

The Conference  
Board of Canada

# Optimizing Outcomes During COVID-19: The Urgent Need for Data Sharing

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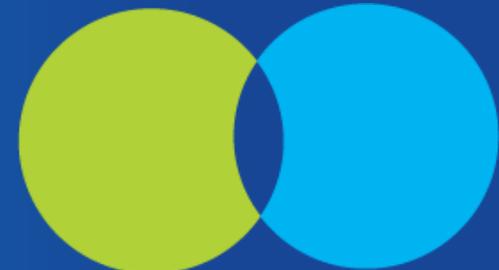
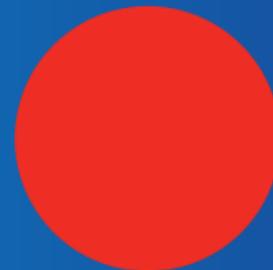
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# CONFERENCE BOARD'S HEALTHCARE PORTFOLIO

## Value-Based Healthcare (VBHC) Canada

VBHC is an approach to healthcare transformation that is focused on achieving the best outcomes for patients at the lowest cost by placing patient-reported outcomes at the center of health care decision-making.<sup>1</sup>

$$\text{Value} = \frac{\text{Health outcomes that matter to patients}}{\text{Costs of delivering these outcomes}}$$

1. Porter, M. E., & Teisberg, E. O. (2006). Redefining health care: Creating value-based competition on results. Boston, Mass: Harvard Business School Press.

# VBHC Canada partners



## **Strategic Partners:**

- Novo Nordisk

## **Participating Members:**

- Canadian Dental Association
- HealthPRO Procurement Services
- Innovative Medicines Canada
- Medavie
- Roche Diagnostics

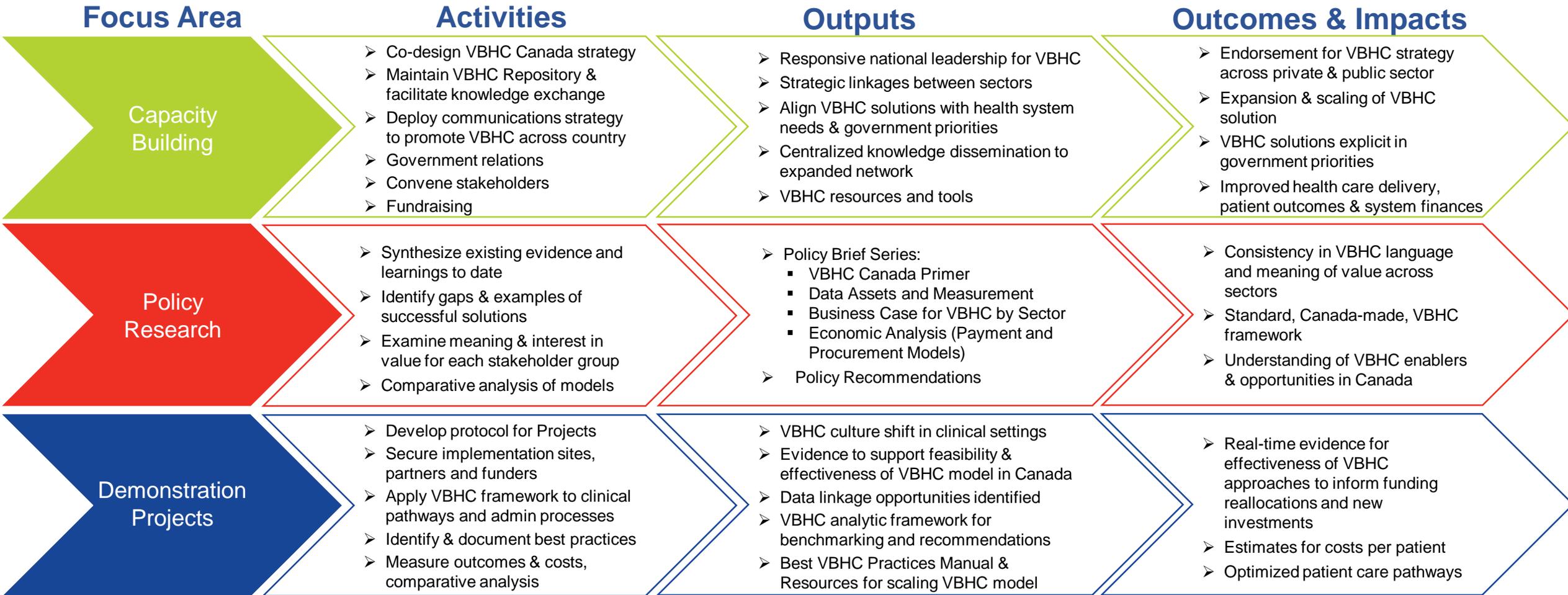
## **Supporting Members:**

- Amgen
- Hoffmann-La Roche Limited

## **Collaborating Partners:**

- Canadian Institute for Health Information
- CorHealth Ontario
- Diabetes Action Canada
- Quebec Cancer Coalition

