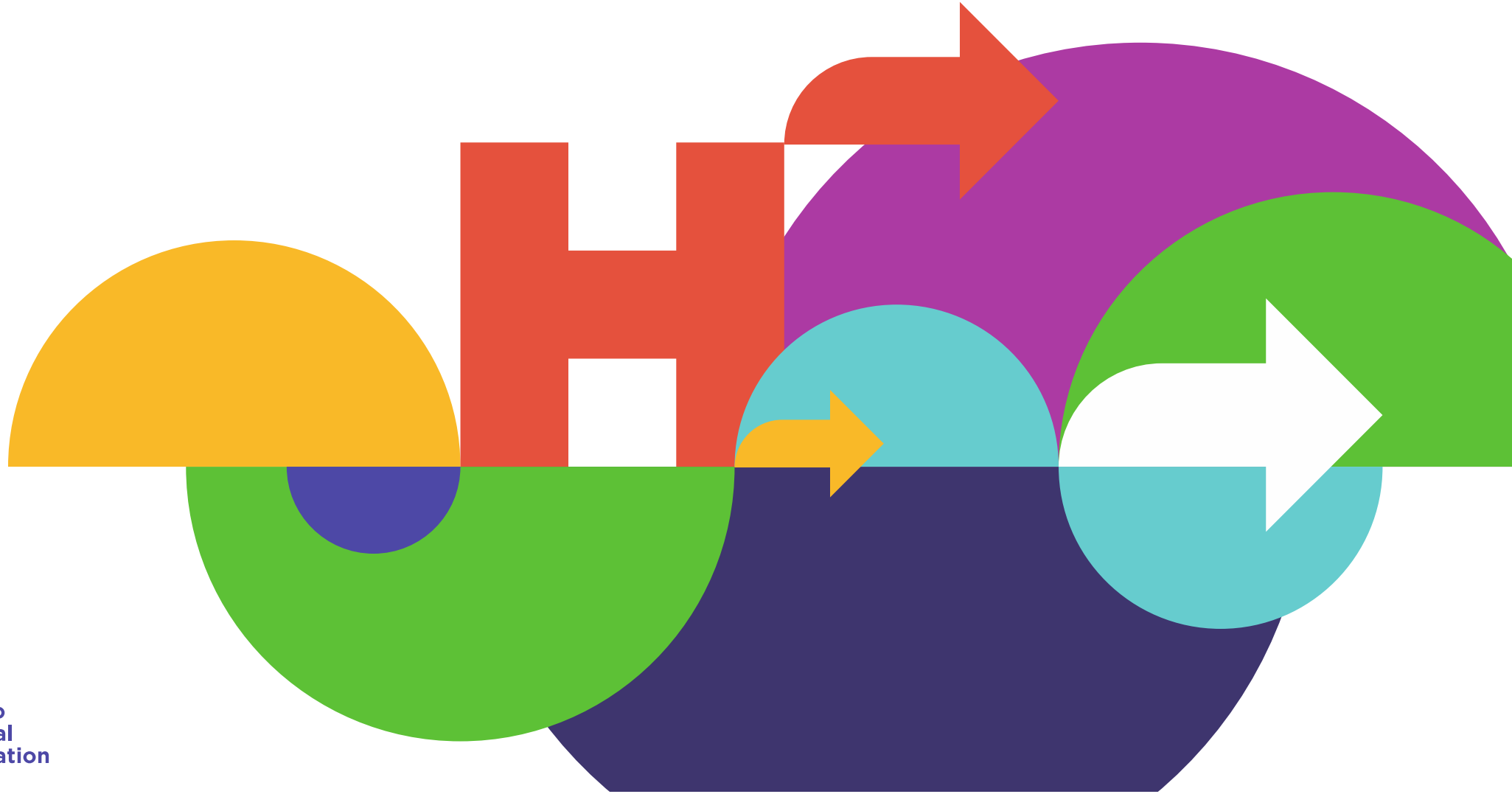
COVID-19 Hospital Capacity

Monday, January 17, 2022



Ontario Hospital Association

Hospital Capacity: Critical Care

Data source: Critical Care Information System
All data as of **January 16 2022**

Total Funded* ICU Bed Capacity				Critical Care Census**				% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	(Adult)	1599	Vented	1788	(Adult)	567	CRCI	76.3% (Adult)	555 (Adult)
		744	Non-Vented			1221	NON-CRCI		
93	(Paediatric)	77	Vented	58	(Paediatric)	6	CRCI	62.4% (Paediatric)	35 (Paediatric)
		16	Non-Vented			52	NON-CRCI		

