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Advancing cardiac, stroke and vascular care

CorHealth COVID-19 Heart Failure Stakeholder Forum #5

May 13, 2020 6:00-7:00 pm

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

Conference ID: 822279661#

Agenda

Description	Presenter	Time
1. Welcome • Recap of April 22nd Meeting • COVID-19 System Planning Updates • Update on the Medly Program • Meeting Objectives	Sheila Jarvis	18:00
2. Update: Cardiovascular Rehabilitation	Karen Harkness	18:05
3. COVID-19 – Update on Current Data	Dr. Heather Ross	18:10
4. Heart Failure Data • Heart Failure Modelling • Heart Failure Survey Results	Dr. Heather Ross/Karen Harkness	18:15
5. Ambulatory Heart Failure Activity—Planning for Resuming Care • IPAC Guidelines on Resuming Care	Dr. Heather Ross	18:30
6. Open Forum Discussion • Opportunity to share current local activities and concerns regarding ambulatory HF care	Dr. Heather Ross	18:40
7. Other Considerations & Next Steps	Dr. Heather Ross / Karen Harkness	18:55

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Welcome

SHEILA JARVIS

Recap of April 22nd Meeting

- Key Themes Discussed:
  - An overview of the current global and provincial landscape of COVID-19
  - A review of a COVID-19 clinical case, and recent research describing the temporal patterns of COVID-19 viral shedding
  - A phased approach for adult cardiac transplant ramp down and restart, as per Trillium Gift of Life
  - Local experiences in the HF community during COVID-19 were shared and discussed regarding the potential for moving towards resuming services in the next few weeks
- Meeting summary notes can be found on our website: https://www.corhealthontario.ca/CorHealth-Summary-Notes-Heart-Failure-Forum4-(April-22-2020).pdf

COVID-19 System Planning Updates

- Ontario Health released "A Measured Approach to Planning for Surgeries and Procedures During the COVID-19 Pandemic" on May 7, 2020
  - Memo and Framework sent to all hospital and regional leadership
  - Provides guidance for reintroducing scheduled surgical and procedural services including criteria and prioritization considerations
  - Hospitals will be expected to reserve 15% acute care capacity
  - Feasibility assessments reviewed at the regional level
  - No confirmed indication for when the resumption of services will be triggered
  - Critical supplies, particularly PPE, required prior to resuming services
- The report can be found on our website: https://www.corhealthontario.ca/OH-Framework-A-Measured-Approach-to-Planning-for-Surgeries-and-Procedures-During-the-COVID-19-Pandemic-(May-7-2020).pdf

Remote HF Monitoring and Virtual Care
UPDATE ON *The Medly Program*

- During the first CorHealth HF Forum (March 25th, 2020), stakeholders were introduced to *The Medly Program (Medly)* as an evidence-based option designed specifically for the HF population
- Dr. Joe Caffazzo and the *Medly* team, with CorHealth, engaged HF programs across the province and hosted an information session on *Medly*, which included logistics of rapid implementation
- Several hospital-based HF programs expressed interest in *Medly,* with an estimated 2000 HF patients who could benefit from remote monitoring and virtual care if enrolled in *Medly*
- Despite fees associated with *Medly* being 'cost-recovery' only, many hospitals indicated that they would be unable to fund *Medly* within their existing budgets and financial sources
- CorHealth has prepared a briefing note to recommend that the Ministry consider funding of *Medly*, as both an immediate solution, and a long-term option to managing HF patients

Meeting Objectives

1. Provide the opportunity for stakeholders to discuss and share what is happening locally in the Heart Failure Community, in the context of COVID-19.
2. Provide an update on COVID-19 provincial & global data.
3. Discuss Heart Failure Data based on modelling work, and survey on ambulatory activity.
4. Discuss planning for resuming care & current local activities and concerns regarding ambulatory Heart Failure care.

Cardiovascular Rehab: Update

Identification of a need for provincial guidance along the care continuum

- Guidance on how the delivery of CR can strive to meet the Standards for the Provision of Cardiovascular Rehabilitation in Ontario (CR Standards) in a virtual environment during the COVID-19 pandemic.
- 3 working group meetings led by Dr. Paul Oh with the support of CorHealth
- May 8th- First Provincial Forum (90 participants) presented draft of Guidance memo
- Cardiac Memo #12 – Recommendations for an Approach to the Provision of Cardiovascular Rehabilitation during COVID-19 in Ontario was released on May 12th, and is available on the CorHealth Resource Center Website: https://www.corhealthontario.ca/CorHealth-COVID-19-Memo12-Cardiovascular-Rehab-(May-12-2020).pdf
- Other activities to support cardiovascular rehabilitation during COVID-19:
  - National survey of CR programs (led by UHN team)
  - National document released by the CCS Rapid Response Team (date TBD)

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COVID-19: Update on Current Data

DR HEATHER ROSS

COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

Total Confirmed
4,281,838

Confirmed Cases by Country/Region/Sovereignty

- 1,370,016 US
- 242,271 Russia
- 228,030 Spain
- 227,741 United Kingdom
- 221,216 Italy
- 178,349 France
- 178,214 Brazil
- 173,369 Germany
- 141,475 Turkey
- 112,725 Iran
- 84,021 China
- 75,048 India
- 72,419 Canada
- 72,059 Peru
- 53,981 Belgium
- 43,410 Netherlands

Admin0

Last Updated at (M/D/YYYY)
5/13/2020, 7:32:27 AM

Cumulative Confirmed Cases | Active Cases | Incidence Rate | Case-Fatality Ratio | Testing Rate | Hospitalization Rate

187
countries/regions

Lancet Inf Dis Article: Here. Mobile Version: Here.
Lead by JHU CSSE. Automation Support: Esri Living Atlas team and JHU APL. Contact US. FAQ.

Data sources: WHO, CDC, ECDC, NHC, DXY, 1point3acres, Worldometers.info, BNO, the COVID Tracking Project (testing and hospitalizations), state and national government health departments, and

Global Deaths
292,376

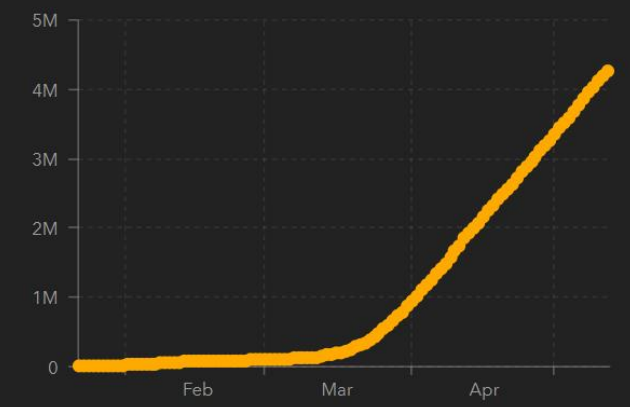
- 82,389 deaths US
- 32,769 deaths United Kingdom
- 30,911 deaths Italy
- 26,994 deaths France
- 26,920 deaths Spain
- 12,461 deaths Brazil
- 8,843 deaths Belgium
- 7,756 deaths

Global Deaths

US State Level
Deaths, Recovered

- 27,284 deaths, 58,679 recovered New York US
- 9,531 deaths, 15,642 recovered New Jersey US
- 5,141 deaths, recovered Massachusetts US
- 4,674 deaths, 22,686 recovered Michigan US
- 3,914 deaths, recovered Pennsylvania US
- 3,601 deaths, recovered Illinois US

US Deaths, Reco…

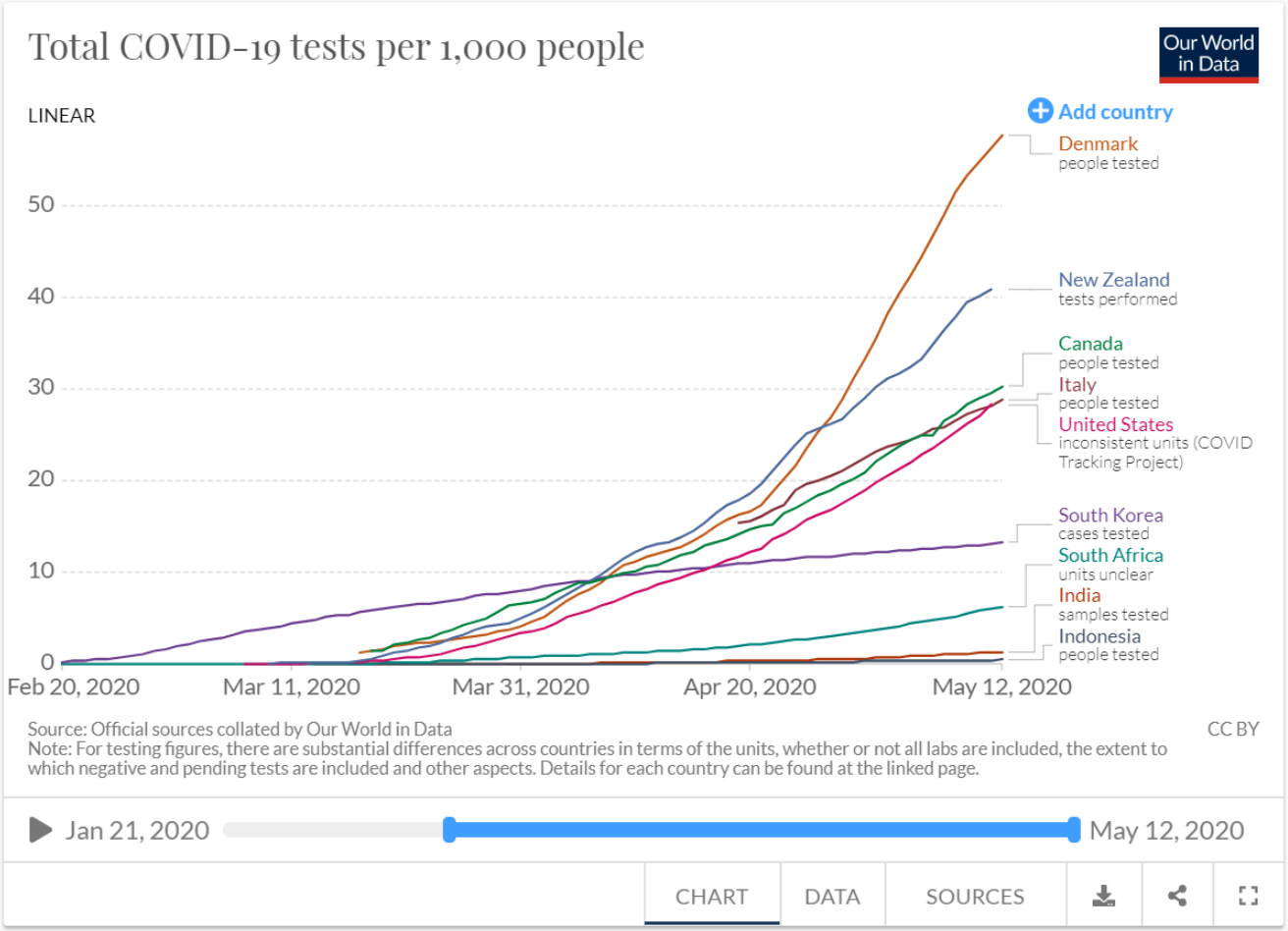


Confirmed | Logarithmic | Daily Cases

Add a country to all charts...

Select countries to show on all charts

How many **total tests** have been performed?



This chart shows the number of *total* tests per thousand people.

In all our charts you can download the data

We want everyone to built on top of our work and therefore we always make all our data always available for download. Click on the 'Data'-tab below the chart and you can download the shown data for all countries in a simple to use csv file.

How to interact with this chart

As before you can add and compare any selection of countries using the Add country button – once you have added more countries and you bring the ends of the blue time slider to the same point in chart you can create a **bar chart**.

Subscribe to receive updates

Feedback

Testing coverage

The chart here shows a measure of testing coverage – tests per thousand people.