# From Vision to Action: Value-Based Healthcare (VBHC) Canada Strategy



# Data is a key enabler of value-based healthcare



- Enables evidence-based system transformation through measurement of patient outcome and care cost data
- Inform process improvements, benchmarking, and value-based reimbursement models to promote innovation and system efficiency
- Systematic collection, sharing, and linking of inputs (system costs) and outputs (patient outcomes) is needed to track performance and reward innovations that increase value to patients and the health system
- Need a system for data sharing and tracking of results



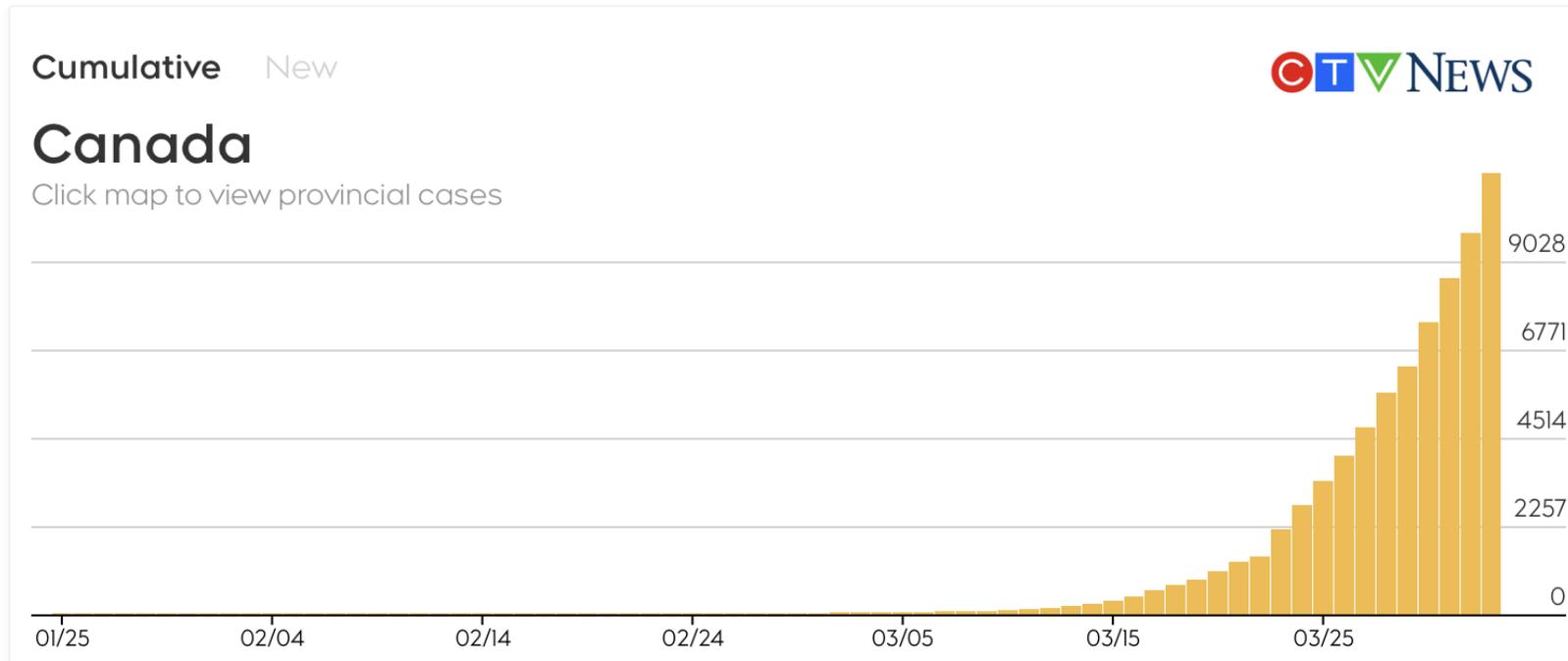
## Data gaps in Canada

- Standardized patient outcome data lack in many clinical areas
- Data are developed and reside at a regional or provincial level at best, limiting the potential for comparison across provinces or with other countries
- Data should be shared to inform clinical and administrative improvements, and public policies
- Live dashboards with actionable data should be leveraged where possible

