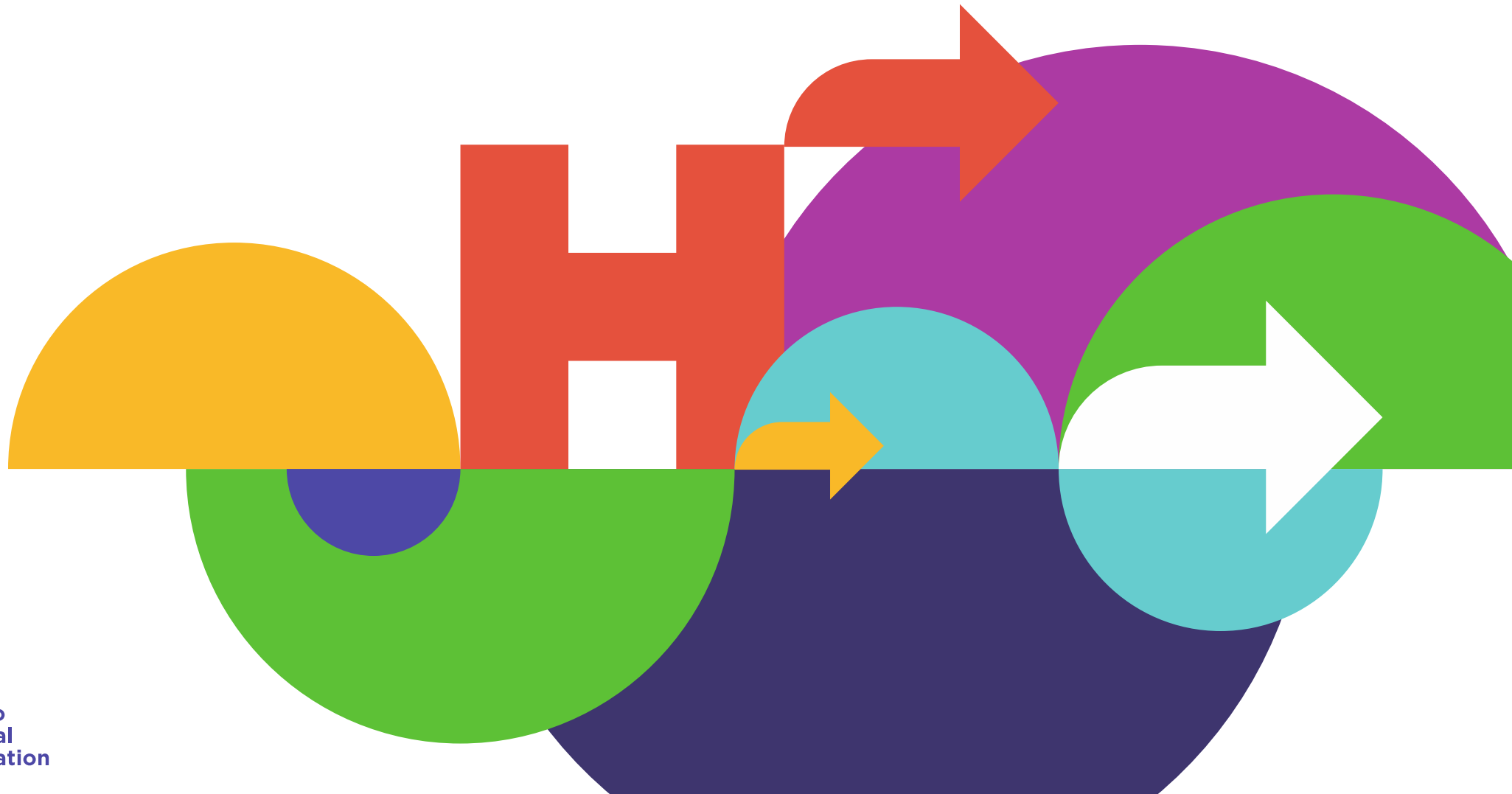


COVID-19 Hospital Capacity

Friday, January 14, 2022



Hospital Capacity: Critical Care

Data source: Critical Care Information System
All data as of **January 13 2022**

Total Funded* ICU Bed Capacity				Critical Care Census**				% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	(Adult)	1599	Vented	1845	(Adult)	510	CRCI	78.7% (Adult)	498 (Adult)
		744	Non-Vented			1335	NON-CRCI		
93	(Paediatric)	77	Vented	65	(Paediatric)	10	CRCI	69.9% (Paediatric)	28 (Paediatric)
		16	Non-Vented			55	NON-CRCI		

