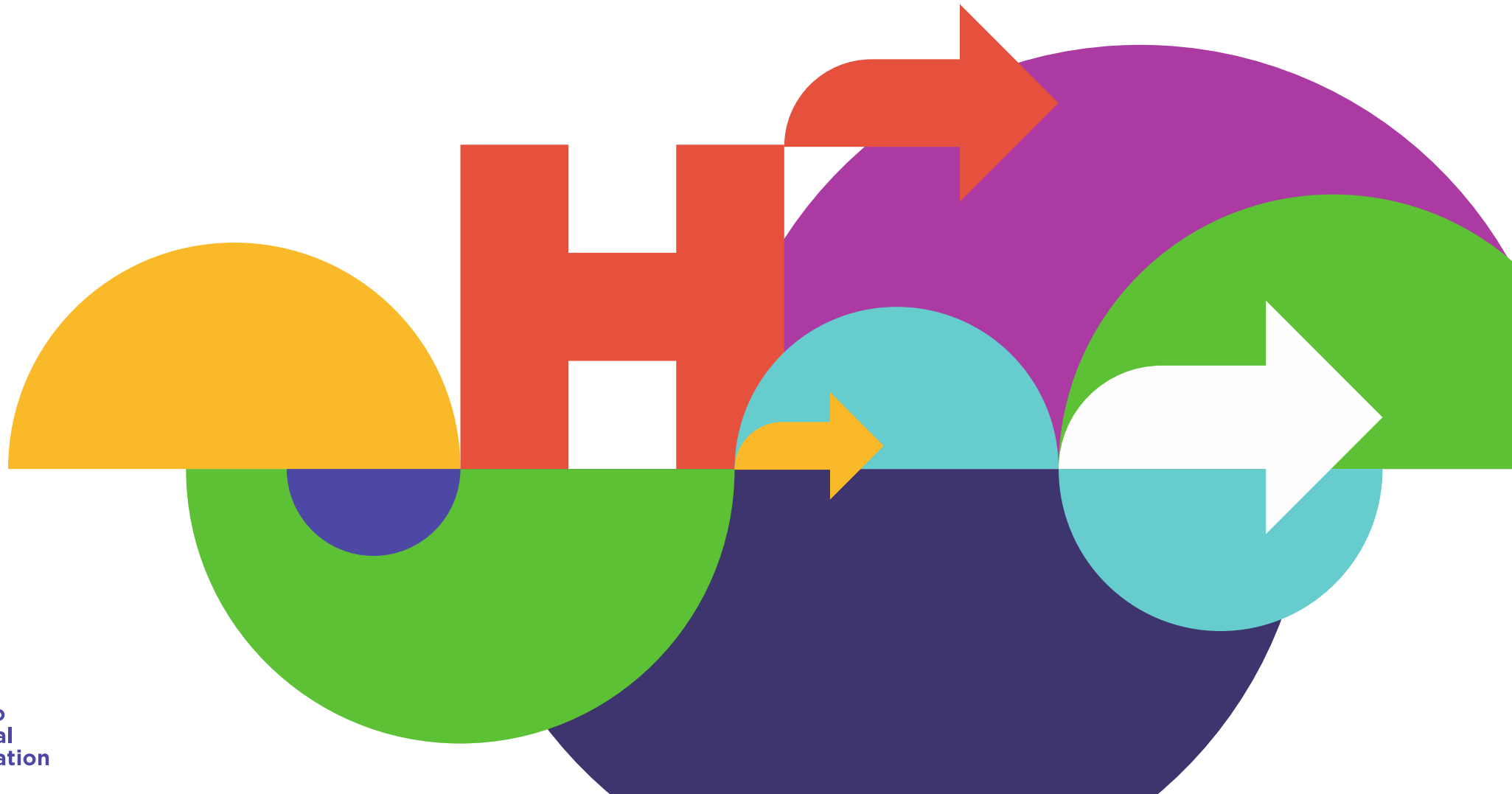


COVID-19 Hospital Capacity

Thursday, February 10, 2022



Hospital Capacity: Critical Care

Data source: Critical Care Information System
All data as of **February 9, 2022**