# COVID-19: Public health emergency



- COVID-19 is placing unprecedented stress on the Canadian healthcare system because demand exceeds capacity
- Healthcare providers and policy makers are trying to minimize mortality for Canadians
- Realtime data is required in all domains of the healthcare system to evaluate impact of policies and care protocols
- Health system data is collected provincially but is often not shared publicly, delayed or not comprehensive



Tracking every case of COVID-19 in Canada, CTV News, April 2, 2020

# Covid-19 trackers across Canada and the world

Country	Name	Brief description	Link
Canada	COVID-19 In Canada	Canada specific. Dashboard/tracker by University of Toronto and University of Guelph.	<a href="https://art-bd.shinyapps.io/covid19canada/">https://art-bd.shinyapps.io/covid19canada/</a>
Canada	Centre for Health Informatics (CHI) Covid-19 tracker	Canada specific and international policy comparisons. University of Calgary, Cummings School of Medicine.	<a href="https://www.chi-csm.ca/">https://www.chi-csm.ca/</a>
Canada	University of Calgary: 2019 Novel Coronavirus (COVID-19)	Canada specific and international. Provides links to Canadian and international datasets.	<a href="https://library.ucalgary.ca/c.php?g=715085&amp;p=5098377">https://library.ucalgary.ca/c.php?g=715085&amp;p=5098377</a>
Canada	Flatten	Canada Specific. Online screening tool/app on COVID-19 information per region/postal code.	<a href="https://flatten.ca/">https://flatten.ca/</a>
Canada	Government of Canada: Coronavirus disease (COVID-19): Outbreak update	Canada specific. Nationwide outbreak updated from official Government of Canada website.	<a href="https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html">https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html</a>
Canada	Ontario: The 2019 Novel Coronavirus (COVID-19)	Ontario specific. Daily epidemiological reports.	<a href="https://www.ontario.ca/page/2019-novel-coronavirus">https://www.ontario.ca/page/2019-novel-coronavirus</a>
Canada	Tracking every case of COVID-19 in Canada	Canada specific. Tracking all cases in Canada by province/territory.	<a href="https://www.ctvnews.ca/health/coronavirus/tracking-every-case-of-covid-19-in-canada-1.4852102">https://www.ctvnews.ca/health/coronavirus/tracking-every-case-of-covid-19-in-canada-1.4852102</a>
Holland	Data Sources COVID-19 (Dutch specific)	A Dutch resource based on national and international sources.	<a href="https://www.databronnencovid19.nl/">https://www.databronnencovid19.nl/</a>
USA	COVID-19 Projections	COVID-19 US state-by-state projections. COVID-19 projections assuming full social distancing through May 2020.	<a href="https://covid19.healthdata.org/projections;">https://covid19.healthdata.org/projections:</a> <a href="http://www.healthdata.org/covid">http://www.healthdata.org/covid</a>
USA	Track Corona	International. Visual of the global spread of COVID-19 by undergraduates at Stanford, University of Virginia, and Virginia Tech.	<a href="https://www.trackcorona.live/">https://www.trackcorona.live/</a>
USA	Coronavirus COVID-19 Global Cases	Interactive dashboard mapping the outbreak in real-time by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)	<a href="https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6">https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6</a>
USA	Our World in Data: Coronavirus Disease (COVID-19) – Statistics and Research	Collaborative efforts of University of Oxford and Global Change Data Lab using European Center for Disease Prevention and Control (ECDC) data.	<a href="https://ourworldindata.org/coronavirus">https://ourworldindata.org/coronavirus</a>

# COVID-19 Data Tracker



- A COVID-19 Tracker linking real-time data on policies, care processes and key outcome metrics across all healthcare domains is needed
- The Tracker should facilitate comparative analysis, predictive modelling, and inform decision making.
- Data needs to be widely shared, requiring all provinces to improve access to real-time healthcare data to help us fight COVID-19 and save the lives of Canadians



# Canada's public data on COVID-19 is (mostly) a mess. Here's how to find the useful info

*The problem is that much of it's based on public data that's limited, incomplete and often outdated, meaning it can lead to wrong conclusions*

Brian Platt, National Post, April 2, 2020



# Ottawa continues to keep Canadians in the dark about potential impact of coronavirus

The federal government is lagging some provinces and other countries as it continues to hold back the modelling that shows the best- and worst-case scenarios Canada faces in the COVID-19 pandemic

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**MARIEKE WALSH > AND JUSTINE HUNTER >**