Dec 16 Ontario Science Table COVID-19 ICU Occupancy Projections for December 31, 2021	
Low range	241-244
"Circuit breaker" high range	326
No intervention high range	637

7-day average CRCI patients in ICU (Adult)	519
7-day average New CRCI Admits (Adult)	68
7-day average New CRCI Admits (Paediatric)	1

% Pts in ICU who have CRCI	% vented pts who have CRCI
31.7% (Adult)	60.7% (Adult)
10.3% (Paediatric)	16.7% (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	190	33.0%	83.0%	118	-9
Central	477	154	43.4%	74.4%	122	11
Toronto	464	73	21.9%	72.0%	130	7
East	574	121	28.1%	75.1%	143	4
North	134	29	31.5%	68.7%	42	7

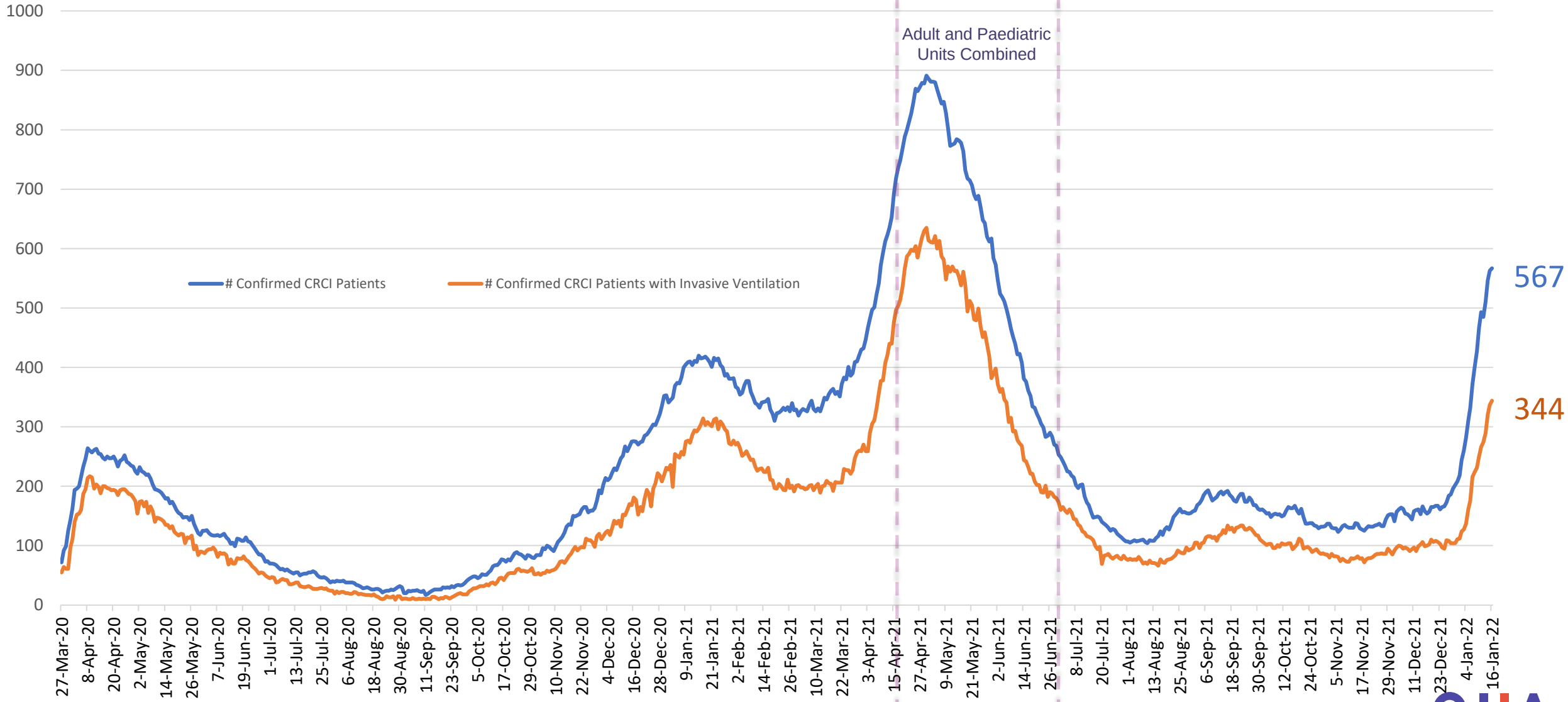
Definition: COVID-19 pts are represented by CRCI (COVID-Related Critical Illness and is defined as: Admission to the ICU because of a clinical syndrome consistent with COVID, AND the patient has had a positive test that is consistent with acute COVID illness).Please note that CCSO data does not currently 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 **6 paediatric CRCI cases, **1** vented. There were **2** neonatal CRCI cases .