Total Funded* ICU Bed Capacity				Critical Care Census**				% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	(Adult)	1599	Vented	1808	(Adult)	437	CRCI	77.2% (Adult)	535 (Adult)
		744	Non-Vented			1371	NON-CRCI		
105	(Paediatric)	78	Vented	58	(Paediatric)	4	CRCI	55.2% (Paediatric)	47 (Paediatric)
		27	Non-Vented			54	NON-CRCI		

7-day average CRCI patients in ICU (Adult)	471	% Pts in ICU who have CRCI		% vented pts who have CRCI	
	31	24.2% (Adult)		64.5% (Adult)	
	1	6.9% (Paediatric)		75.0% (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	137	24.0%	82.1%	124	↓	-5
Central	477	110	29.4%	78.4%	103	↓	-7
Toronto	464	61	18.0%	72.8%	126	↓	-2
East	574	100	23.6%	73.9%	150	↓	-2
North	134	29	28.4%	76.1%	32	↑	4

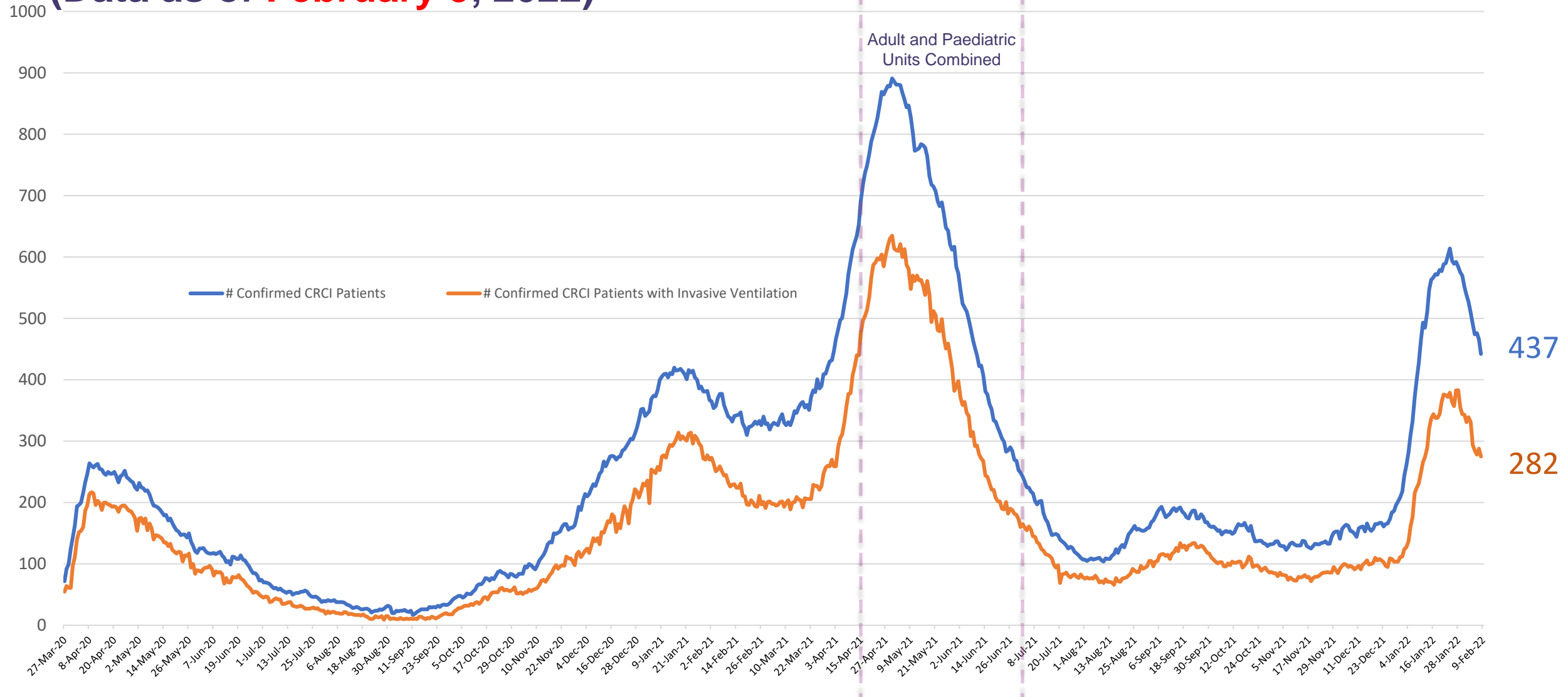
Definition: COVID-19 pts are represented by CRCI (COVID-Related Critical Illness and is defined as: Admission to the ICU because of a clinical syndrome consistent with COVID, AND the patient has had a positive test that is consistent with acute COVID illness). Please note that CCSO data does not currently 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 **4 paediatric CRCI cases, **3** 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 9, 2022**)