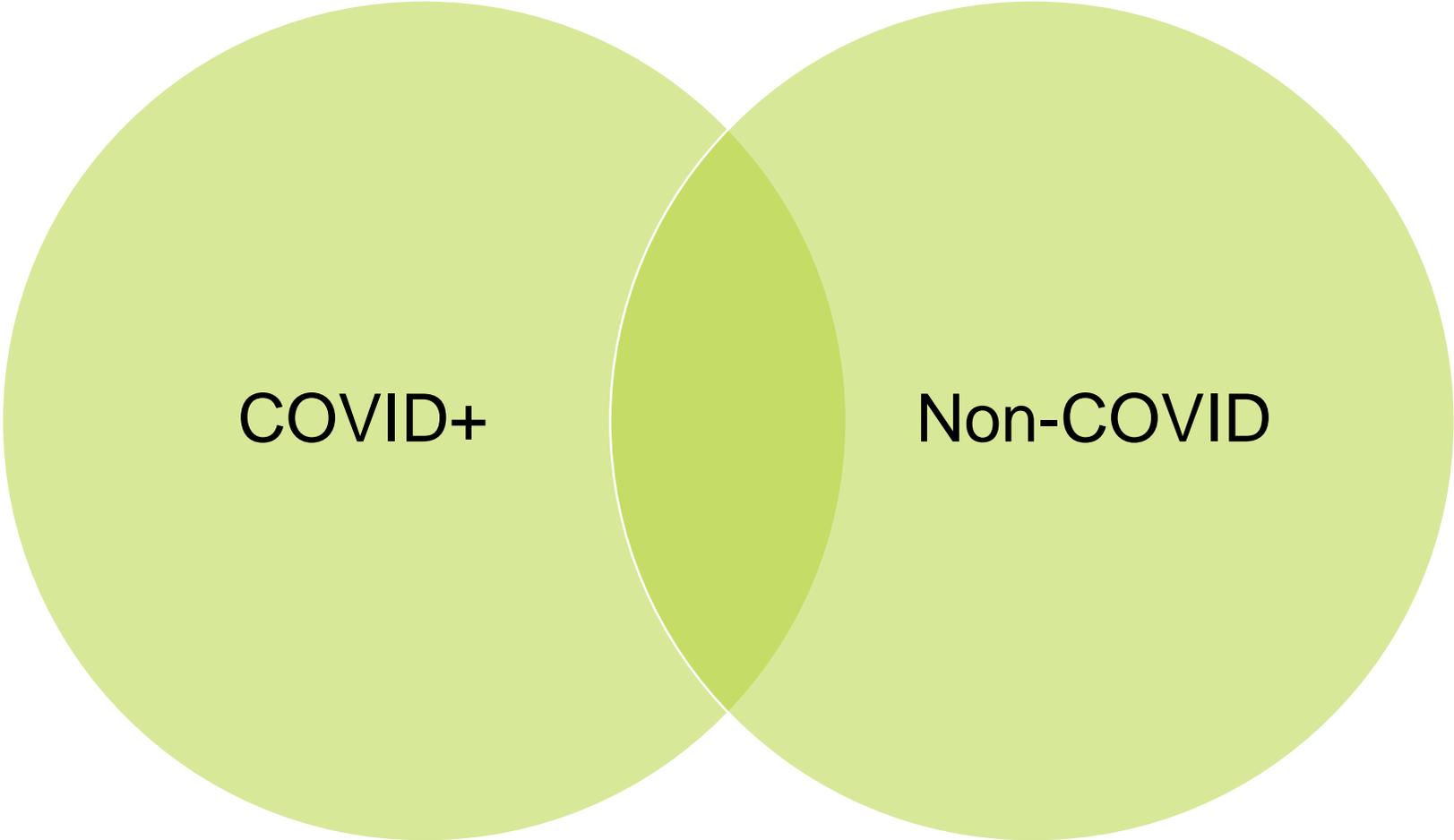
OTTAWA AND VICTORIA

PUBLISHED APRIL 2, 2020

UPDATED 37 MINUTES AGO

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# Primary goal: Minimize deaths





## Current situation

- COVID-19 knowledge is evolving rapidly
- Healthcare resources are being prioritized to meet anticipated COVID-19 demand
- Healthcare providers are practicing ‘Disaster Medicine’
- Health systems are responding differently





# Information in multiple domains

- Outcomes
  - Mortality rates by location (ICU, hospital, community), and by cause of death, etc.
- Policies
  - Self-isolation, travel, testing criteria, protective equipment, economic support, etc.
- Structure
  - ICU beds, hospital beds, cohorted wards, elder care, primary care, shelters, human resources, PPE
- Process
  - COVID+ HCW, Tele-consults, ED Triage, LTC Transfers, Length of time ventilated, Ambulance calls