Dec 16 Ontario Science Table COVID-19 ICU Occupancy Projections for December 31, 2021	Low range	241-244	7-day average CRCI patients in ICU (Adult)	450	% Pts in ICU who have CRCI	% vented pts who have CRCI
	"Circuit breaker" high range	326	7-day average New CRCI Admits (Adult)	65	27.6% (Adult)	56.7% (Adult)
	No intervention high range	637	7-day average New CRCI Admits (Paediatric)	2	15.4% (Paediatric)	20.0% (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	175	29.8%	84.7%	106	↓	-27
Central	477	132	36.3%	76.3%	113	↑	7
Toronto	464	63	18.6%	73.1%	125	↑	10
East	574	115	25.8%	77.5%	129	↓	-11
North	134	25	22.9%	81.3%	25	↑	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.

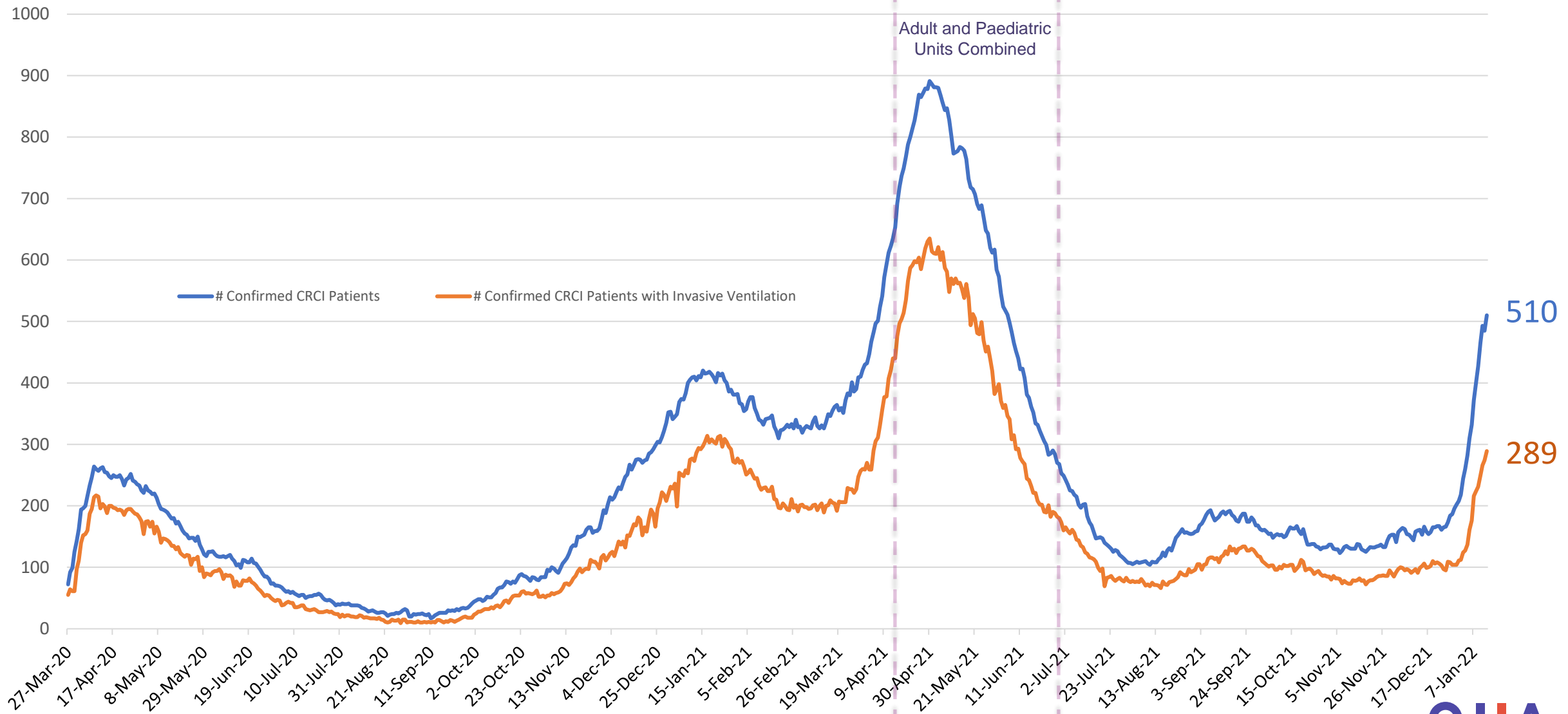
There were **10 paediatric CRCI cases, **2** vented. There were **2** neonatal CRCI cases .