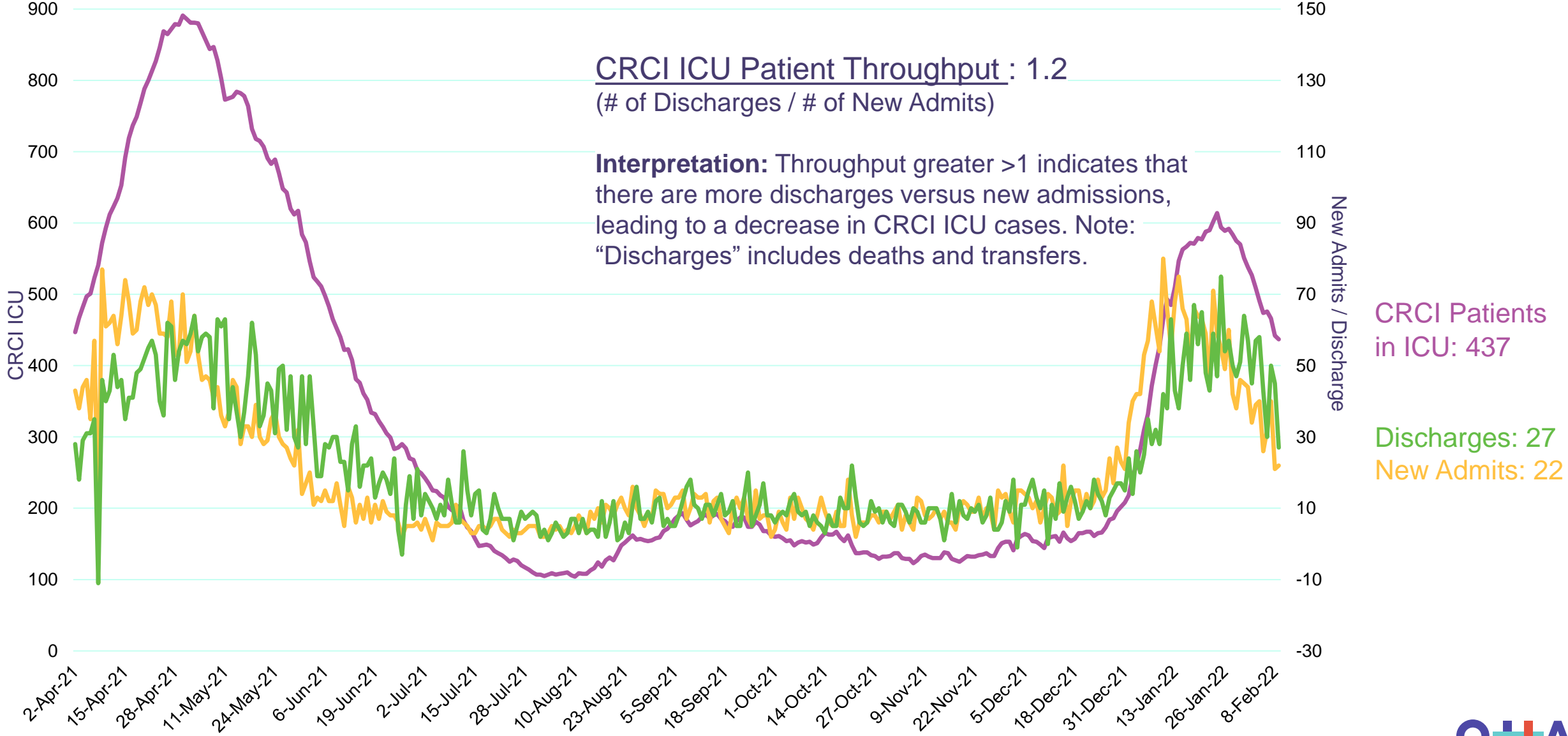


"COVID-related critical illness (CRCI) Census: Admission to the ICU because of a clinical syndrome consistent with COVID, AND patient has had a positive test that is consistent with acute COVID illness.
Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID."