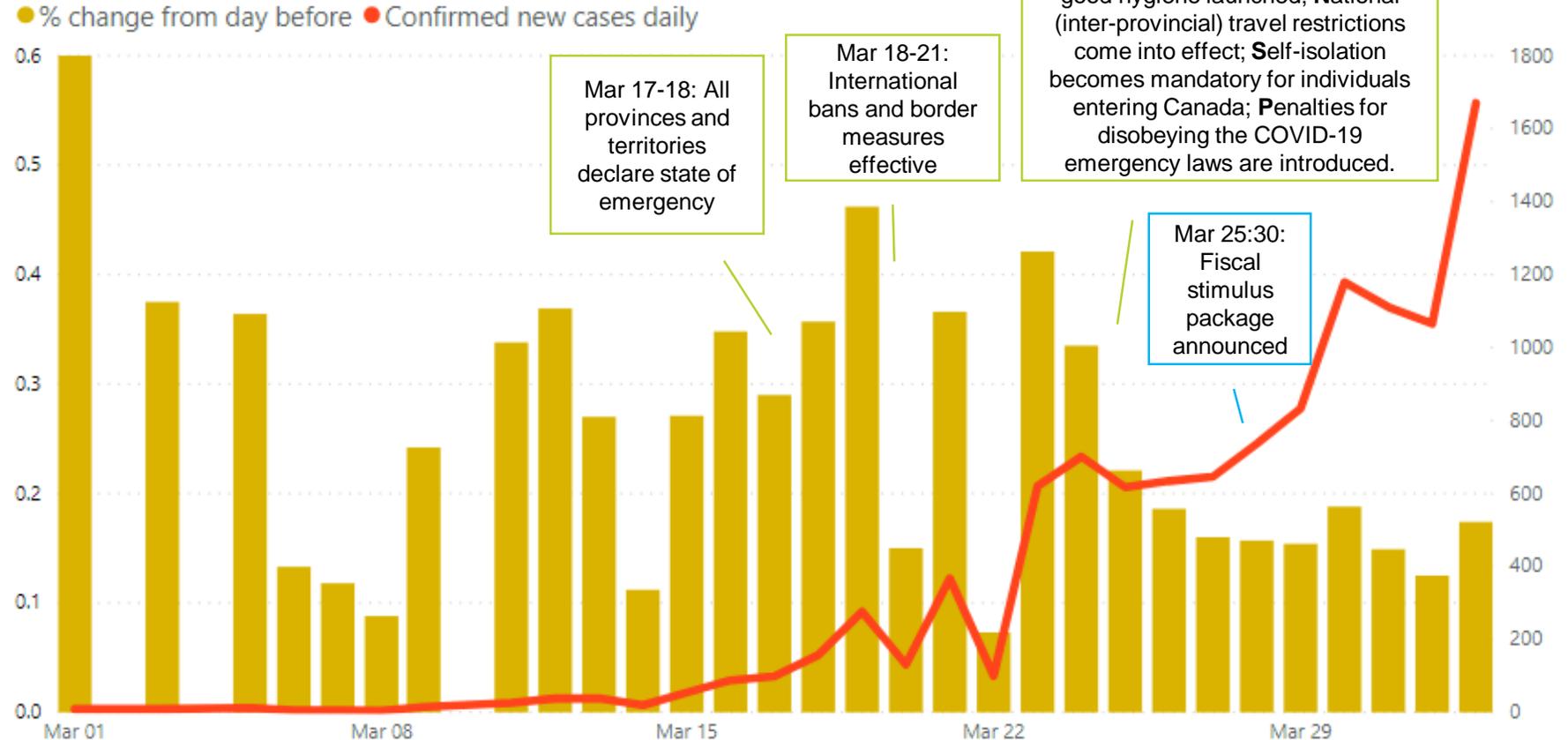
# Support Faster Insights Through Interactive Visuals



## Is Canada flattening the curve?

### Region

- Alberta
- British Columbia
- Canada
- Manitoba
- New Brunswick
- Newfoundland and Lab...
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Repatriated Travellers
- Saskatchewan
- Yukon



3/1/2020

4/2/2020





# Information needs

- Evaluate impact of decisions, predict future needs, inform decision making
- Our data must be:
  - Comprehensive
  - Comparable
  - Accurate
  - Real-time
  - **Public**

## Our ask of you



- A commitment to advocate to at least 3 people for open sharing of healthcare data to inform the fight against COVID-19 and help save Canadian lives.

# The Conference Board of Canada

[conferenceboard.ca](http://conferenceboard.ca)