OHA

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

(Source: Critical Care Services Ontario)

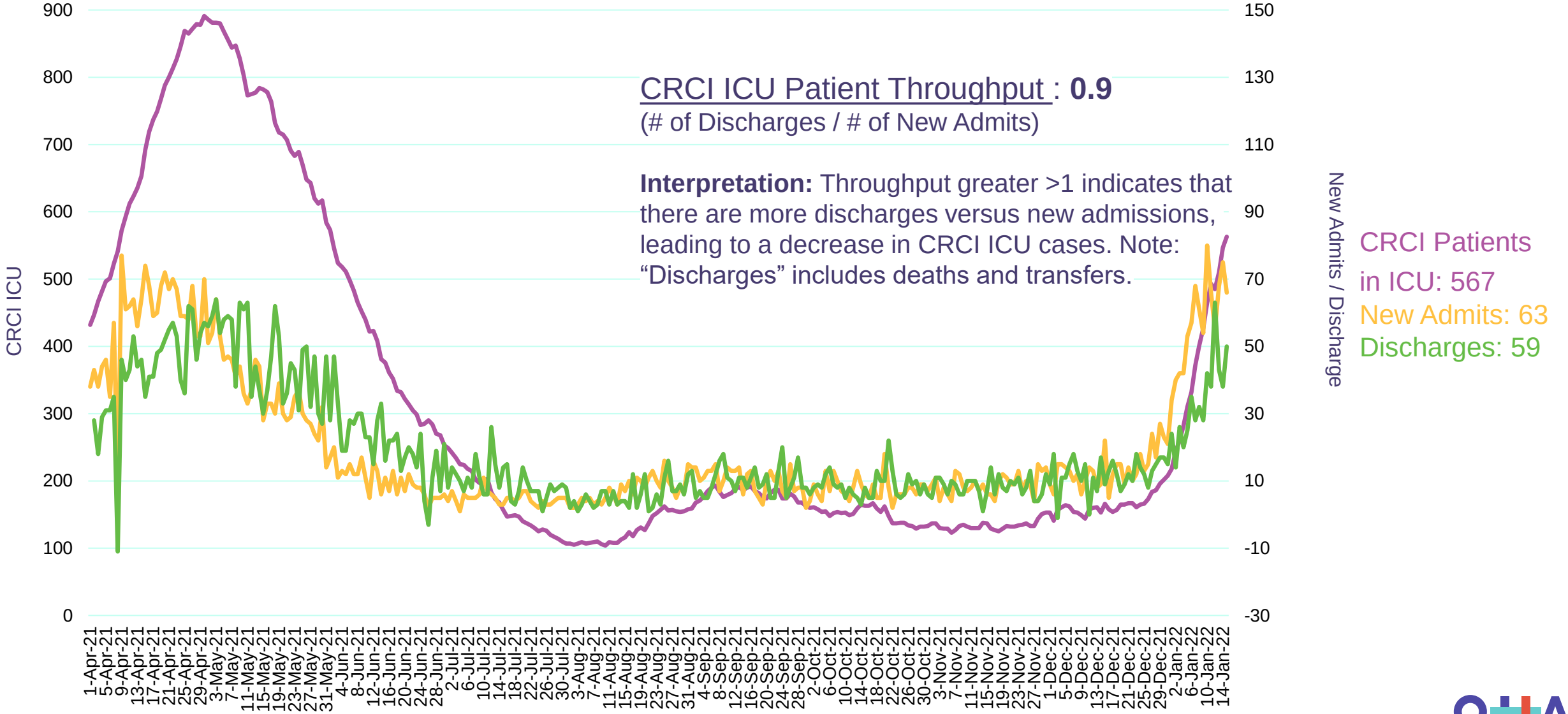
(Data as of January 16, 2022)



