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

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carferenceboard.ca
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.¹

Value = Health outcomes that matter to patients / Costs of delivering these outcomes

VBHC Canada partners

Strategic Partners:
- Novo Nordisk

Supporting Members:
- Amgen
- Hoffmann-La Roche Limited

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

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

## Focus Area

### Capacity Building
- Co-design VBHC Canada strategy
- Maintain VBHC Repository & facilitate knowledge exchange
- Deploy communications strategy to promote VBHC across country
- Government relations
- Convene stakeholders
- Fundraising

### Policy Research
- Synthesize existing evidence and learnings to date
- Identify gaps & examples of successful solutions
- Examine meaning & interest in value for each stakeholder group
- Comparative analysis of models

### Demonstration Projects
- Develop protocol for Projects
- Secure implementation sites, partners and funders
- Apply VBHC framework to clinical pathways and admin processes
- Identify & document best practices
- Measure outcomes & costs, comparative analysis

## Activities

- Responsive national leadership for VBHC
- Strategic linkages between sectors
- Align VBHC solutions with health system needs & government priorities
- Centralized knowledge dissemination to expanded network
- VBHC resources and tools

- Policy Brief Series:
  - VBHC Canada Primer
  - Data Assets and Measurement
  - Business Case for VBHC by Sector
  - Economic Analysis (Payment and Procurement Models)
  - Policy Recommendations

- VBHC culture shift in clinical settings
- Evidence to support feasibility & effectiveness of VBHC model in Canada
- Data linkage opportunities identified
- VBHC analytic framework for benchmarking and recommendations
- Best VBHC Practices Manual & Resources for scaling VBHC model

## Outputs

- Endorsement for VBHC strategy across private & public sector
- Expansion & scaling of VBHC solution
- VBHC solutions explicit in government priorities
- Improved health care delivery, patient outcomes & system finances

- Consistency in VBHC language and meaning of value across sectors
- Standard, Canada-made, VBHC framework
- Understanding of VBHC enablers & opportunities in Canada

- Real-time evidence for effectiveness of VBHC approaches to inform funding reallocations and new investments
- Estimates for costs per patient
- Optimized patient care pathways
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
<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Brief description</th>
<th>Link</th>
</tr>
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<tbody>
<tr>
<td>Canada</td>
<td>COVID-19 In Canada</td>
<td>Canada specific. Dashboard/tracker by University of Toronto and University of Guelph.</td>
<td><a href="https://art-bd.shinyapps.io/covid19canada/">https://art-bd.shinyapps.io/covid19canada/</a></td>
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<tr>
<td>Canada</td>
<td>Flatten</td>
<td>Canada specific. Online screening tool/app on COVID-19 information per region/postal code.</td>
<td><a href="https://flatten.ca/">https://flatten.ca/</a></td>
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<tr>
<td>Holland</td>
<td>Data Sources COVID-19 (Dutch specific)</td>
<td>A Dutch resource based on national and international sources.</td>
<td><a href="https://www.databronnencovid19.nl/">https://www.databronnencovid19.nl/</a></td>
</tr>
<tr>
<td>USA</td>
<td>Coronavirus COVID-19 Global Cases</td>
<td>Interactive dashboard mapping the outbreak in real-time by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)</td>
<td><a href="https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6">https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6</a></td>
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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

MARIEKE WALSH AND JUSTINE HUNTER
OTTAWA AND VICTORIA
PUBLISHED APRIL 2, 2020
UPDATED 37 MINUTES AGO
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
DATA IS THE NEW BACON
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?

- % change from day before
- Confirmed new cases daily

Mar 17-18: All provinces and territories declare state of emergency

Mar 18-21: International bans and border measures effective

Mar 23-25: National ad campaign promoting social distancing and good hygiene launched; National (inter-provincial) travel restrictions come into effect; Self-isolation becomes mandatory for individuals entering Canada; Penalties for disobeying the COVID-19 emergency laws are introduced.

Mar 25-30: Fiscal stimulus package announced

Region
- Alberta
- British Columbia
- Canada
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- 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

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