Countries are reporting testing data in different ways: some report the number of tests, others report the number of people tested. This distinction is important – people may be tested many times, and the number of tests a person has is likely to vary across countries.[16]

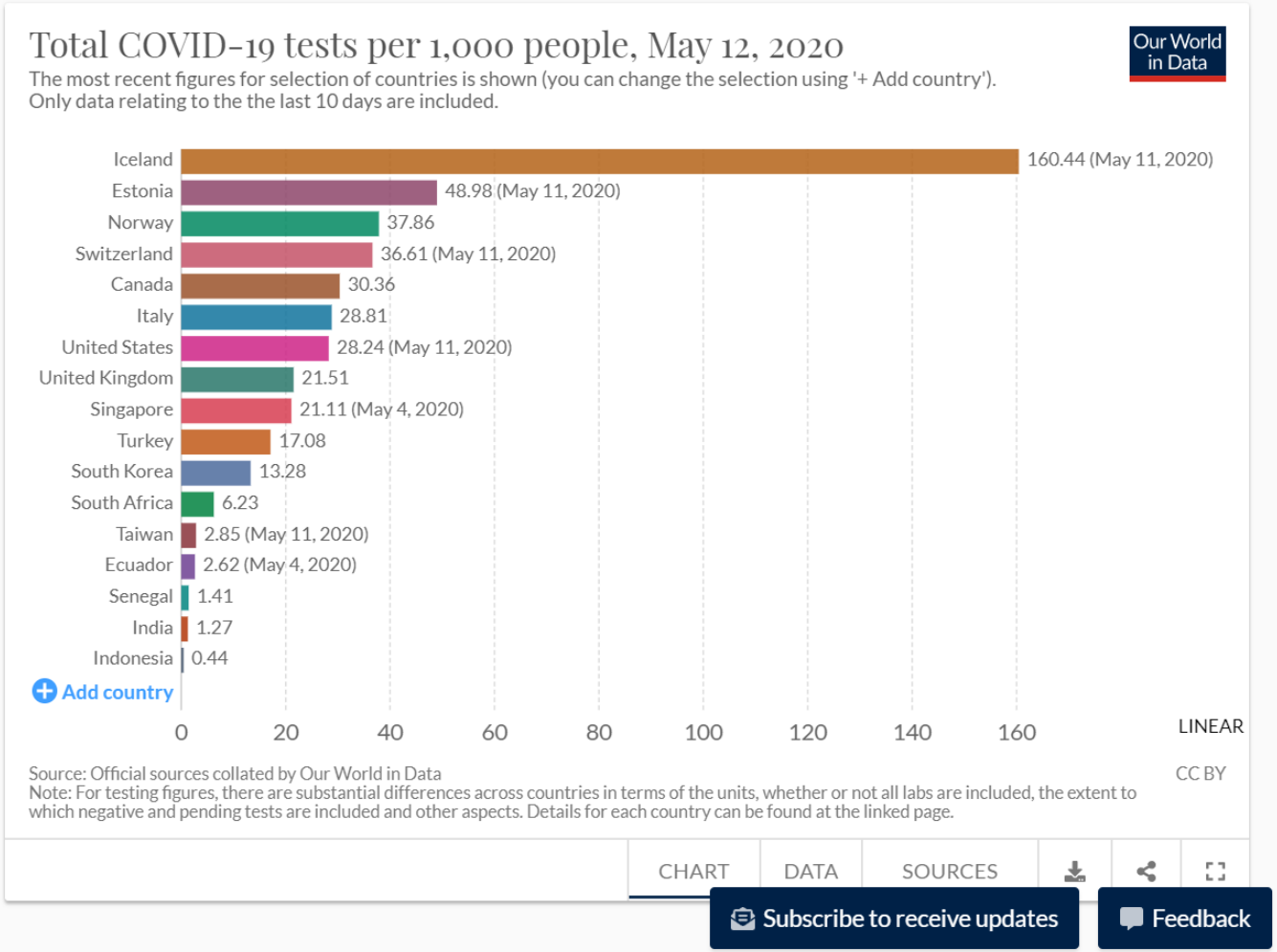
Across different countries, we see an enormous range in testing coverage. In Iceland there have been more than 100 tests per thousand people – far more than in any other country. In Indonesia, testing coverage is very low – only 0.1 tests per thousand people.[17]

Generally, we would expect that more testing means more reliable data on confirmed cases, for two reasons.

Firstly, a greater degree of testing provides us with a larger 'sample' of people for which their infection status is known. If everybody was tested, we would know the true number of people who are infected.

Secondly, it may be the case that countries with a high capacity for testing do not need to ration tests as much. Where the capacity for testing is low, tests may be reserved (or 'rationed') for particularly high-risk groups. Such rationing is one of the reasons that tested people are not representative of the wider population.

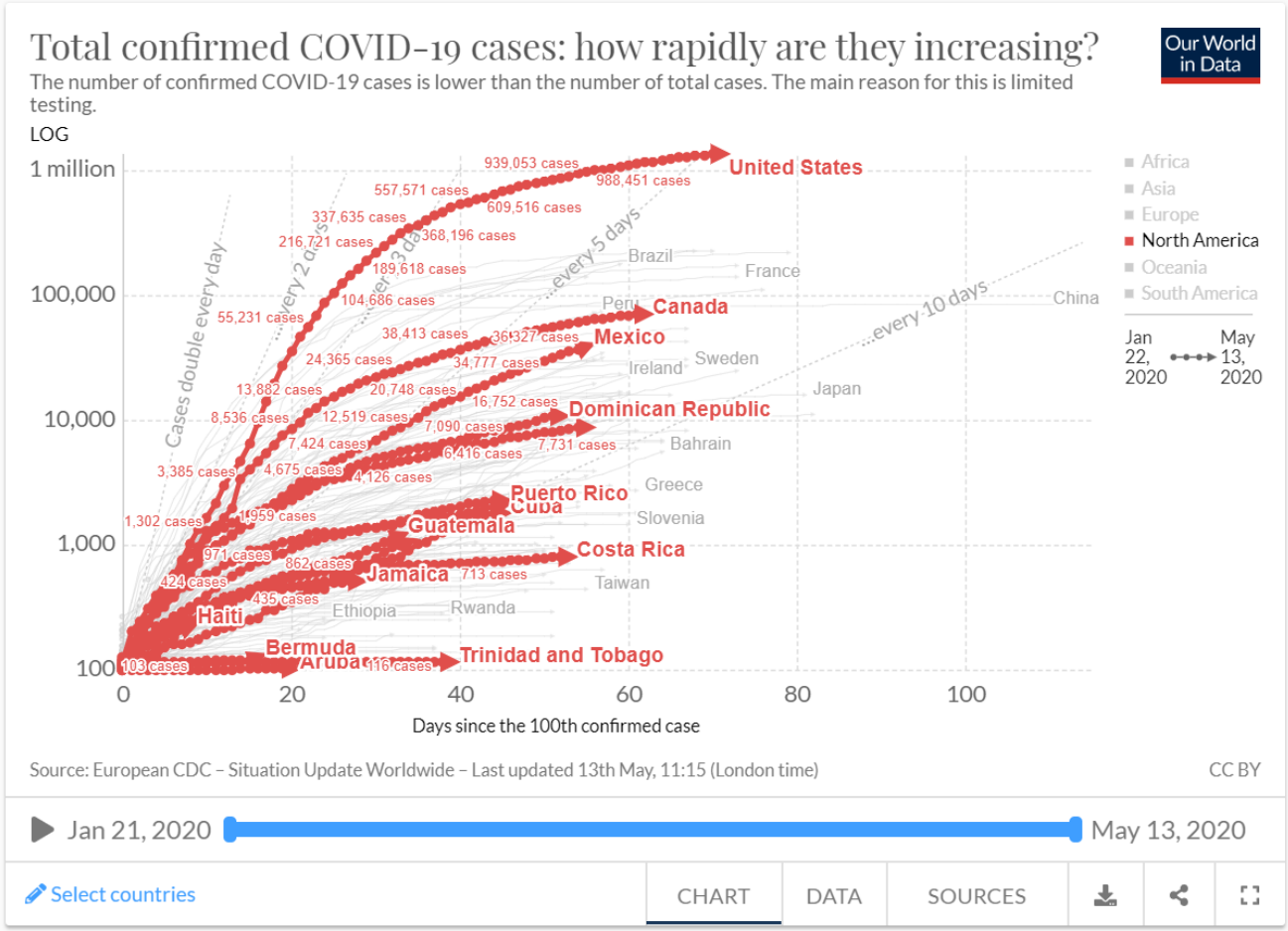
As such, where testing coverage is higher, the 'sample' of tested people may provide a less biased idea of the true prevalence of the virus.[18]



Add a country to all charts...

Select countries to show on all charts

Total confirmed cases: how rapidly have they increased compared to other countries?



The trajectory for every country begins on the day when that country had 100 confirmed cases. This allows you to make comparisons of how quickly the number of confirmed cases has grown in different countries.

Keep in mind that in countries that do very little testing the total number of cases can be much higher than the number of confirmed cases shown here.

How you can interact with this chart

Clicking on any country in the chart highlights that country. If you click on several countries you can create a view in which you can compare several countries.

Any country you might not see immediately you can find via the **'Select Countries'** in the bottom left. Just type the name in the search box there.

Related chart:

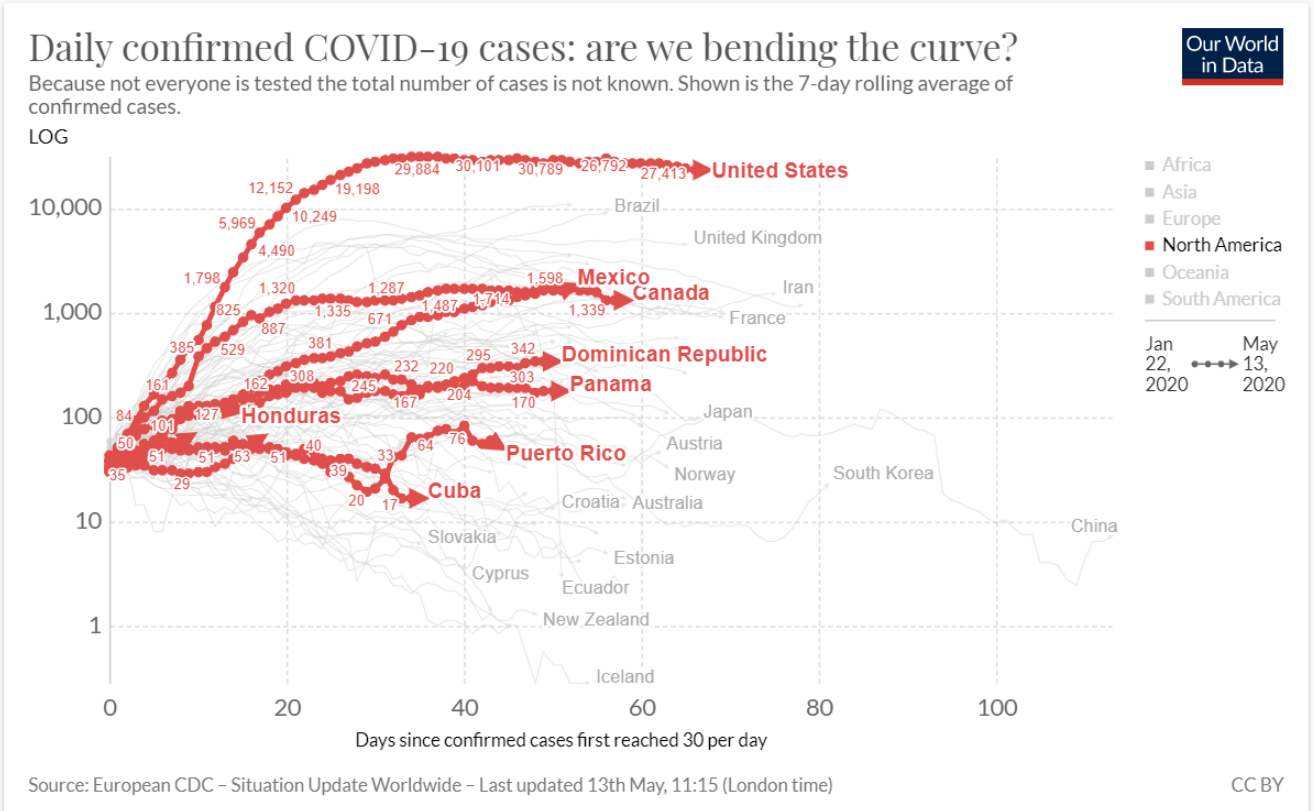
Subscribe to receive updates

Feedback

Add a country to all charts...