CRCI ICU Patient Throughput (starting April 2021 onward)

(Data as of February 9, 2022)

Data source: Critical Care Information System

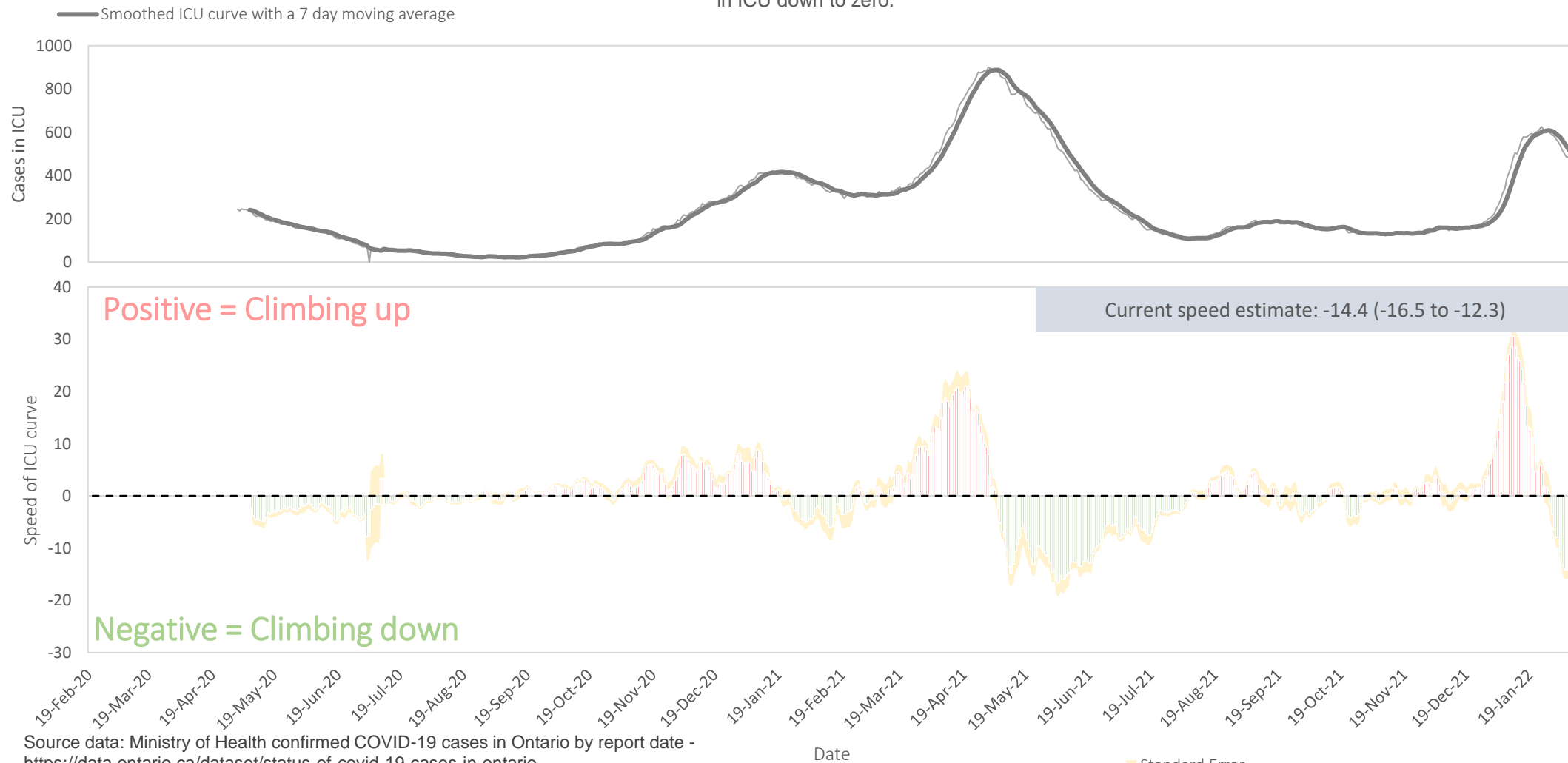


Technical Note: Patient Throughput based on [Ontario Health - CCO methodology](#)



COVID-19 ICU curve and speed of ICU curve: as of **February 9, 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.