"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 January 16, 2022)

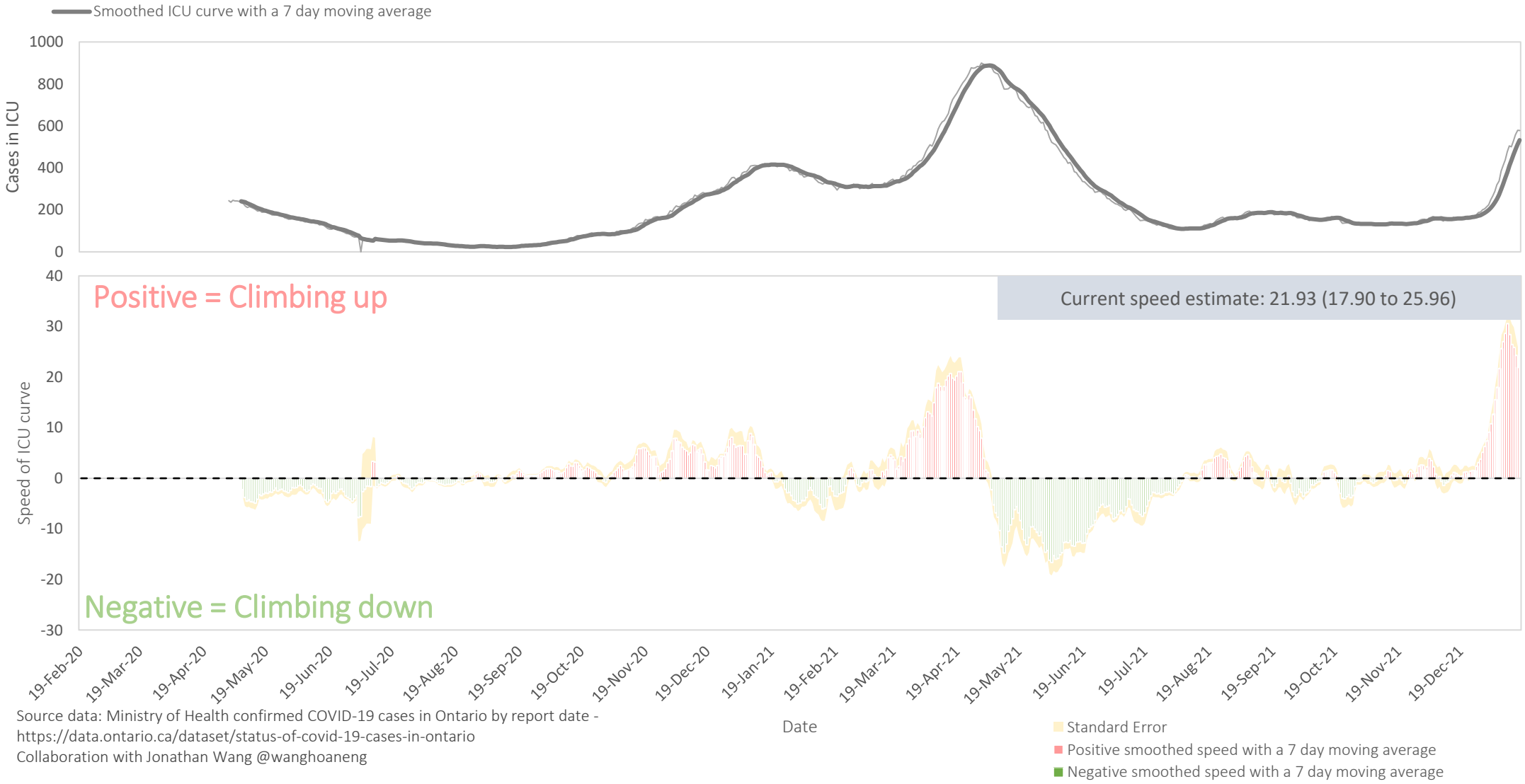
Data source: Critical Care Information System