Select countries to show on all charts

Daily confirmed cases: are we bending the curve?



Jan 21, 2020 — May 13, 2020

Select countries | CHART | DATA | SOURCES

To bring the pandemic to an end, **every country has to bring the curve of daily cases down to zero.**

This chart allows you to track whether countries are achieving this or not.

This chart shows the same data as before, but now adjusted for the size of the population – it shows **daily confirmed cases per million people**.

How you can interact with this chart

The default log view is helpful to compare the growth rates between countries: on a logarithmic scale the steepness of the line corresponds to the growth rate.

But in this chart, as in many of our charts, you can switch to a linear axis. Just click on 'LOG'.

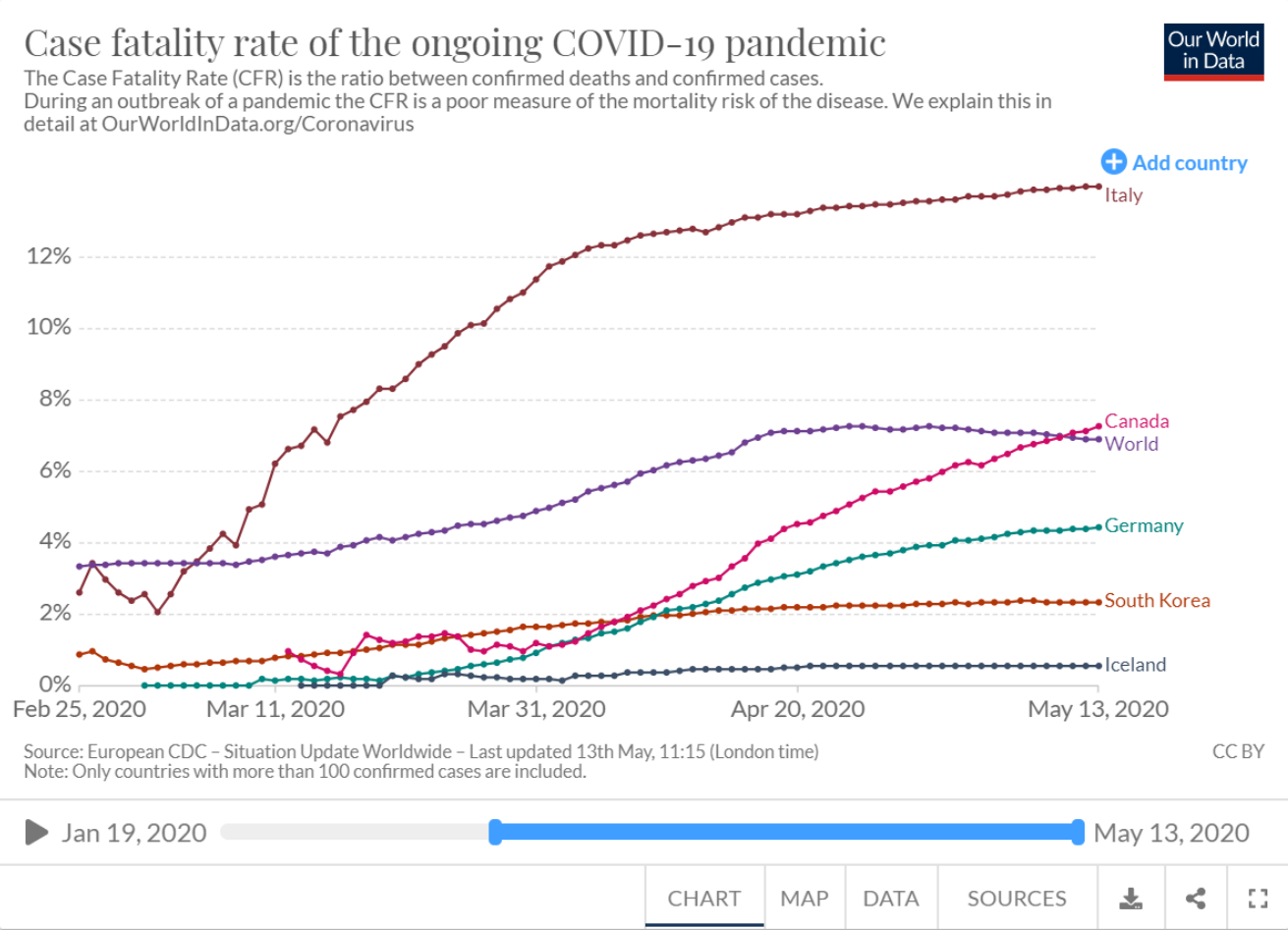
Here is an explanation for how to read logarithmic axes.

Related chart:

Subscribe to receive updates

Feedback

The case fatality rate

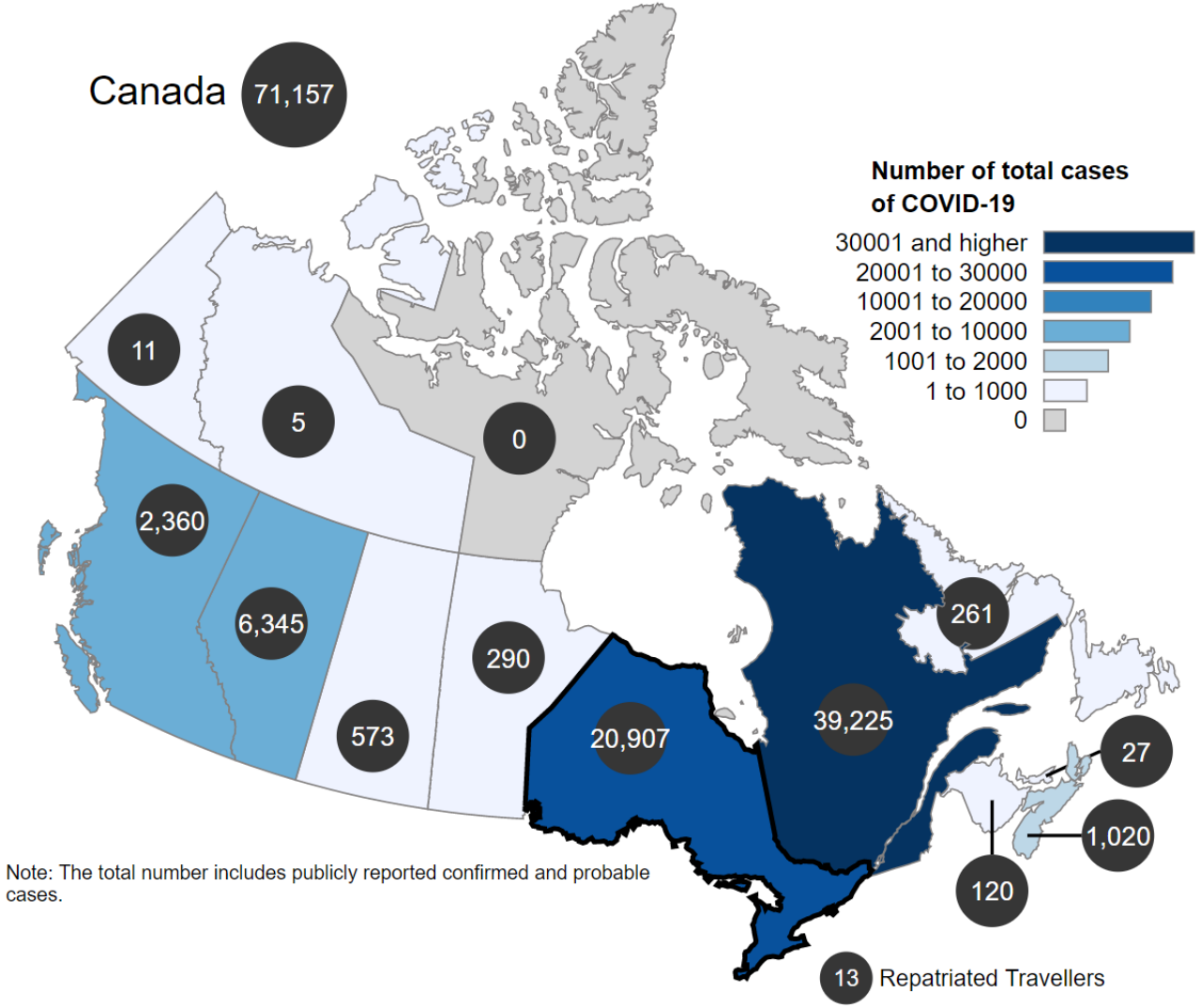


The case fatality rate is simply the ratio of the two metrics shown in the chart above.

The case fatality rate is the number of confirmed deaths divided by the number of confirmed cases.

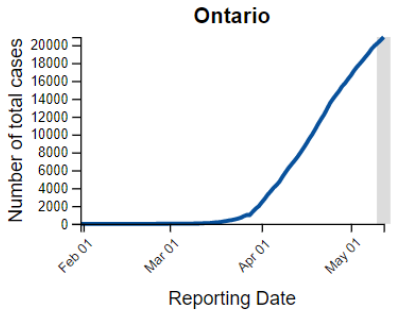
This chart here plots the CFR calculated in just that way.

During an outbreak – and especially when the total number of cases is not known – **one has to be very careful in interpreting the CFR**. We wrote a detailed explainer on what can and can not be said based on current CFR figures.



Note: The total number includes publicly reported confirmed and probable cases.

The number of total cases of COVID-19 in **Ontario** was **20,907** as of May 12, 2020.



▶ Play .csv

▶ Map - Total Number of COVID-19 Cases in Canada - Text Description

Additional COVID-19 case information:

COVID-19 Virtual Assistant

Public Health Agency of Canada | Agence de la santé publique du Canada

Canada

CORONAVIRUS DISEASE 2019 (COVID-19)