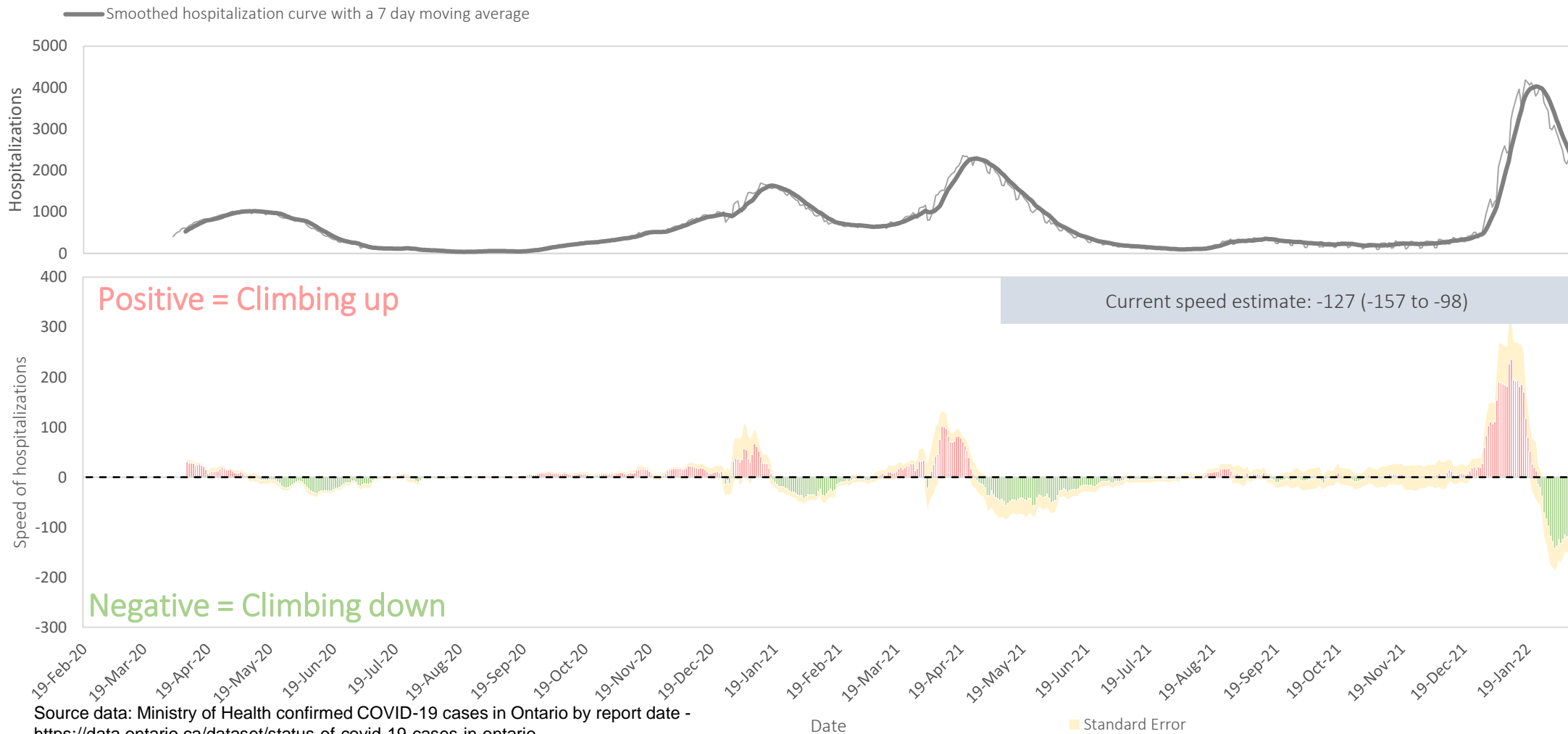


Source data: Ministry of Health confirmed COVID-19 cases in Ontario by report date - <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>