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

COVID-19 ICU curve and speed of ICU curve: as of January 16, 2022 in Ontario

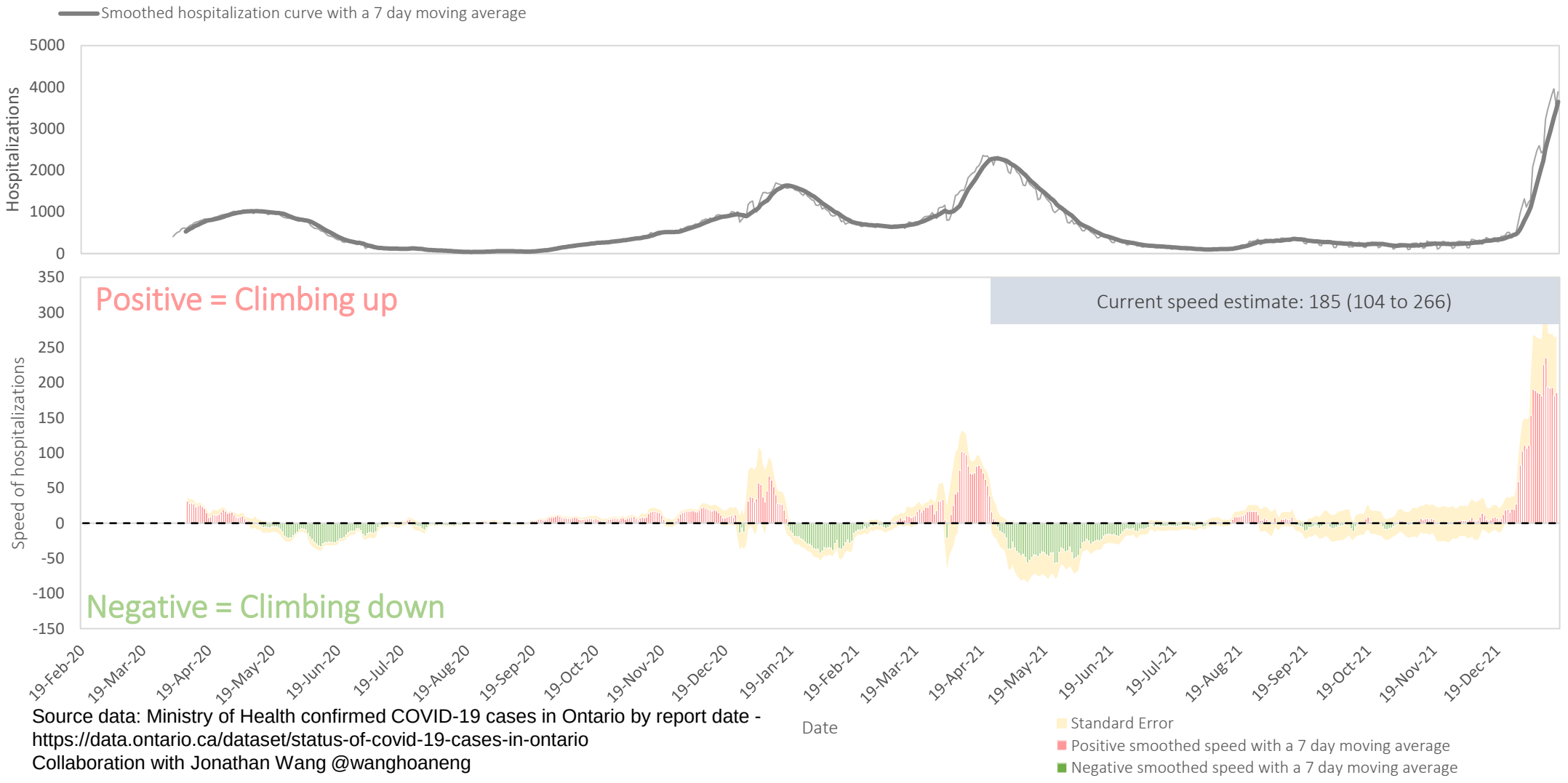
The speed of COVID-19 spread is measured as the slope of the ICU curve. When the **speed > 0**, then the trend of cases in ICU is speeding up. When the **speed < 0**, then trend of cases in ICU is slowing down. When **speed = 0**, then the cases in ICU have plateaued. The goal is to drive cases in ICU 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 January 16, 2022 in Ontario