DAILY EPIDEMIOLOGY UPDATE

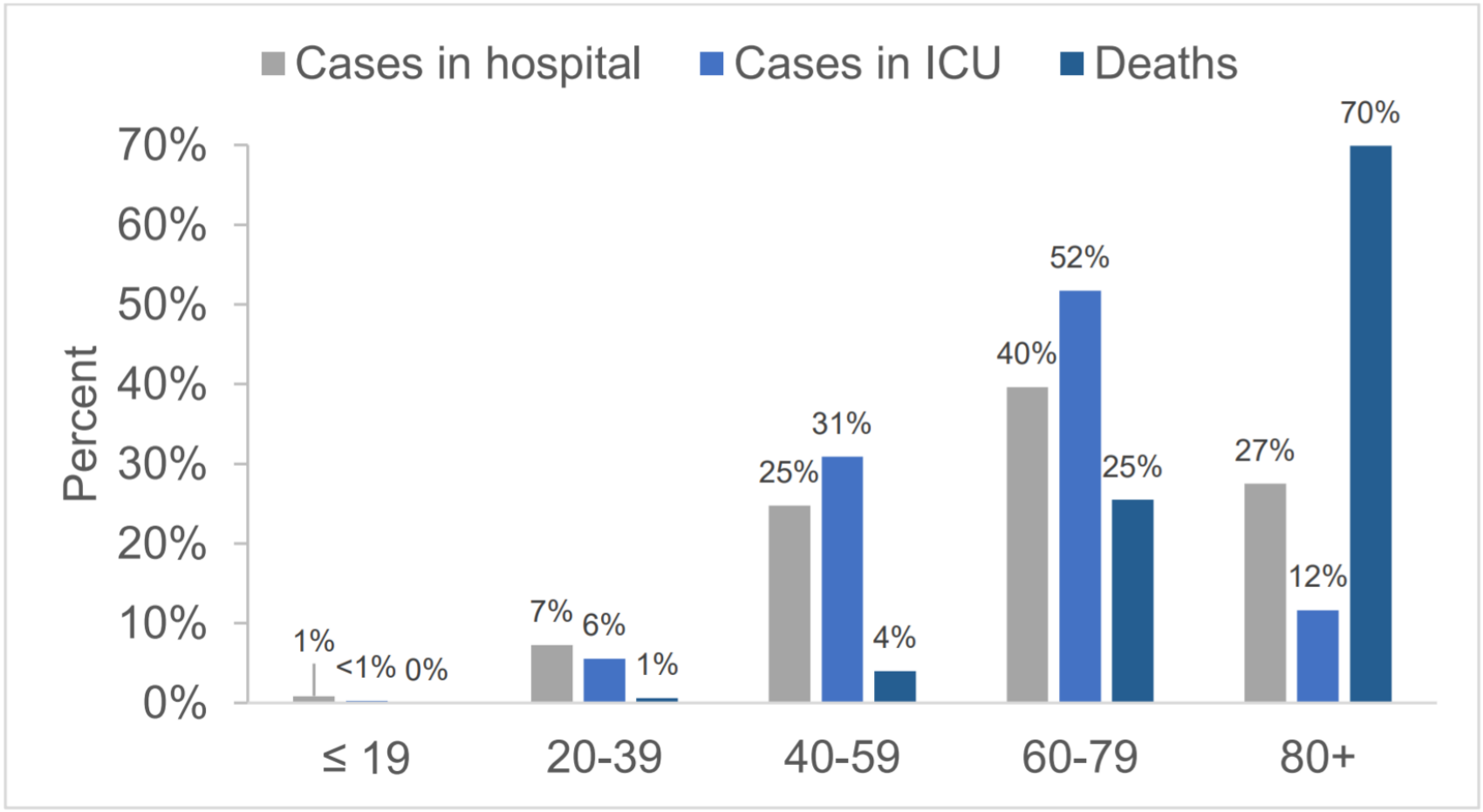
Updated: 12 May 2020, 11:00 ET

70 342 CONFIRMED CASES	**33 254 (47%)** RECOVERED	**5 049 (7%)** DEATHS
1 186 NEW CASES	**30 452** PEOPLE TESTED PER 1 000 000	**5.7%** PERCENT POSITIVE, CUMULATIVE

KEY UPDATES

- New cases continue to be reported across the country, however with a decreasing trend in daily reported cases observed.
- Quebec continues to report the highest number of cases of COVID-19 in Canada (Figure 1), since 23 March, 2020.
- No new deaths were reported in ten jurisdictions within the past 24 hours.
- The majority of deaths (94%) were reported from Quebec and Ontario.

Figure 4. Proportion of COVID-19 cases hospitalized, admitted to ICU and have died in Canada, by age group, as of 12 May 2020



https://www.ontario.ca/page/how-ontario-is-responding-covid-19#section-0

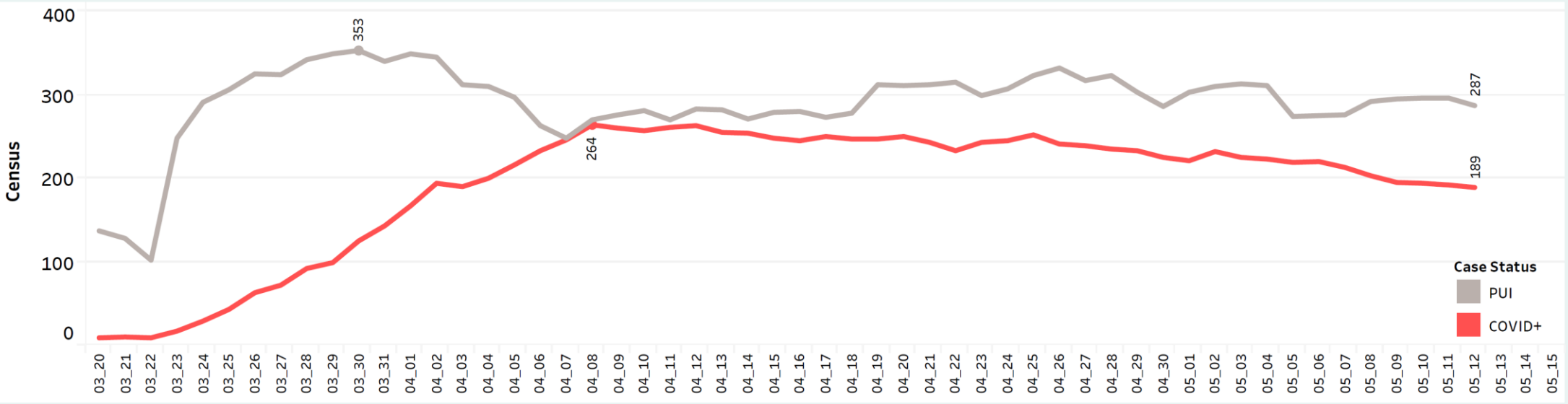
Summary of cases of COVID-19: Ontario, January 15, 2020 to May 11, 2020

	Number	Percentage
Number of cases[1]	20,907	N/A
Change from previous report	361	1.8% increase
Resolved[2]	15,391	73.6
Deceased[3]	1,725	8.3

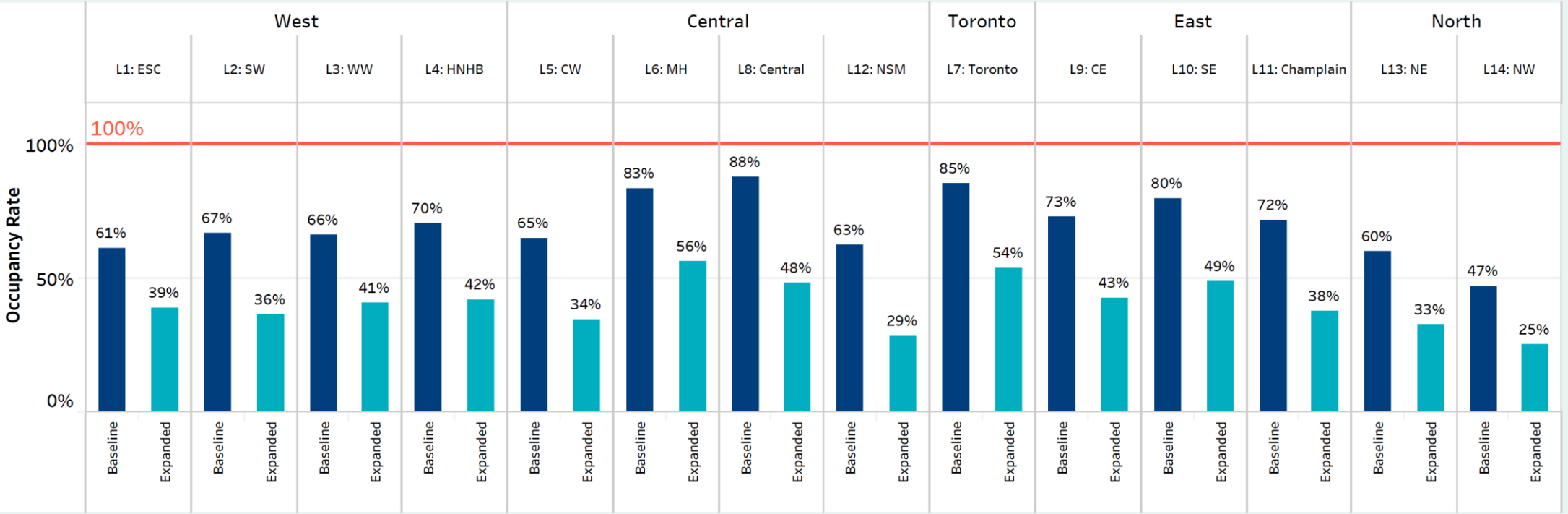
https://www.ontario.ca/page/how-ontario-is-responding-covid-19#section-0

Testing		
Total tests completed[4]	459,921	N/A
Total tests completed in the previous day[5]	11,957	N/A
Currently under investigation[6]	10,811	N/A
Hospitalizations		
Number of patients hospitalized with COVID-19[7]	1,025	N/A
Number of patients in ICU[8] with COVID-19	192	N/A
Number of patients in ICU[8] on a ventilator with COVID-19	146	N/A

Daily Trend of Critical Care COVID+ and PUI Census



Critical Care Bed Occupancy Rate for Baseline Capacity and Expanded ICU Capacity



art-bd.shinyapps.io/Ontario_Health_Unit_IDEA_model/

Select a public health unit (only displaying health units reporting at least 1 week with cumulative cases >5)

Health Unit

Toronto

Download Health Unit Projections

Download Ontario Projections

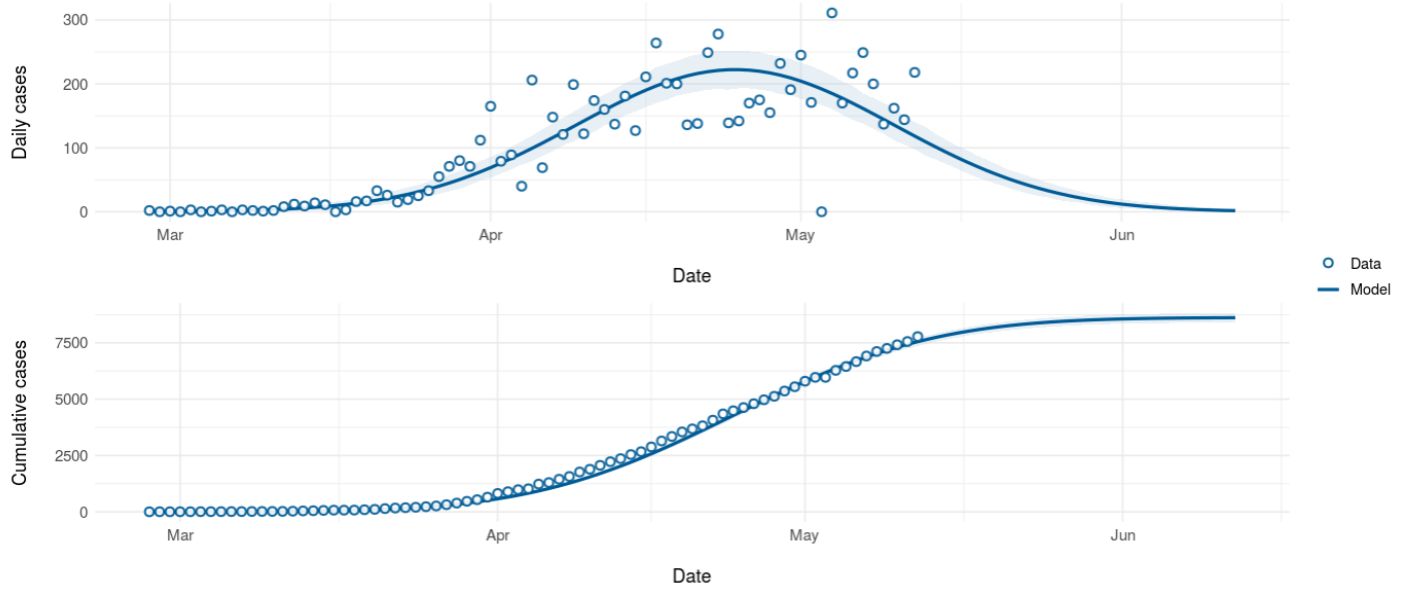
Daily fits to reported case count data are presented for health units reporting substantial COVID-19 activity. Forecasts are based on reported case data collected by the COVID-19 Canada Open Data Working Group.

Projected cases are shown for 30 days into the future. Lines represent best-fit estimates to the data. Shaded areas represent 95% prediction intervals and are a measure of the uncertainty associated with the projections.