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

(Source: Critical Care Services Ontario)

(Data as of **January 13, 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."

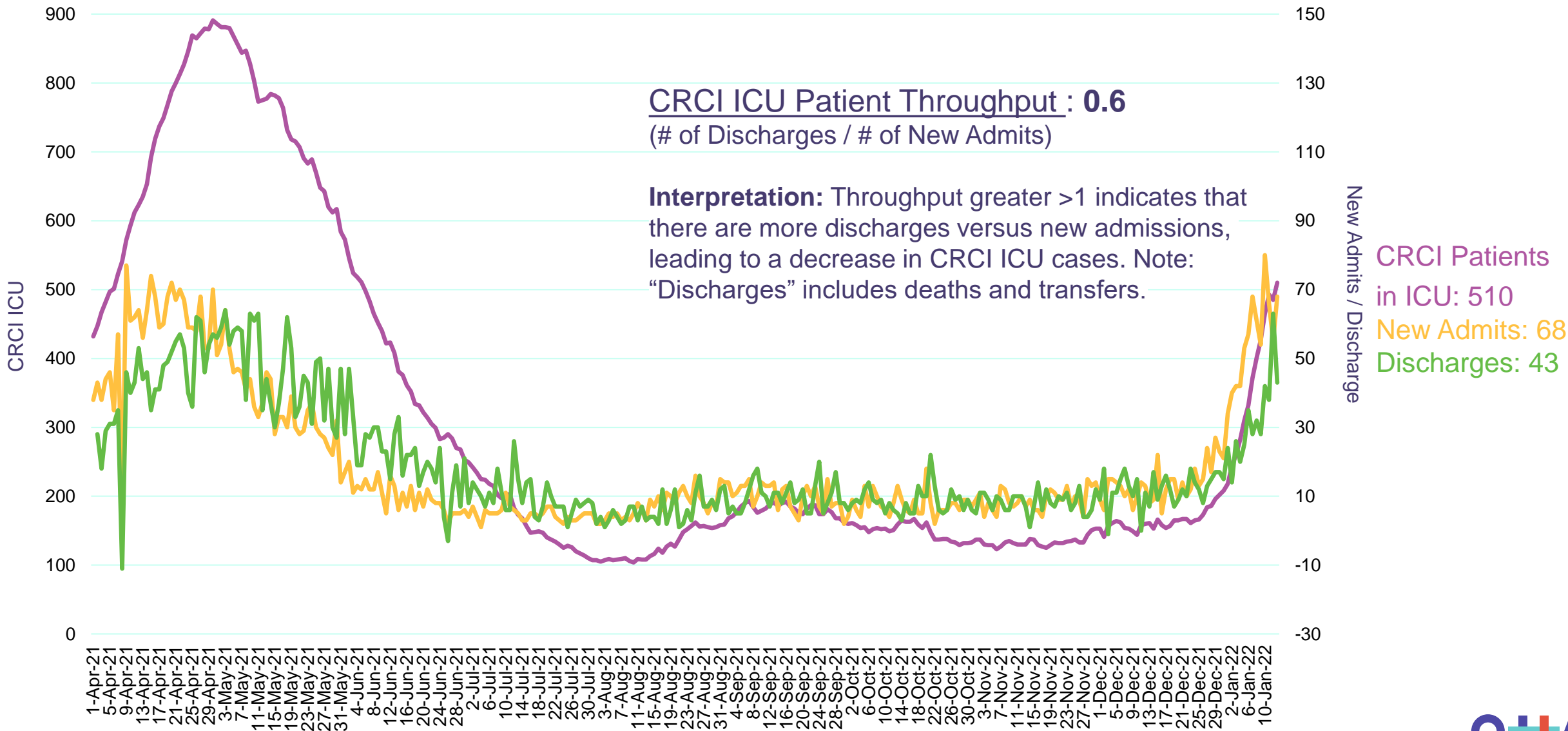
CRCI ICU Patient Throughput

(starting April 2021 onward)

(Data as of **January 13, 2022**)