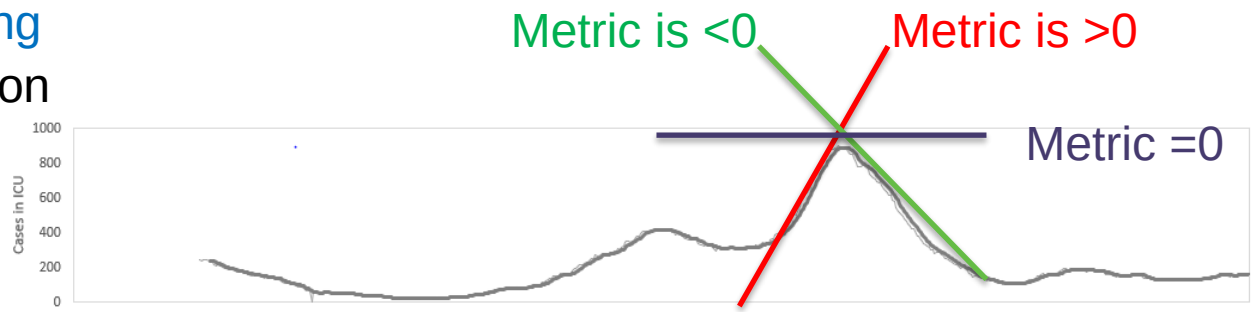
The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed > 0**, then the trend of hospitalizations is speeding up. When the **speed < 0**, then trend of hospitalizations is slowing down. When **speed = 0**, then the hospitalizations have plateaued. The goal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

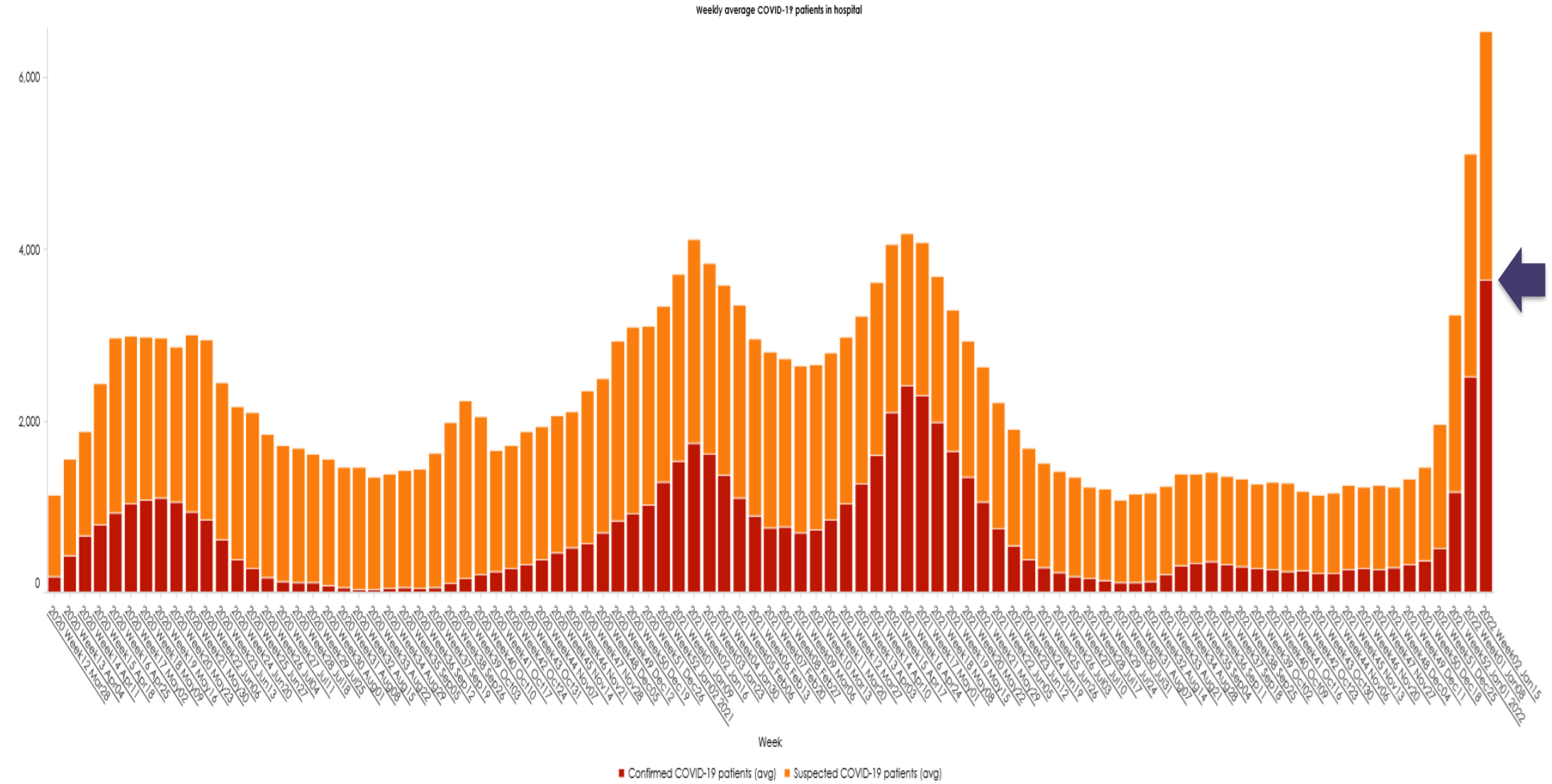
Interpretation of the “Speed Signal” Graphs