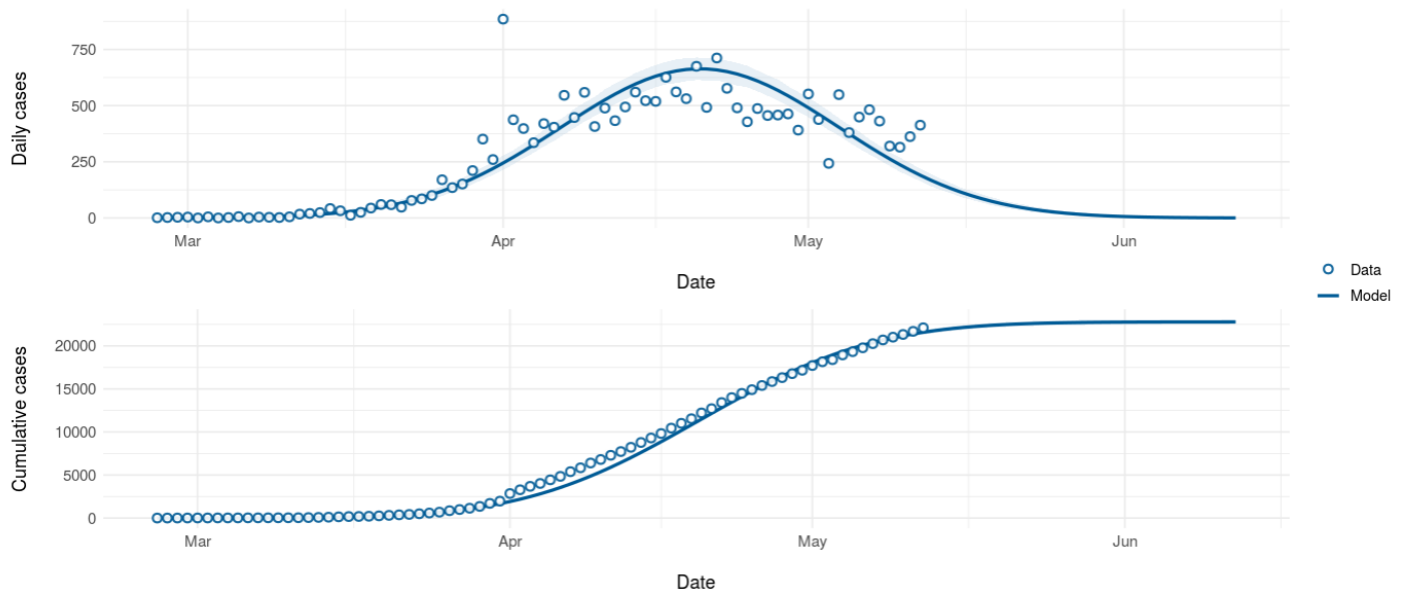
Projections should be interpreted with caution. Note that the projections are subject to change as additional case data become available and are particularly unstable for health units with small numbers of cases or fewer days with reported cases. Any changes in testing/reporting will also make these estimates unstable.

Model projections for the entire province of Ontario are shown for comparison.

Refer to the Details tab for additional information.



Ontario

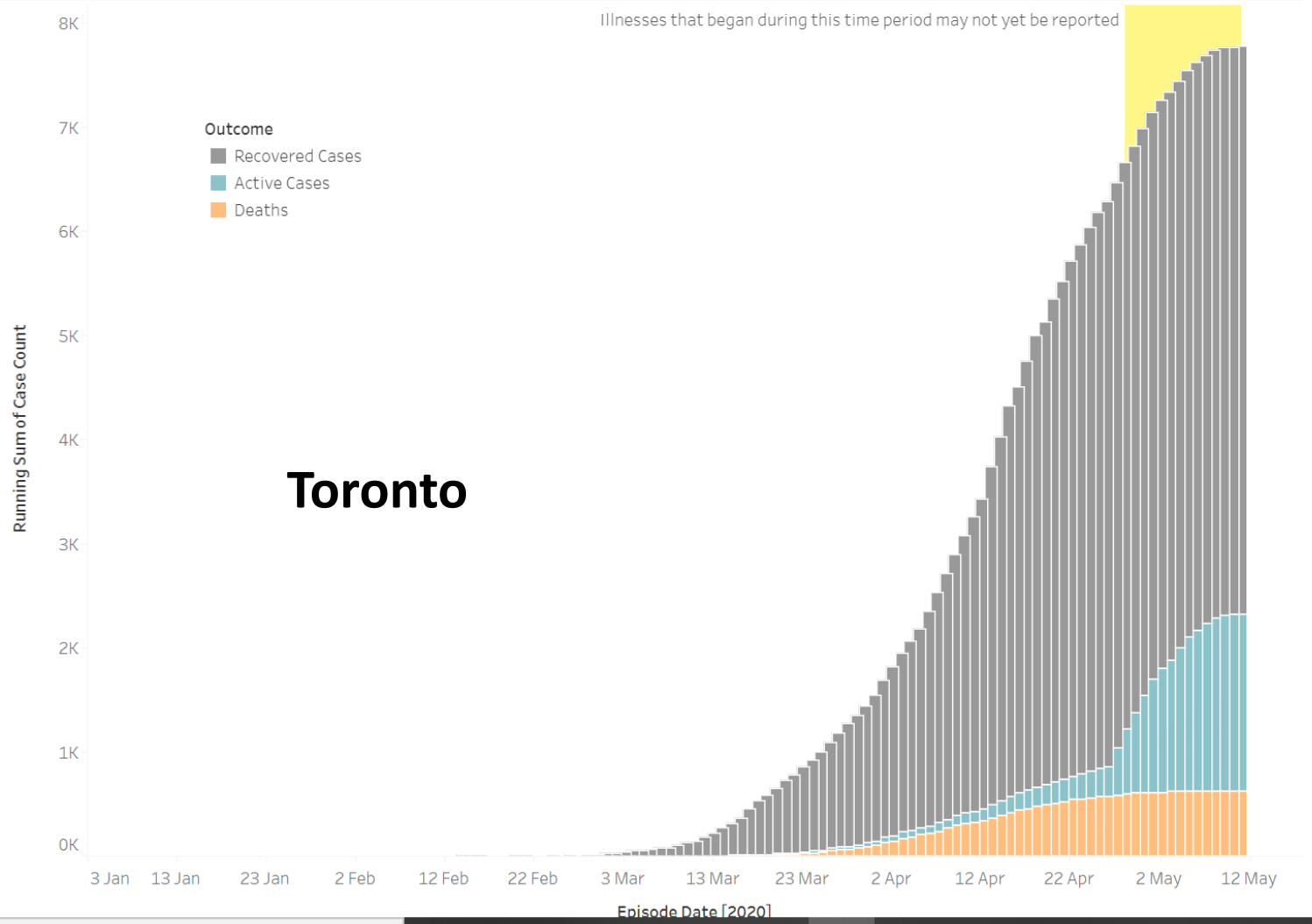


Developed by Ashleigh Tuite, David Fisman, and Amy Greer, University of Toronto and University of Guelph

toronto.ca/home/covid-19/covid-19-latest-city-of-toronto-news/covid-19-status-of-cases-in-toronto/

Cases*	Recovered Cases	Deaths	Cumulative Institutional Outbreaks +
7,775	5,449	622	125

Cumulative Cases by Episode Date and Outcome



Toronto

Toronto Public Health
Telephone: 416-338-7974
Email: TPHmedia@toronto.ca

TOPublicHealth

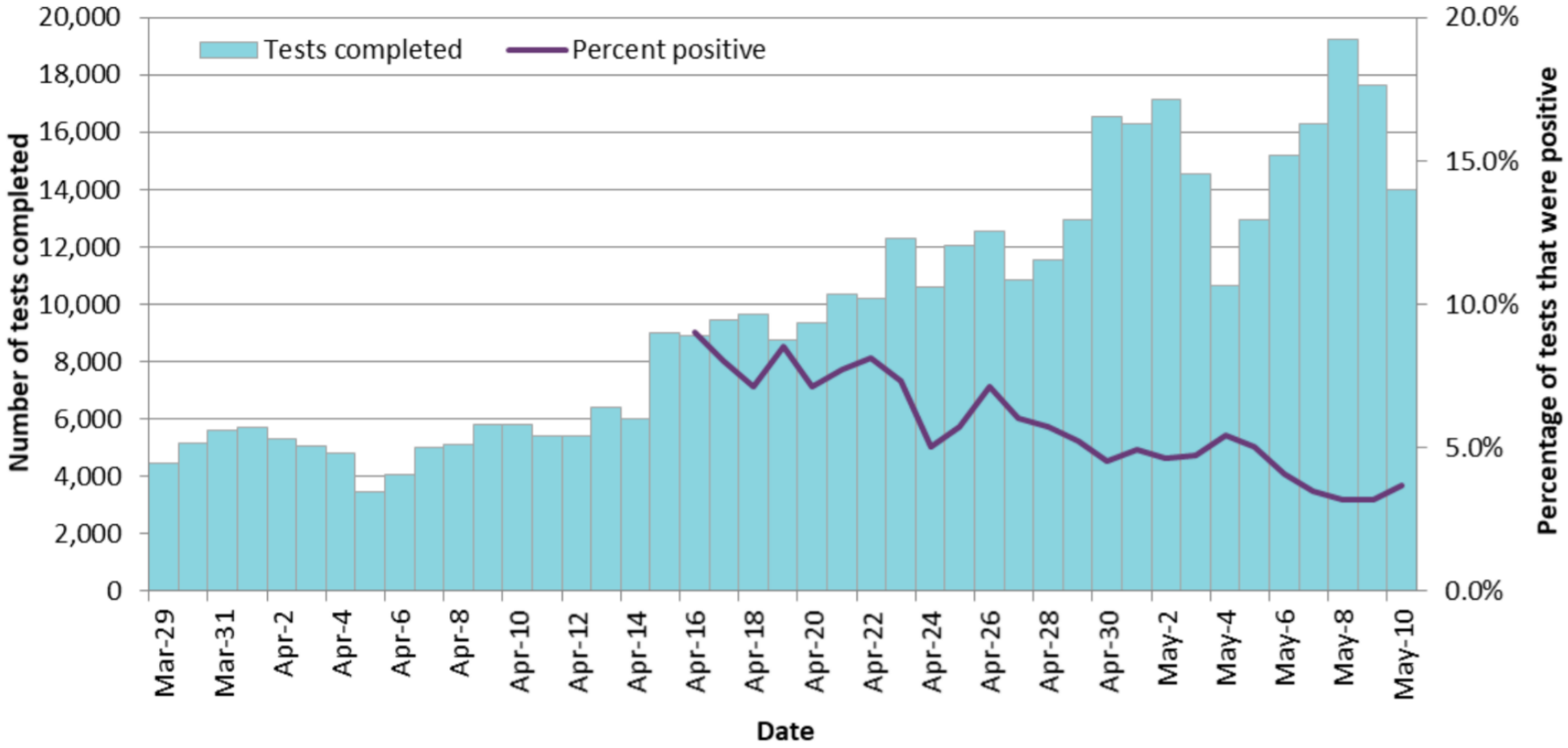
Related Information

Information for Health Professionals

Information for City Employees

Outbreaks LTC 180
Confirmed cases residents 2703
Confirmed cases staff 1677
Deaths residents 1239
Deaths staff < 5

Figure 3. Number of COVID-19 tests completed[1] and percent positivity: Ontario, March 29, 2020 to May 10, 2020



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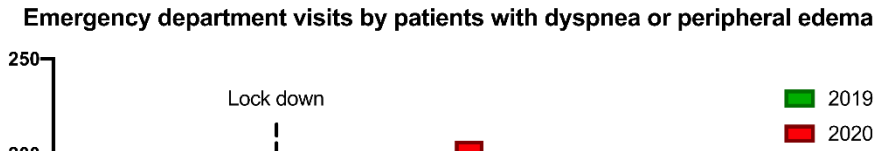
SCARY - Heart Failure Data

DR. HEATHER ROSS

These are the prevalent and incident patients at a provincial level up to March 31st2019. (ICES)

CONFIDENTIAL- available in presentation only and not for wider distribution

UHN real time data



CONFIDENTIAL- available in presentation only and not for wider distribution

UHN real time data - 2019 vs 2020

CONFIDENTIAL- available in presentation only and not for wider distribution

Where are we???