Data source: Critical Care Information System

4

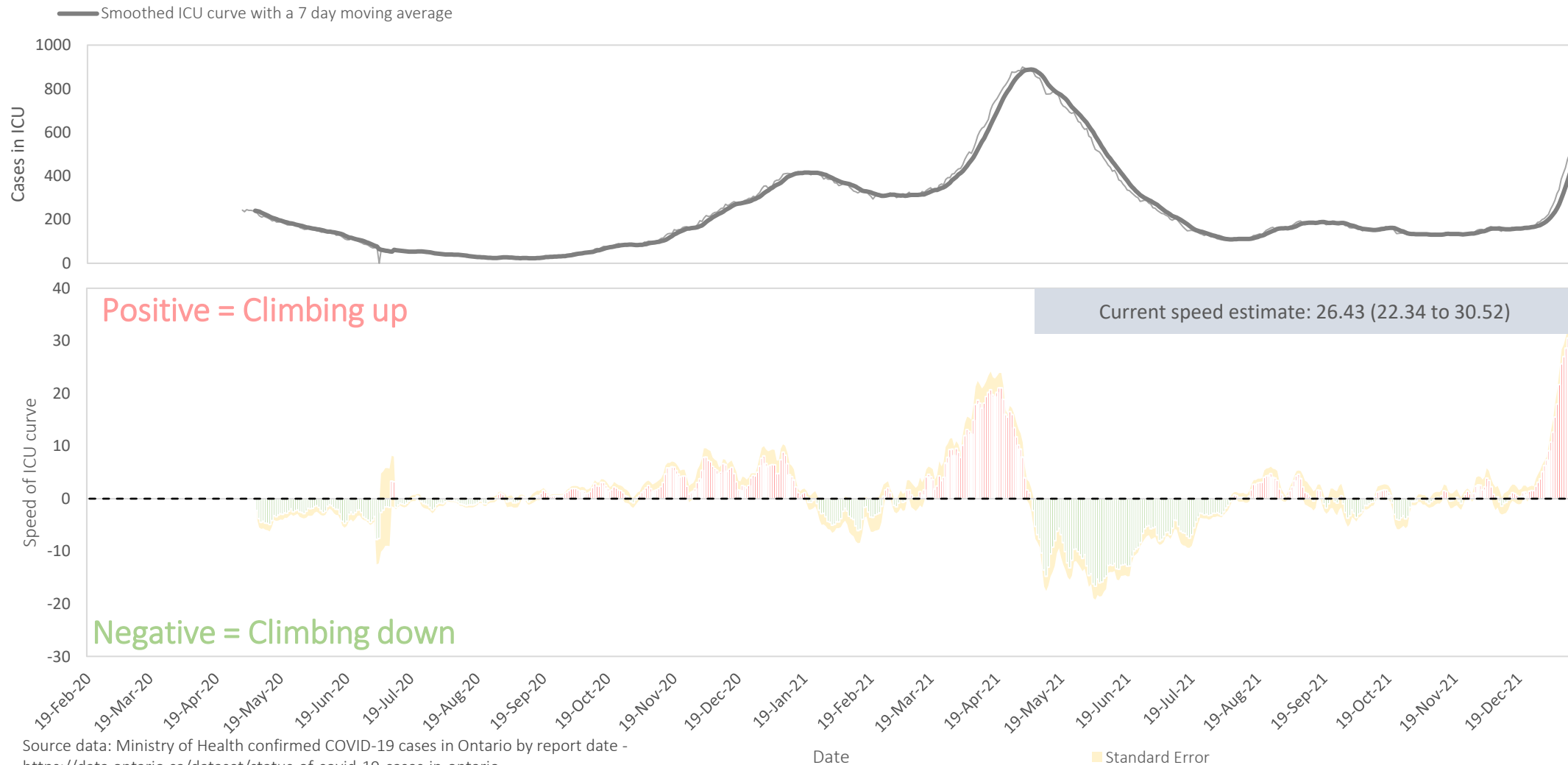


Technical Note: Patient Throughput based on [Ontario Health - CCO methodology](#)