- 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 as of January 15, 2022)



3911 confirmed COVID-19 patients (January 15, 2022)

Source: MOH VA Tool

Hospital Occupancy

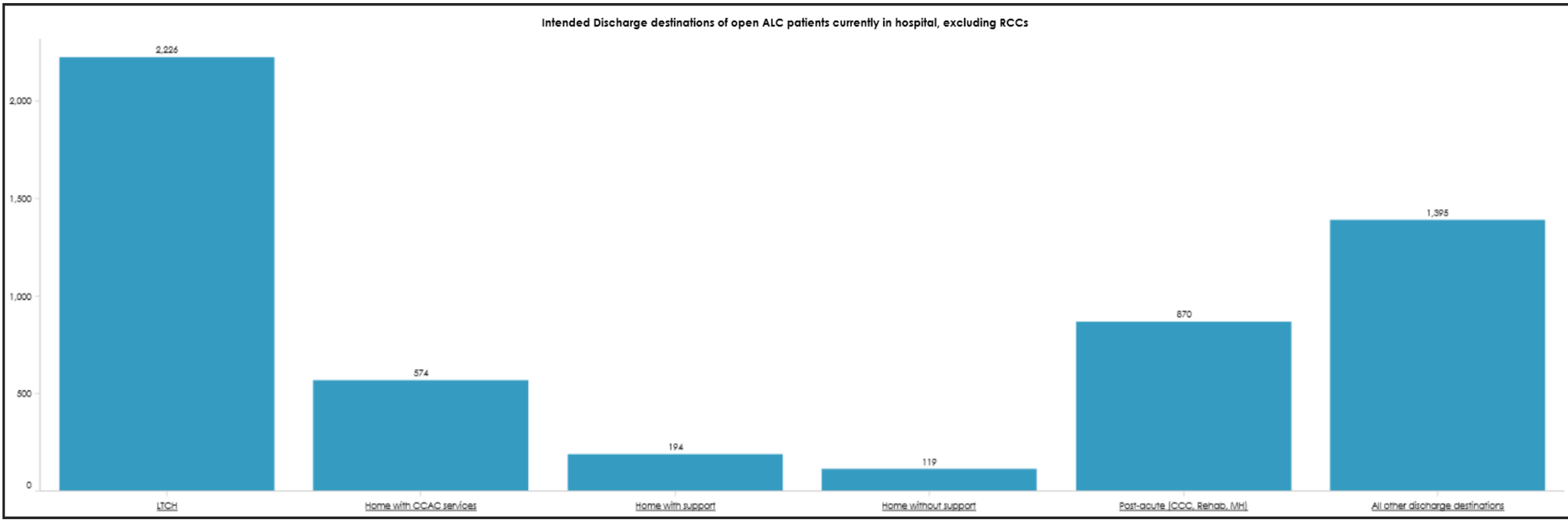
(Data as of January 15, 2022)

All Beds (Total)	Acute	Post-acute
90.1%	93.4%	83.1%
+/- from previous day -1.8	+/- from previous day -2.1	+/- from previous day -1.9
2,634	1,164	1,453
Availiable beds	Availiable beds	Availiable beds

(Data as of January 13, 2022)

5,378	10.7%	41.4%
ALC Open Cases Excludes RCCs	% waiting for homecare	% waiting for LTC