- In 2010, with CCN, Wijesundera did an environmental scan of HF clinics.
  - Identified 30 self-identified HF clinics.
  - Based on that data, capacity was 31,295 visits per year – that was the capacity a decade ago (we sampled in 2010) of annual visits.
- Translating that into a **1-month capacity is ~3000 visits**.

- Alba did an update of this in 2020 including MD and NP-led clinics and identified 36 clinics.
- 22 clinics reported their annual visit volume totalizing **~41,000 visits/year.**

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Ambulatory Heart Failure Activity: Survey

KAREN HARKNESS & DR. HEATHER ROSS

Ambulatory HF Activity Survey

- Survey distributed to Cardiac Hospital Admin / HF Clinic Contacts, to *understand the clinical activity for ambulatory HF management, to describe & quantify as best as possible, the response to COVID-19 restrictions,* within these settings
- Total Respondents: **23/27** (85% RR)
- Number of Patients Enrolled in HF Clinic:
  - Median (Q1,Q4): **550** (250, 800)
  - Range: **40 – 4000**

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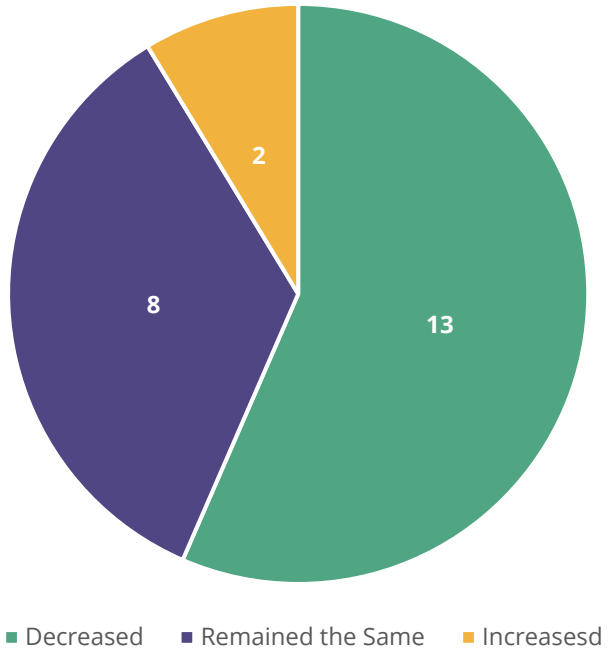
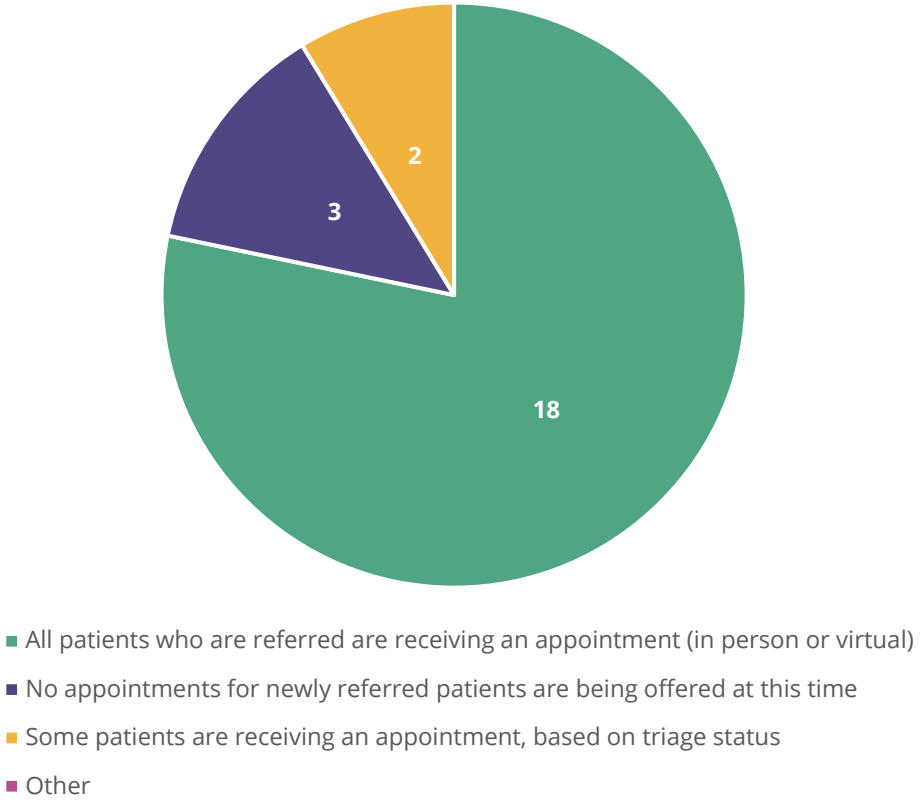
Survey Results (Part 1/2)

1. Over the past two months, has there been a change in the # of referrals for HF ambulatory services?

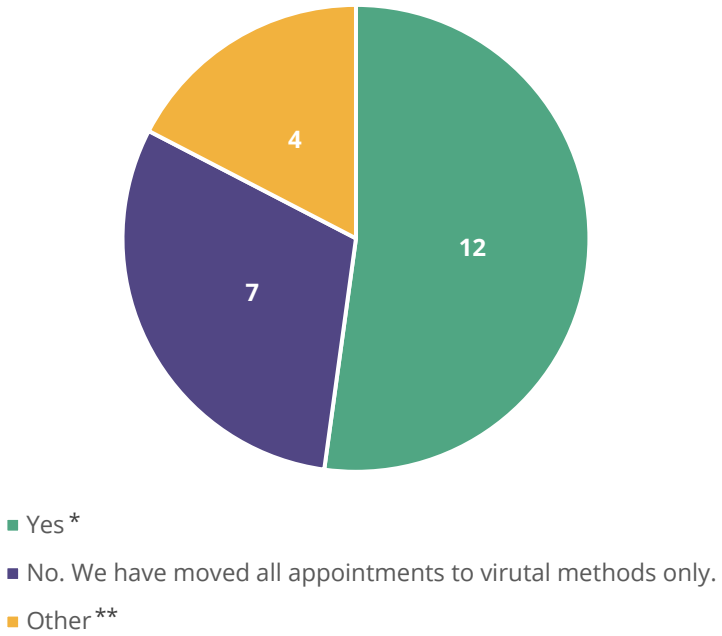


2. Over the past two months, what is your practice for new referrals?

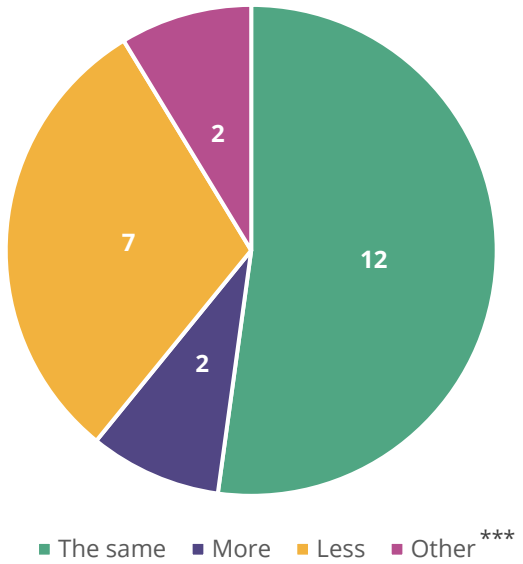


Survey Results (Part 2/2)

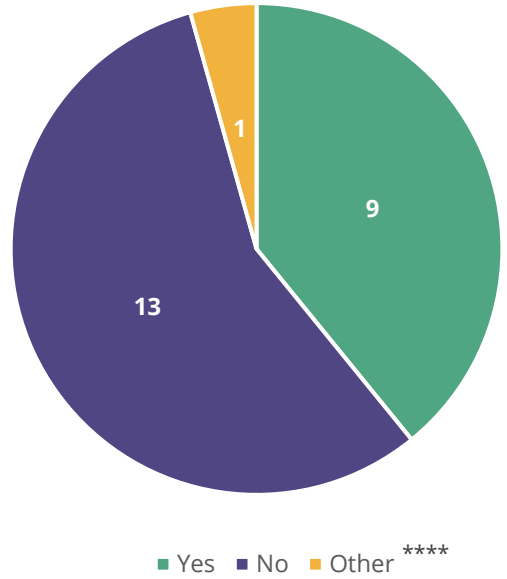
3. For patients enrolled in the clinic prior to COVID-19, are you providing any in-person patient appointments?



4. How has the volume of clinic visits (person or virtual) changed since COVID-19 restrictions implemented?



5. Prior to COVID-19, did you offer vitual patient visits?



* Seven out of the 12 respondents that selected 'Yes' provided an approximation of the number of in-person patient appointments per week. The result was an average of ~8.6 visits per week. A typical week in a HF clinic would be upwards to 80 patient visits

**The four responses to 'other' for Question# 3 were: 1) reduced FTF visits by 90%; 2) depending on acuity during initial telephone conversation with RN, if deemed high risk will be seen as in-person; 3) we are only open 1 day per week, but in-person appointments are offered for anyone with NYHA Class III-IV symptoms; 4) As needed for advanced HF or hospital diversion; so far only 1 day.

*** The two responses to 'other' for Question #4 were: 1) Less in-person visit, more virtual care; 2) Increase in telephone consultations, decrease in in-person consultation. However, receiving more referrals so overall increasing numbers followed in clinic.

**** The one response to 'other' for question #5 was: We did telephone follow-up in some cases especially if the patient lived at a distance.

Summary of Findings

1. Changes in referral volumes and appointment volumes during COVID-19 **are not consistent across settings.**

2. Most HF clinics:
   - **Did not provide** a **virtual care option** prior to COVID-19
   - Have substituted **virtual appointments for in-person visits**
   - Provide **in-person visits for a highly selected group of patients** (10-20% of appointments)

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Ambulatory Heart Failure Activity: Planning for Resuming Care

DR. HEATHER ROSS

Overview of Recovery Phases

	Pandemic Period: as of Mar 13, 2020	Recovery Phase 1	Recovery Phase 2	Recovery Phase 3	Future State: "New Normal"
Recovery Phase	Essential Care Only	Time sensitive procedure if delayed more than 90 days; or priority program (e.g. UHN only provider in Ontario)[1]	Prioritize activity where UHN is one of a few providers of specialty care in Ontario[1]	Prioritize based on impact on quality of life and disease outcomes[1, 2]	New baseline activity level established

[1] May also include procedures at low risk for admission to hospital (e.g. Endoscopy, Cystoscopy, Arthroscopy, Diagnostic Cardiac Cath, Ophthalmology).

[2] This may require adjudication of proposed increases in activity by the Clinical Activities Working Group in each program, as available Hospital resources may limit the ability for all increases in activity to proceed simultaneously.

Resumption of care – summary of our detailed doc that went to the clinical activity working group

Program	Baseline Weekly Activity	Recovery Phase 1	Recovery Phase 2	Recovery Phase 3	Future State "New Normal"
Peter Munk Cardiac	2,696	5% - 30%	5% - 30%	10% - 100%+	25% - 100%+
Cardiology	**850**	**10%**	**25%**	**50%**	**60-70**
Vascular Surgery		25 – 30%	25 – 30%	> 100%	> 100%
Cardiovascular Surgery		5%	5%	30%	30%
Cardiac Rehab		0%	0%	10 – 25%	25 – 50%

Ambulatory

Program	Baseline Weekly Activity	Recovery Phase 1	Recovery Phase 2	Recovery Phase 3	Future State "New Normal"
Peter Munk Cardiac					
Cardiology	33-37/d Approx. 170 per week	40%	60%	100-120%	100-120% till waitlist is appropriate

Procedural

Program	Recovery Phase 1	Recovery Phase 2	Recovery Phase 3	Future State "New Normal"
Peter Munk Cardiac	90	75	50	70
Cardiology	**90%**	**75%**	**50%**	**30-40%**
Vascular Surgery	TBC	TBC	TBC	TBC
Cardiovascular Surgery	TBC	TBC	TBC	TBC
Cardiac Rehab	100%	100%	≥ 75%	≥ 50%

Virtual

Summary of UHN IPAC Guidelines on Resuming Ambulatory Care

- Install Plexiglas barriers at reception area if possible; where not possible, PFC or receptionist to wear mask and face shield
- Use floor tape to clearly mark where patients should wait, should a queue develop at check-in
- Additional hand hygiene dispensers various clinics
- Shut down water coolers
- Move unnecessary equipment out of clinic rooms or bag/cover it so as to signify non-use
- Patients screened by phone prior to the appointment, upon arrival using the symptom screening tool. During the phone screening, patients will be directed to call ahead if they develop any symptoms
- No accompanying persons are to be allowed to limit in-hospital traffic. The exceptions are:
    - The patient has a physical or cognitive impairment and needs support from a caregiver or caregivers
    - The test or procedure requires the patient to bring an escort
    - The patient needs interpretation (and interpretation services not available)
- Upon arrival, patients are given masks at entrance to building and asked to perform hand hygiene
- Patient waiting time **should be minimized** as much as possible if not eliminated.
- Patients in waiting area must socially distance by 2 metres minimum; managers must coordinate to determine schedule/number
- Have signage to close off washrooms if a symptomatic patient uses it. Signage something along the lines of *'do not use - needs terminal cleaning'*, while awaiting HK terminal cleaning
- Ensure diligent clinic room turnover/disinfection (BP cuffs, exam tables, etc.)