COVID-19 ICU curve and speed of ICU curve: as of **January 13, 2022** in Ontario

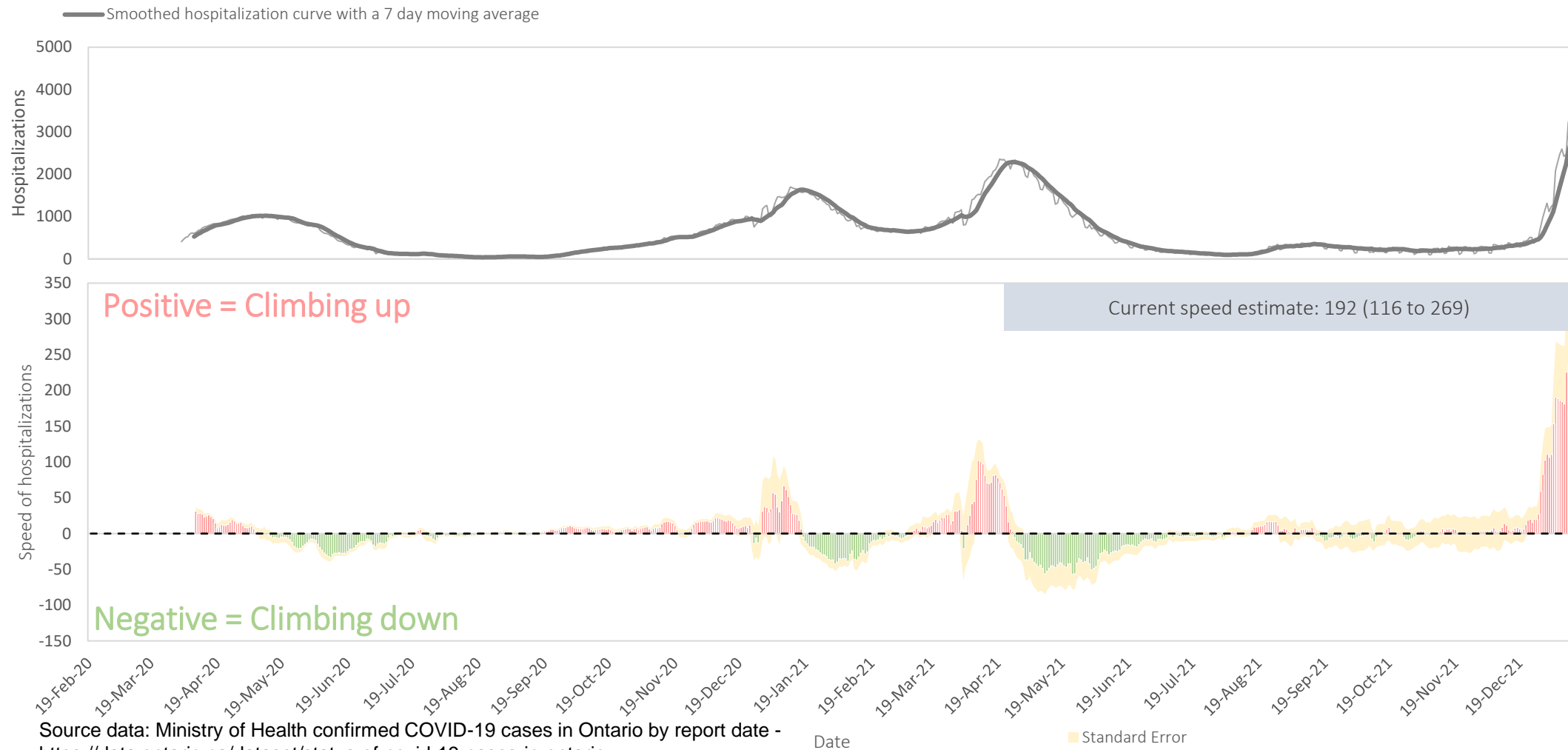
The speed of COVID-19 spread is measured as the slope of the ICU curve. When the **speed** > 0 , then the trend of cases in ICU is speeding up. When the **speed** < 0 , then trend of cases in ICU is slowing down. When **speed** $= 0$, then the cases in ICU have plateaued. The goal is to drive cases in 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 13, 2022** in Ontario