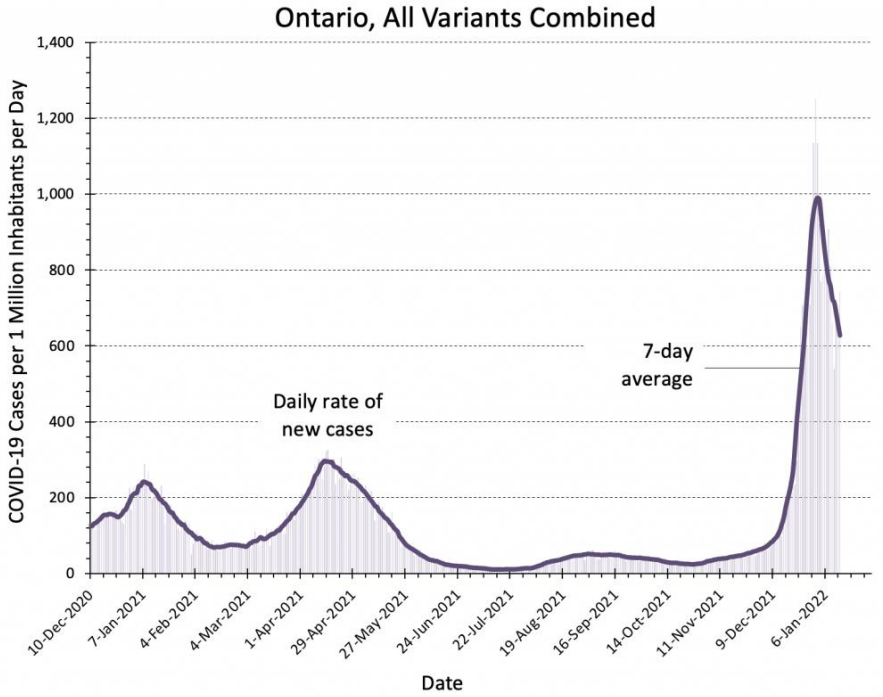
As of January 13, there are **377** ALC patients in RCC beds, almost 1 out of 2 intended to be discharged to LTCH.



Highlights: COVID-19 Science Table Ontario Dashboard

Key Indicators	
Effective Reproduction Number R(t)	-*
Estimated Number of COVID-19 Cases per Day, on 14-Jan-2022	9,249
Change per week	-2,637
Doubling Time (Days)	-*
Estimated Percentage Caused by Omicron	98.6%
Test Positivity	22.0%
Change per week	-6.6%
COVID-19 Hospital Occupancy, on 14-Jan-2022	3,830
Change per week	+1344
Doubling Time (Days)	8.6
COVID-19 ICU Occupancy, on 14-Jan-2022	527
Change per week	+189
Doubling Time (Days)	9.5
Estimated Number of COVID-19 Deaths per Day, on 11-Jan-2022	30
Change per week	+12
COVID-19 Cases per 1 Million per Day, on 14-Jan-2022	627.7
Among Unvaccinated People	956.9
Among People Vaccinated with at Least 2 Doses	565.8
Reduction Associated with at Least 2 Vaccine Doses	-40.9%
COVID-19 Hospital Occupancy per 1 Million, on 14-Jan-2022	259.9
Among Unvaccinated People	951.5
Among People Vaccinated with at Least 2 Doses	197.9
Reduction Associated with at Least 2 Vaccine Doses	-79.2%
COVID-19 ICU Occupancy per 1 Million, on 14-Jan-2022	35.8
Among Unvaccinated People	222.0
Among People Vaccinated with at Least 2 Doses	20.0
Reduction Associated with at Least 2 Vaccine Doses	-91.0%
COVID-19 Vaccination, on 13-Jan-2022	
Number of People Vaccinated With at Least 1 Dose	12,333,169
Change per week	+72,794
Percent of People Aged 5+ Vaccinated With at Least 1 Dose	88.0%
Change per week	+0.5%
Number of People Vaccinated With at Least 2 Doses	11,517,048
Change per week	+62,826
Percent of People Aged 5+ Vaccinated With at Least 2 Doses	82.2%
Change per week	+0.4%
Number of People Vaccinated With 3 Doses	5,310,425
Change per week	+903,477
Percent of People Aged 5+ Vaccinated With 3 Doses	37.9%
Change per week	+6.4%

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



Current COVID-19 Risk in Ontario by Vaccination Status