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Open Forum Discussion

DR. HEATHER ROSS

Open Forum Discussion

- *What are your biggest concerns for meeting the needs of patients with heart failure in your local area?*
- *What processes have you implemented locally, to keep patients & providers safe for a face to face visit during this time?*
- *For sites that do not currently provide face to face visits, do you have any plans to explore this option at this time?*
- *What changes have you made to your practice during COVID-19 that you feel are working well and should be carried forward?*

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Next Steps

DR. HEATHER ROSS / KAREN HARKNESS

Next Steps & Wrap Up

- CorHealth will be distributing a **short survey** to stakeholder forum members early next week for their **feedback on the COVID-19 Stakeholder Forums**
- Next **COVID-19 Heart Failure Stakeholder Forum Meeting**

- Are there other issues we should be considering / discussing?
- Are these meetings still helpful? How could they be more helpful?

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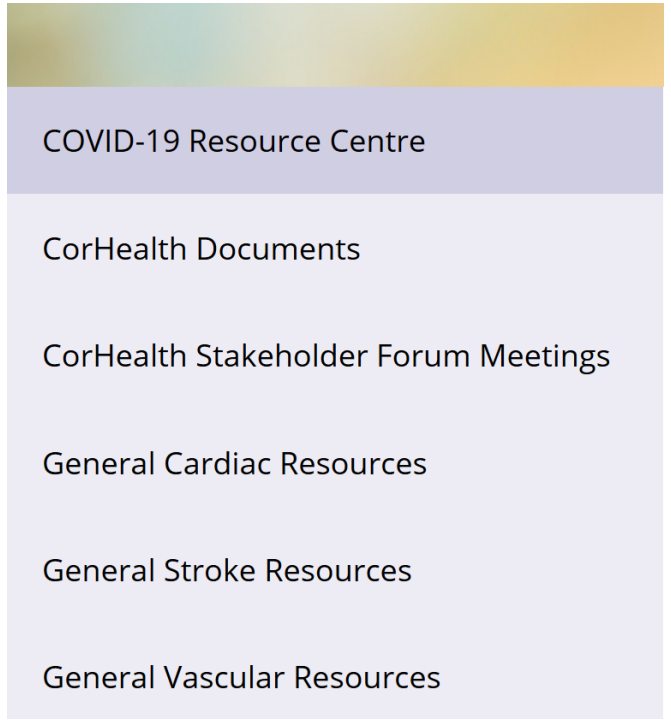
Appendix

CorHealth COVID-19 Resource Centre

- Accessible from the CorHealth homepage
- Updated twice a day at 10:30am and 5:30pm
- Includes:
  - General COVID-19-related documents
  - CorHealth Guidance Documents
  - Presentations & Summary notes from Cardiac, Stroke, and Vascular Forums
  - Cardiac-, Stroke-, and Vascular-specific COVID-19-related documents
- Organized from most recent resources at the top to oldest at the bottom of each page

COVID-19 Resource Centre Sections



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Note: the documents are being made available for sharing purposes only to support organizations as they navigate the challenges presented by COVID-19. If you have resources or tools you would like to share on this site, please send them to service@corhealthontario.ca.

A Measured Approach to Planning for Surgeries and Procedures During the COVID-19 Pandemic

MAY 13, 2020

Ontario Health

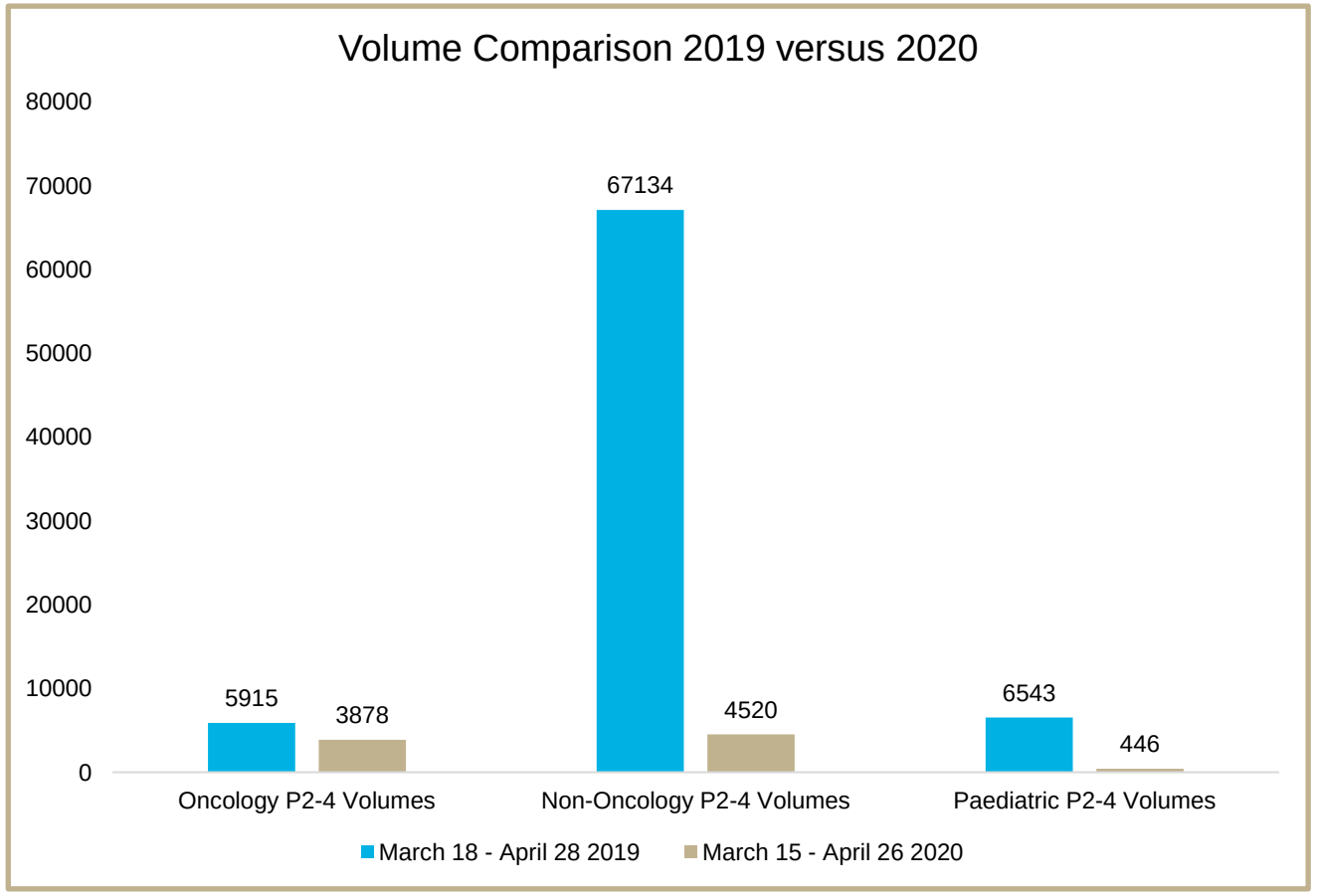
Background

- On March 15, 2020, following the release of a memorandum from the Ministry of Health and then Directive #2 by the Chief Medical Officer of Health, hospitals began to significantly decrease scheduled surgical and procedural work to create capacity to care for patients with COVID-19
- Not only are surgeries and procedures delayed, but also many other services such as diagnostic imaging, laboratory services, and anesthesia services
- As the COVID-19 pandemic evolves, it is important to consider the impact of deferred care and develop a plan to resume services while maintaining COVID-19 preparedness

Context: Surgeries Completed Since March 15, 2020

The cumulative impact to patients from delayed care is growing. Fewer surgeries were completed in this time period in 2020 compared to 2019. For example:

- 3,878 adult oncology surgeries (34% fewer)
- 4,520 adult non-oncology surgeries (e.g., hip and knee replacement, eye, and hernia surgeries) (93% fewer)
- 446 paediatric surgeries (93% fewer)



Source: Ontario Health – CCO Wait Time Information System (WTIS) for March 18 to April 28, 2019 (42 days) and March 15 to April 26, 2020 (43 days)

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A Measured Approach

- "**A Measured Approach to Planning for Surgeries and Procedures During the COVID-19 Pandemic**" identifies criteria for safely reintroducing scheduled surgical and procedural care
- While the spread of COVID-19 continues to be a challenge for residents in long-term care and other group living facilities, it may now be possible for hospitals to begin planning for the gradual resumption of surgeries and procedures that have been postponed, as long as plans are executed to assist with the situation in long-term care
- Although Ontario may be very slowly gaining the upper hand in this pandemic, there is an ongoing risk of local, rolling mini-surges in either community or congregate settings
- A pre-condition for increasing surgical and procedural activity is the requirement that *regional or sub-regional COVID-19 Steering Committees* and hospitals **jointly sign-off** on the hospital's plan to resume elective surgeries and procedures and this plan is reviewed and reconfirmed on a weekly basis by the hospital and region/sub-region
- In addition, this is about **planning for resumption**. While Directive #2 is still in effect, **no hospital should be resuming scheduled surgery and procedural care**

Core Assumptions

- The pandemic and its impacts in Ontario may last many months to years
- Emergent surgical and procedural care has been continuing during the pandemic
- Urgent surgical and procedural care has been continuing at reduced volumes during the pandemic
- Capacity has been appropriately created in hospitals during the acceleration phase of the pandemic, and this capacity should be considered for use when planning to increase surgical and procedural activity if we ensure ongoing capacity to care for patients with COVID-19
- Changes to surgical and procedural activity (including increasing and decreasing activity) will be asymmetrical between organizations and regions based on their local context
- Hospitals may have staff redeployed to other settings and this may impact planning to increase surgical and procedural activity
- The need for emergent or urgent surgery or procedures for patients with COVID-19 is determined on a case-by-case basis, weighing the risk of further delay of treatment against the risk of proceeding and the risk of virus transmission
- Plans for increasing surgical and procedural care includes existing backlog and delays since March 15, 2020

Expectation of Hospitals

- Reserve 15% of acute care capacity (i.e., 85% occupancy or ability to immediately create an additional 15% capacity when needed), subject to any alternate agreement at the regional or sub-regional tables for securing sufficient regional capacity
- Attain sign off from the Regional COVID-19 Steering Committee on planned resumption
- Planning for the resumption of elective surgeries and procedures at any hospital must consider:
  - Conventional in-patient space is available for care, and this space is evaluated in the context of physical distancing for both patient flow and outpatient activity. This space cannot include care in hallways
  - Confirmed critical supplies, including PPE, swabs, reagents, and medications, exceed both current usage and projected requirements for elective surgical and procedural work. **There should be no dependence on emergency escalation to source any of the above while providing elective care**. Stock of critical supplies needs to be confirmed with your regional or sub-regional table weekly. The target for PPE is a rolling 30-day stock on-hand, that includes the current usage rate plus forecasted additional requirements
  - Health human resources that are available for urgent and emergent care are not unduly impacted. This includes consideration of overall workforce availability, as well as health human resources being directed to support long-term care