Collaboration with Jonathan Wang @wanghoaneng

COVID-19 hospitalizations curve and speed of hospitalizations: as of **February 9, 2022** in Ontario

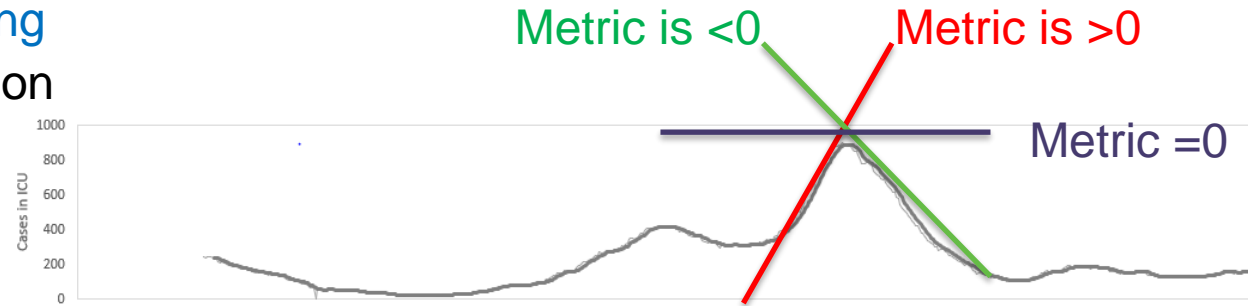
The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed > 0**, then the trend of hospitalizations is speeding up. When the **speed < 0**, then trend of hospitalizations is slowing down. When **speed = 0**, then the hospitalizations have plateaued. The goal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