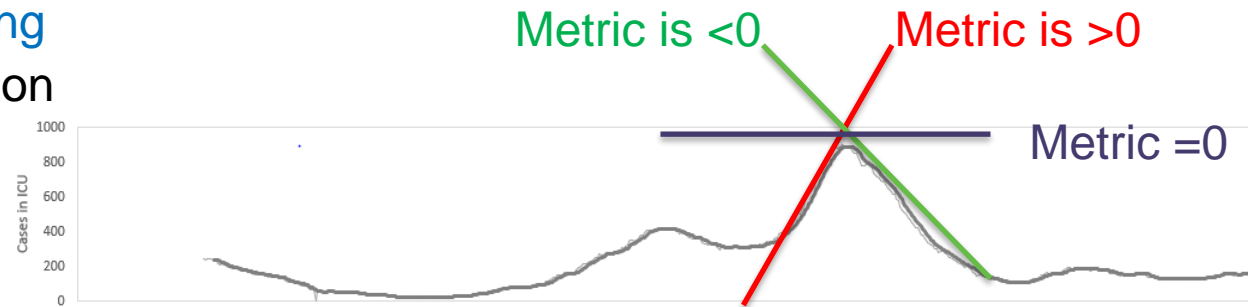
The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed > 0**, then the trend of hospitalizations is speeding up. When the **speed < 0**, then trend of hospitalizations is slowing down. When **speed = 0**, then the hospitalizations have plateaued. The goal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