Expectation of Regions/Sub-Regions

- A regional or sub-regional approach is taken for managing surge capacity *and* the resumption of elective surgeries and procedures:
  - Maintain an aggregate 15% percent of acute care capacity
  - Take a regional or sub-regional approach for managing surge capacity **and** the resumption of elective surgeries and procedures
  - Collaborate across hospitals to arrive at coordinated and committed plans
  - Ensure the hospital remains committed in their plan to support long-term care
  - Monitor surgical and procedural activity across their territories, working to balance:
    - Wait lists
    - Equitable access to care
    - Regional resource availability in primary care, home and community care and rehabilitation with a view to virtual care options

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Objectives of the Recommendations

- To ensure an equitable, measured, and responsive approach to planning decisions for expanding and contracting surgical and procedural care, while continuing to reserve capacity for any COVID-19 surge

The recommendations recognize:

- The priority of the health, well-being, and safety of both patients and health care workers
- The need to weigh the therapeutic benefit of treatment against the potential risk for COVID-19 transmission to both health care workers and patients
- The importance of following guiding ethical principles (i.e., proportionality, non-maleficence, equity, and reciprocity) when making decisions

Recommendations

1. Use the **existing regional or sub-regional COVID-19 steering committee** to provide oversight in partnership with an **organizational (hospital) surgical and procedural oversight committee**
2. Conduct a **feasibility assessment at the hospital level** and communicate results to regional leadership before increasing surgical or procedural activity
3. **Attain joint sign-off** from both the regional or sub-regional COVID-19 steering committee and hospital surgical and procedural oversight committee
4. **Review and re-conduct the feasibility assessment on a weekly basis** to identify changes in the assessment and recognize when a change in direction is required
5. Follow a **fair process for case prioritization** that is grounded by a set of ethical principles as a part of the implementation plan
6. Consider how to **leverage opportunities to redesign care**

Feasibility Assessment Decision Criteria

1. The community has a manageable level of disease burden or has exhibited a sustained decline in the rate of COVID-19 cases over the past 14 days
2. The organization has a stable rate of COVID-19 cases
3. The organization and region have a stable supply of PPE
4. The organization and region have a stable supply of medications
5. The organization and region have adequate capacity of inpatient and ICU beds
6. The organization and region have adequate capacity of health human resources
7. The organization has a plan for addressing pre-operative COVID-19 diagnostic testing (where appropriate, in consultation with local IPAC)
8. The organization has confirmed the availability of post-acute care outside the hospital that would be required to support patients after discharge (e.g., home care, primary care, rehabilitation)
9. The organization and region have a wait list management mechanism in place to support ethical prioritization

Process for Case Prioritization

- Follow ethical principles to guide a fair process
- Criteria for surgical and procedural case prioritization include:
  - Patient factors (e.g., condition, co-morbidities)
  - Disease factors (e.g., non-operative treatment options, risk of surgery delay)
  - Procedure factors (e.g., inpatient vs. outpatient or day procedures, operating room time, length of stay, anticipated blood loss, intubation probability)
  - Use of resources (e.g., PPE, medications, ICU and other postoperative care needs)
  - COVID-19 exposure/virus transmission risk
- In the context of resource constraints, consider a staged or stepwise approach to begin the resumption of services gradually
  - A hospital may choose to begin by offering services that require none, or a minimal amount, of a constrained resource e.g., a hospital may choose to begin with outpatient procedures, followed by day surgeries, followed by inpatient surgeries as resources become available

Implementation Considerations

- Consider the interdependence of our health care system and assess and monitor health care utilization impacts to ensure there are no unintended community-wide consequences
- Ensure continuous communication and follow-up with patients
- Leverage opportunities to improve care
  - What do we want to keep doing?
  - What do we want to stop doing?
  - What we are leaving behind?

Opportunities to Improve Care Delivery for Scheduled Surgical and Procedural Care

- Use services that reduce patient time spent in acute care settings
  - Virtual care, post-op remote monitoring programs, care in the community, outpatient care
- Ensure the appropriate use of tests, treatments, and procedures
  - Choosing Wisely Canada recommendations, e-consults services, virtual medical assessments and triaging
- Consider redesign of care
  - Designate hospitals/units for surgical and procedural care (COVID-protected sites)
  - Centralize waitlists for surgeries and procedures, if feasible
  - Extend operating room schedules
  - Organize the pre- and post-operative care pathway, leveraging virtual care solutions

Conclusion

- This is about a measured approach to planning for resumption of scheduled surgeries and procedures
- This planning must take place at a hospital level in collaboration with and sign off by the already established Regional COVID-19 Steering Committee
- Due to many of the pre-conditions required, resumption of services may be asymmetrical due to local context
- No actual activity should start until such time that Directive #2 is revoked or amended

Appendix

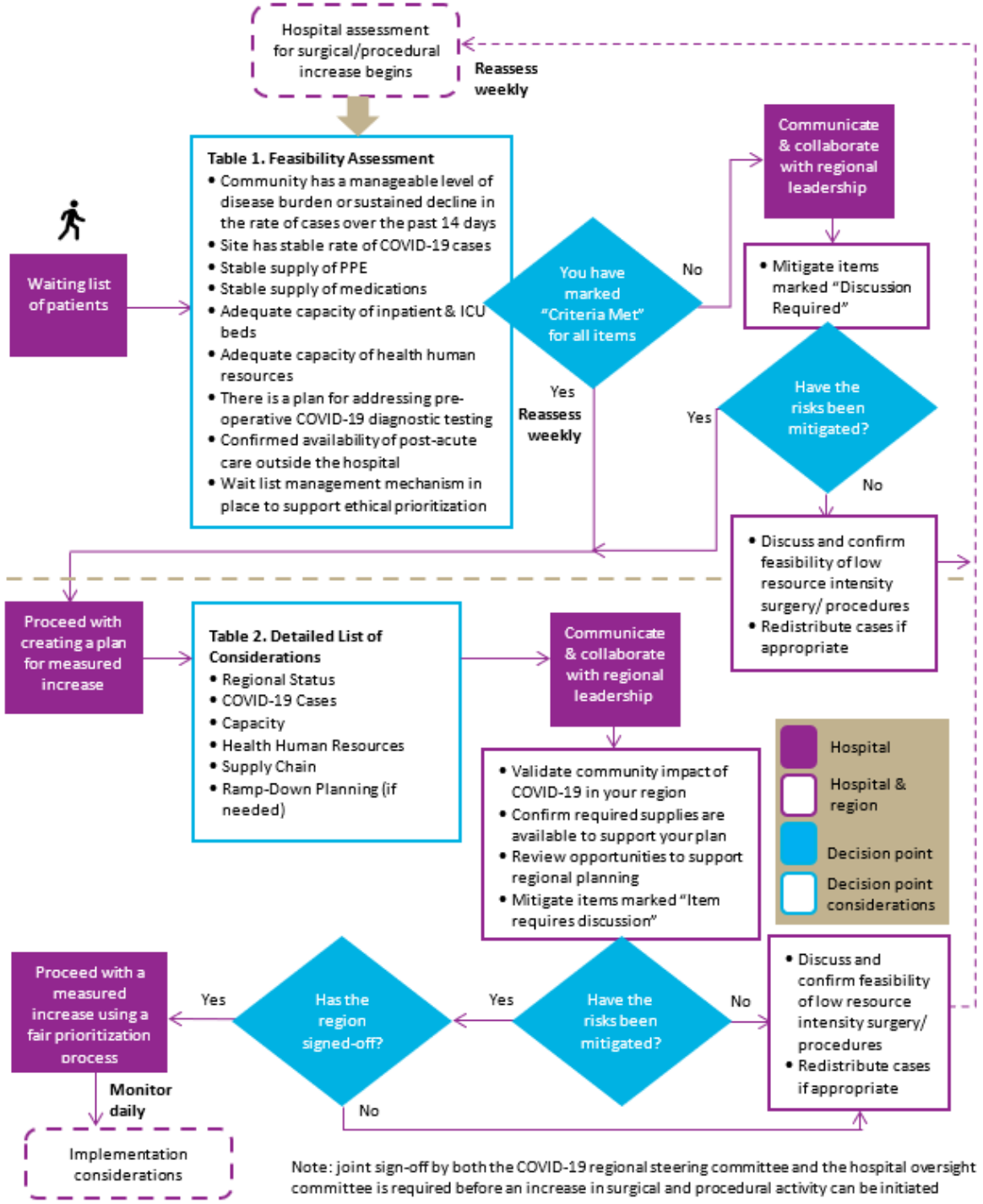
Surgical and Procedural Planning Committee

Name	Title(s) and Institution(s)
Chris Simpson (Chair), BSc, MD, FRCPC, FACC, FHRS, FCCS, FCAHS	Vice-Dean (Clinical), School of Medicine, Queen's University
Connie Clerici, RN, BScN	Executive Chair, Closing the Gap Healthcare
David Musyj	President & CEO, Windsor Regional Hospital
David Pichora, MD, FRCSC	President & CEO, Kingston Health Sciences Centre
Derek McNally, RN, MM	Executive VP Clinical Services and Chief Nursing Executive, Niagara Health
Garth Matheson, MBA	Interim President & CEO, Ontario Health (Cancer Care Ontario)
Howard Ovens, MD, FCFP(EM)	Chief Medical Strategy Officer, Sinai Health System Professor, Department of Family and Community Medicine, University of Toronto and Sr. Fellow, IHPME Ontario Provincial Lead for Emergency Medicine
Janet Van Vlymen, MD, FRCPC	Anesthesiologist, Program Medical Director, Perioperative Services, Kingston Health Sciences Centre Associate Professor, Department of Anesthesiology and Pain Medicine, Queen's University
Janice Skot, MHSc, CHE	President & CEO, Royal Victoria Regional Health Centre
Jennifer Everson, BScN, MD, CCFP, FCFP	Vice-President, Clinical, Ontario Health (West)
Jim Rutka, MD, PhD, FRCSC	R.S. McLaughlin Professor and Chair, Department of Surgery, University of Toronto Director, Arthur and Sonia Labatt Brain Tumour Research Centre, The Hospital for Sick Children

Surgical and Procedural Planning Committee

Name	Title(s) and Institution(s)
Jonathan Irish, MD, MSc, FRCSC, FACS	Provincial Head, Surgical Oncology, Ontario Health (Cancer Care Ontario) Clinical Lead, Access to Care, Ontario Health (Cancer Care Ontario)
Julian Dobranowski, MD, FRCPC	Chief, Diagnostic Imaging, Provincial Lead, Niagara Health, Ontario Health (Cancer Care Ontario)
Karen Devon, MD, FRCSC	Assistant Professor, Department of Surgery and Joint Centre for Bioethics, University of Toronto Endocrine Surgeon, Women's College Hospital and University Health Network
Michael Gardam, MSc, MD, CM, MSc, FRCPC	Chief of Staff, Humber River Hospital
Mike Heenan	Assistant Deputy Minister (Hospitals and Capital), Ministry of Health
Neva Fantham-Tremblay, MD, FRCSC	Medical Director of Surgery and Head of Obstetrics and Gynecology, North Bay Regional Health Centre
R. Sacha Bhatia, MD, MBA, FRCPC	Chief Medical Innovation Officer, Women’s College Hospital
Sarah Downey	President & CEO, Michael Garron Hospital
Shaf Keshavjee, MD, MSc, FRCSC, FACS	Surgeon-in-Chief, Program Medical Director, Surgery, Anaesthesia, and Critical Care, University Health Network Director, Toronto Lung Transplant Program
Tim Jackson, BSc, MD, MPH, FRCSC, FACS	General Surgeon, University Health Network Provincial Surgical Lead, Ontario Health (Quality) President, Ontario Association of General Surgeons
Wendy Hansson, BSc, MHA, CHE	President & CEO, Sault Area Hospital

A Measured Approach to Planning for Surgeries and Procedures during the COVID-19 Pandemic Flow Chart



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