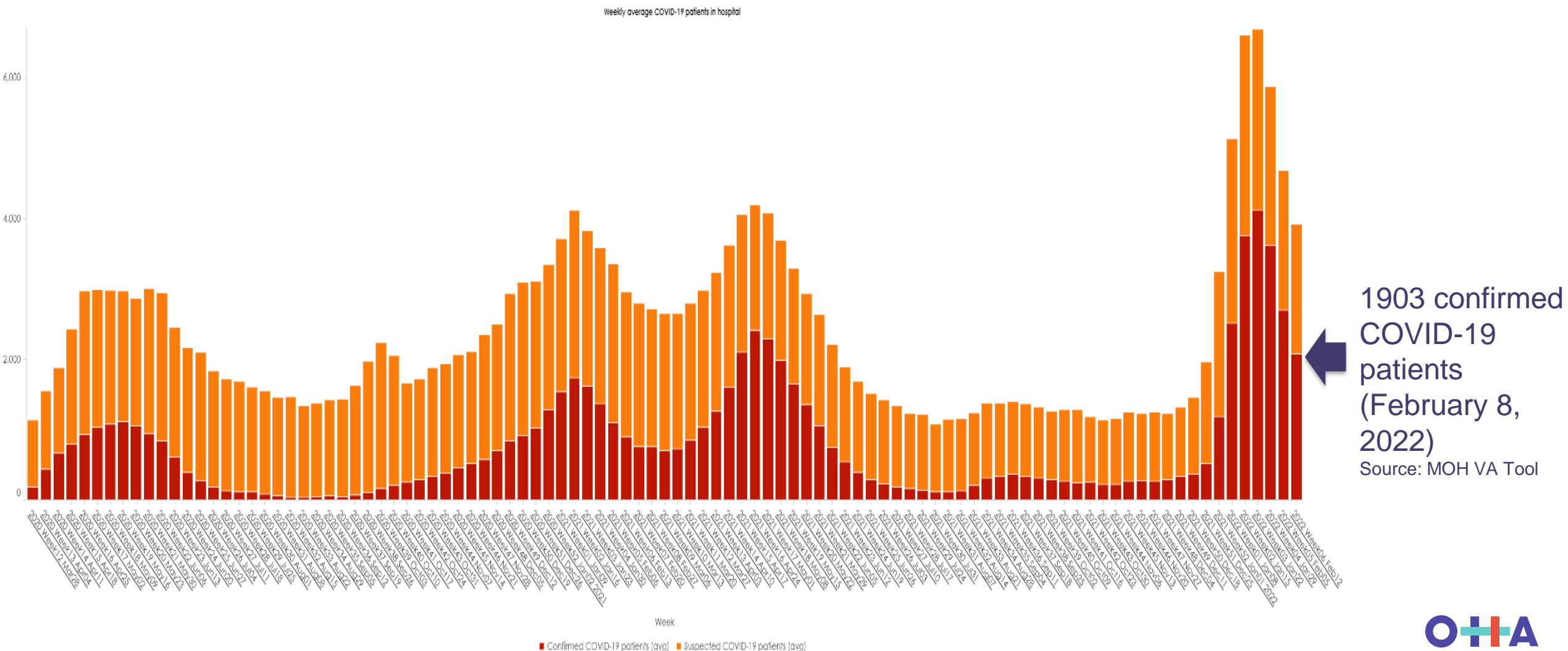


- The speed of COVID-19 spread is measured as the slope of the hospitalization/ICU curve.
- When the **speed metric is > 0**, then the trend of hospitalizations/ICU cases is speeding up.
- When the **speed metric < 0**, then the trend of hospitalizations/ICU cases is slowing down.
- When **speed = 0**, 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 February 8, 2022)

Source: MOH VA Tool
Data extracted on February 7, 2022

8



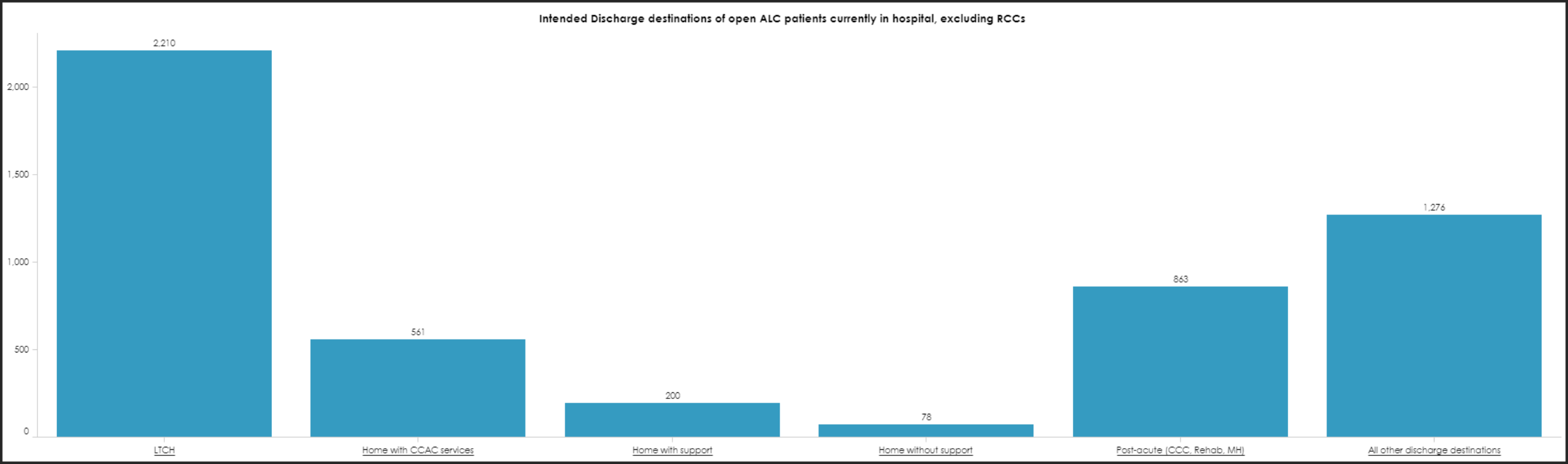
Hospital Occupancy (Data as of February 8, 2022)

Source: MOH VA Tool
Data extracted on February 7, 2022 9

All Beds (Total)	Acute	Post-acute
92.5%	95.6%	87.1%
+/- from previous day 0.6	+/- from previous day 0.9	+/- from previous day -0.1
2,499	923	1,526
Available beds	Available beds	Available beds

5,215	10.8%	42.7%
ALC Open Cases Excludes RCCs	% waiting for homecare	% waiting for LTC

As of February 8 , there were 357 ALC patients in RCC beds, where 1 out of 2 intended to be discharged to LTCH.