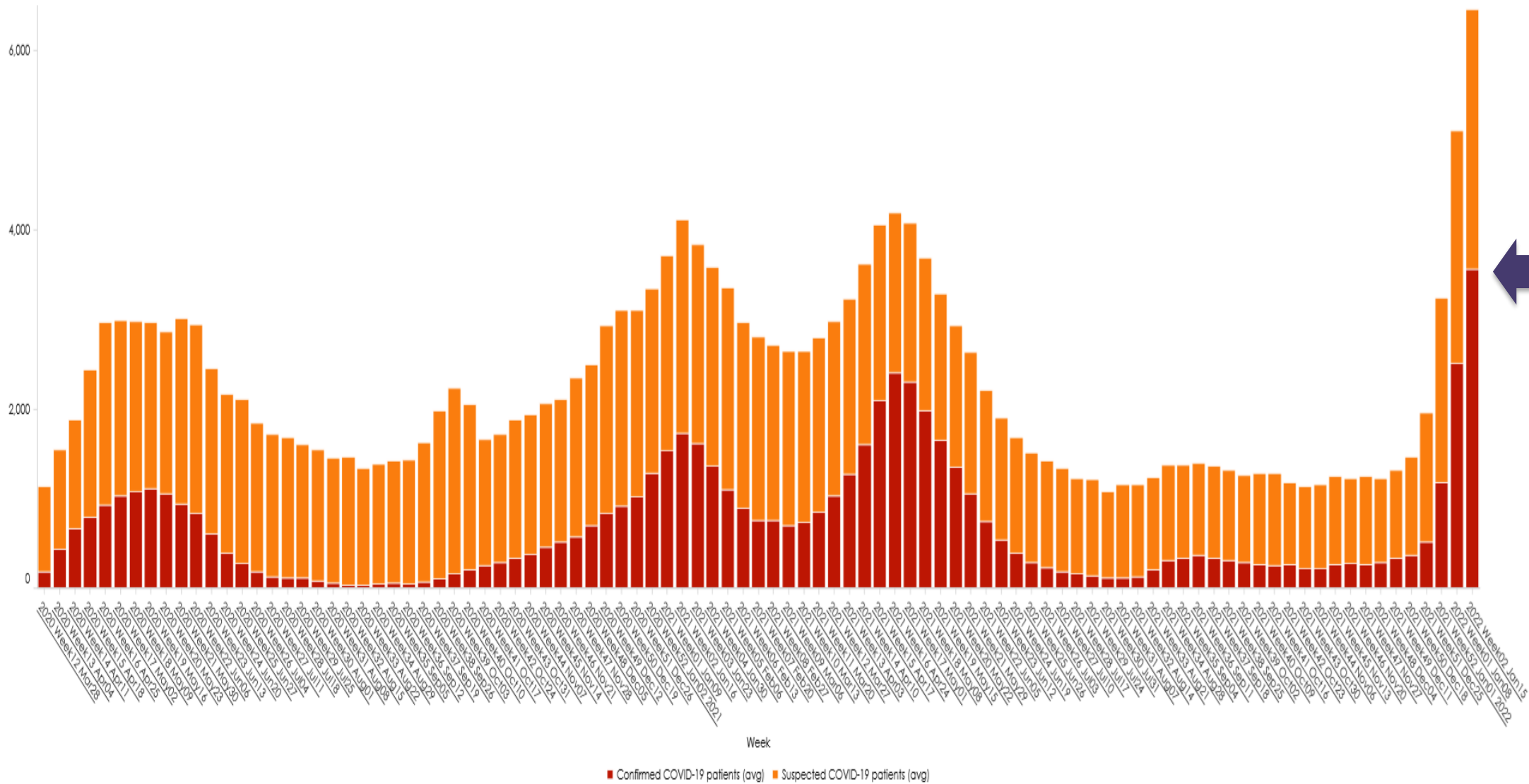


- The speed of COVID-19 spread is measured as the slope of the hospitalization/ICU curve.
- When the **speed metric is > 0**, then the trend of hospitalizations/ICU cases is speeding up.
- When the **speed metric < 0**, then the trend of hospitalizations/ICU cases is slowing down.
- When **speed = 0**, 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 12, 2022**)

Weekly average COVID-19 patients in hospital

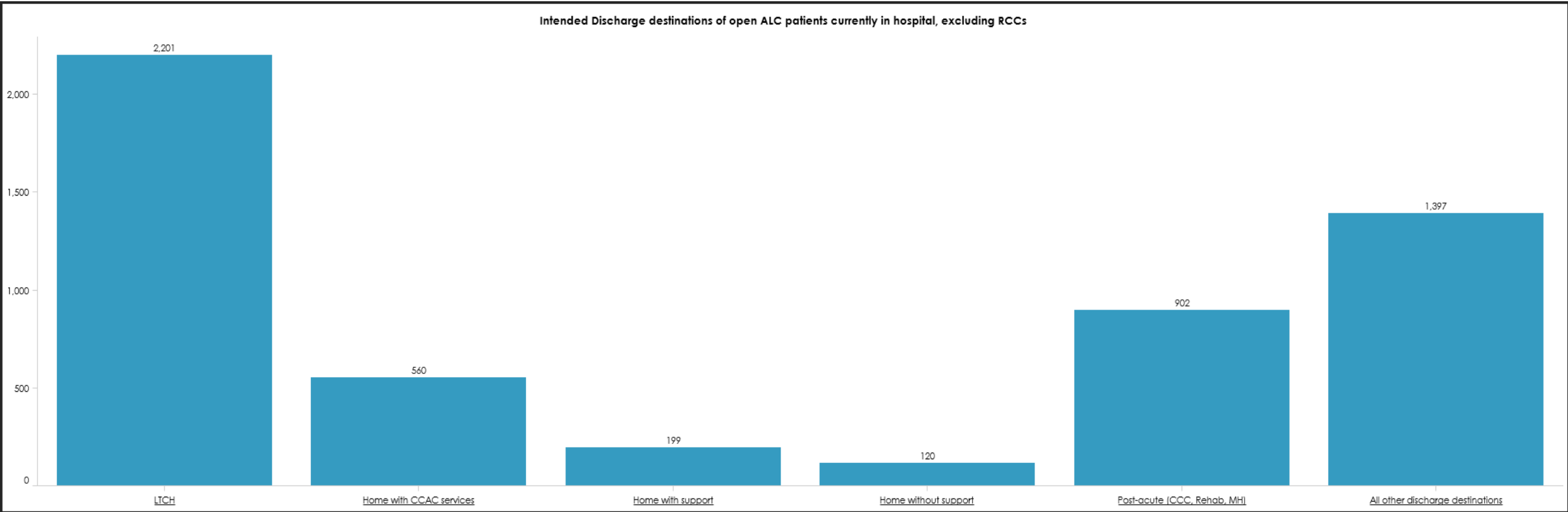


3838 confirmed COVID-19 patients (January 12, 2022)
Source: MOH VA Tool

Hospital Occupancy (Data as of January 12, 2022)

<div>All Beds (Total)</div> <div>92.6%</div> <div>+/- from previous day -0.2</div> <div>2,515</div> <div>Available beds</div>	<div>Acute</div> <div>96.4%</div> <div>+/- from previous day -0.6</div> <div>789</div> <div>Available beds</div>	<div>Post-acute</div> <div>85.8%</div> <div>+/- from previous day 0.2</div> <div>1,707</div> <div>Available beds</div>	<div>5,379</div> <div>ALC Open Cases</div> <div>Excludes RCCs</div>	<div>10.4%</div> <div>% waiting for homecare</div>	<div>40.9%</div> <div>% waiting for LTC</div>
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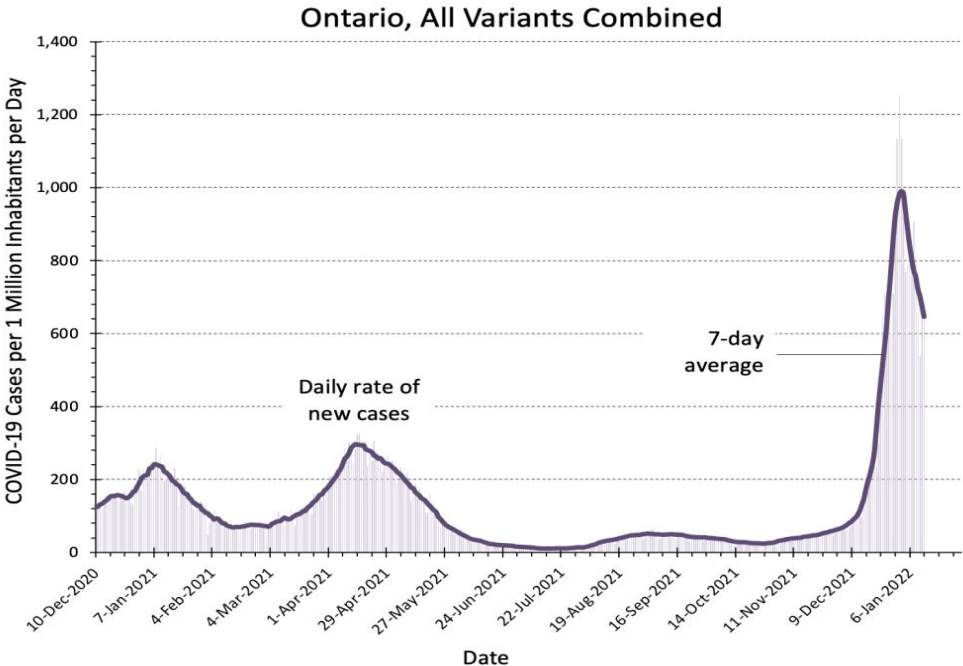
As of January 12, there are 376 ALC patients in RCC beds, over 2 out of 5 intended to be discharged to LTCH.



Highlights: COVID-19 Science Table Ontario Dashboard

Key Indicators	
Effective Reproduction Number R(t)	~*
Estimated Number of COVID-19 Cases per Day, on 13-Jan-2022	9,519
Change per week	-2,919
Doubling Time (Days)	~*
Estimated Percentage Caused by Omicron	98.3%
Test Positivity	23.2%
Change per week	-6.1%
COVID-19 Hospital Occupancy, on 13-Jan-2022	3,649
Change per week	+1358
Doubling Time (Days)	8.1
COVID-19 ICU Occupancy, on 13-Jan-2022	500
Change per week	+181
Doubling Time (Days)	8.9
Estimated Number of COVID-19 Deaths per Day, on 10-Jan-2022	30
Change per week	+16
COVID-19 Cases per 1 Million per Day, on 13-Jan-2022	646.1
Among Unvaccinated People	956.3
Among People Vaccinated with at Least 2 Doses	588.9
Reduction Associated with at Least 2 Vaccine Doses	-38.4%
COVID-19 Hospital Occupancy per 1 Million, on 13-Jan-2022	247.7
Among Unvaccinated People	900.4
Among People Vaccinated with at Least 2 Doses	189.4
Reduction Associated with at Least 2 Vaccine Doses	-79.0%
COVID-19 ICU Occupancy per 1 Million, on 13-Jan-2022	33.9
Among Unvaccinated People	207.7
Among People Vaccinated with at Least 2 Doses	19.2
Reduction Associated with at Least 2 Vaccine Doses	-90.8%
COVID-19 Vaccination, on 12-Jan-2022	
Number of People Vaccinated With at Least 1 Dose	12,319,449
Change per week	+69,726
Percent of People Aged 5+ Vaccinated With at Least 1 Dose	87.9%
Change per week	+0.5%
Number of People Vaccinated With at Least 2 Doses	11,504,282
Change per week	+59,099
Percent of People Aged 5+ Vaccinated With at Least 2 Doses	82.1%
Change per week	+0.4%
Number of People Vaccinated With 3 Doses	5,174,098
Change per week	+941,426
Percent of People Aged 5+ Vaccinated With 3 Doses	36.9%
Change per week	+6.7%

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



Current COVID-19 Risk in Ontario by Vaccination Status