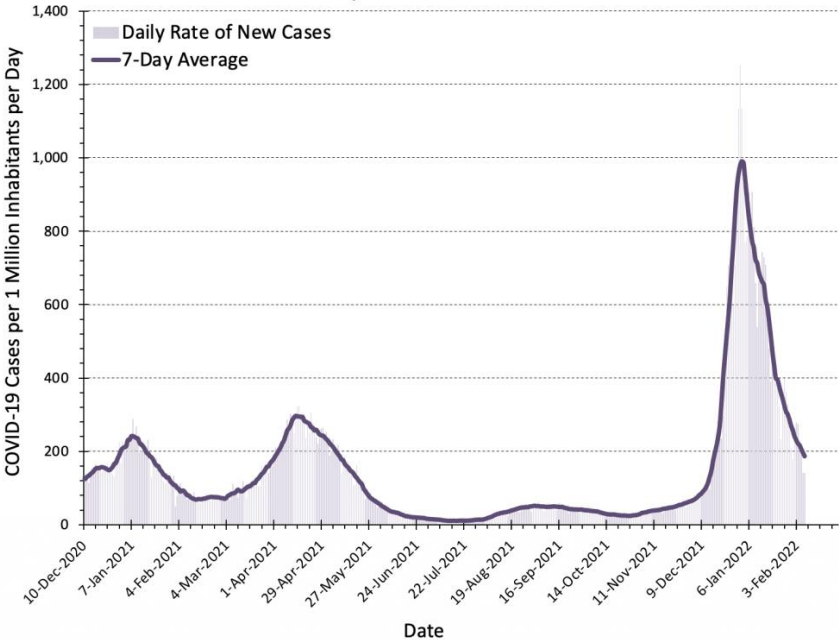


Highlights: COVID-19 Science Table Ontario Dashboard

Key Indicators for Ontario

Effective Reproduction Number R(t) Based on COVID-19 Cases	~*
Estimated Number of COVID-19 Cases per Day, on 09-Feb-2022	2,651
Change per Week	-903
Halving Time (Days)	15.2
Estimated Percentage Caused by Omicron	100.0%
Standardized Wastewater Signal, on 04-Feb-2022	0.52
Change per Week	-0.08
Halving Time (Days)	111.9
Test Positivity	13.0%
Change per Week	-0.6%
COVID-19 Hospital Occupancy, on 08-Feb-2022	2,095
Change per week	-877
Halving Time (Days)	14.9
COVID-19 ICU Occupancy, on 08-Feb-2022	449
Change per Week	-106
Halving Time (Days)	25.9
Estimated Number of COVID-19 Deaths per Day, on 06-Feb-2022	53
Change per Week	-7
COVID-19 Cases per 1 Million per Day, on 09-Feb-2022	180.0
Among Unvaccinated People	374.2
Among People Vaccinated with at Least 2 Doses	141.8
Reduction Associated with at Least 2 Vaccine Doses	-62.1%
COVID-19 Hospital Occupancy per 1 Million, on 08-Feb-2022	142.2
Among Unvaccinated People	626.3
Among People Vaccinated with at Least 2 Doses	104.6
Reduction Associated with at Least 2 Vaccine Doses	-83.3%
COVID-19 ICU Occupancy per 1 Million, on 08-Feb-2022	30.5
Among Unvaccinated People	194.2
Among People Vaccinated with at Least 2 Doses	18.4
Reduction Associated with at Least 2 Vaccine Doses	-90.5%
COVID-19 Vaccination in Ontario, on 08-Feb-2022	
Number of People Vaccinated With at Least 1 Dose	12,508,829
Change per Week	+33,622
Percent of People Aged 5+ Vaccinated With at Least 1 Dose	89.3%
Change per Week	+0.2%
Number of People Vaccinated With at Least 2 Doses	11,847,856
Change per Week	+91,697
Percent of People Aged 5+ Vaccinated With at Least 2 Doses	84.6%
Change per Week	+0.7%
Number of People Vaccinated With 3 Doses	6,650,287
Change per Week	+192,573
Percent of People Aged 18+ Vaccinated With 3 Doses	55.6%
Change per Week	+1.4%

Estimated Rate of COVID-19 Cases per 1 Million Inhabitants per Day in Ontario
Ontario, All Variants Combined



Current COVID-19 Risk in Ontario by Vaccination Status

