CIHI’s Analytical Plan

2020 to 2022
Production of this document is made possible by financial contributions from Health Canada and provincial and territorial governments. The views expressed herein do not necessarily represent the views of Health Canada or any provincial or territorial government.

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How to cite this document:
Canadian Institute for Health Information. CIHI’s Analytical Plan, 2020 to 2022. Ottawa, ON: CIHI; March 2021.

Cette publication est aussi disponible en français sous le titre Plan analytique de l’ICIS de 2020 à 2022.
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Introduction

The analytical products and indicators produced by the Canadian Institute for Health Information (CIHI) aim to inform the public, enlighten policy decisions and answer the most critical questions of health system managers, clinicians and other health stakeholders. The purpose of the corporate analytical plan is to provide a consolidated view of CIHI’s analytical activities to ensure that they are

- Aligned with CIHI’s strategic directions and priorities;
- Relevant to stakeholder needs; and
- Transparent for our partners, to help identify opportunities for collaboration and avoid duplication.

The plan builds on consultations regarding the information needs of CIHI’s priority audiences, including policy-makers and health system managers. It presents a rolling picture of CIHI’s new analytical projects, including new indicators and analytical reports, over 2 years.

Under the leadership of senior staff from across the organization, with expert external guidance from the Strategic Analytical Advisory Committee, CIHI’s analytical planning process strives to identify relevant, appropriate and actionable analyses, while optimizing the efficient use of resources.

This document provides brief descriptions of projects released or to be released between April 1, 2020, and March 31, 2022, categorized by priority theme areas defined in CIHI’s multi-year business plan. It also includes a new theme on COVID-19 and provides information on recent and planned releases in support of this work.

This update of CIHI’s analytical plan is as of March 1, 2021. Actual names, release dates and products may change during development. The plan is updated twice a year, and the latest version can be found on CIHI’s website.

If you have suggestions for CIHI’s analytical plan or would like more information, please send an email to analyticalplan@cihi.ca.
In support of A Common Statement of Principles on Shared Health Priorities, CIHI is working closely with federal, provincial and territorial governments to develop a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care.

Delaying admissions to long-term care for clients whose needs can be met through home care programs provides better experiences for clients and ensures that long-term care facilities have the capacity to provide care for clients with more complex health needs. This indicator helps identify seniors in residential care settings who might have been supported through better access to home care.
Caregiver Distress

Released: August 2020
Next anticipated update: Spring 2021

In support of A Common Statement of Principles on Shared Health Priorities, CIHI is working closely with federal, provincial and territorial governments to develop a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care.

Unpaid caregivers provide essential care that may help prevent or delay the need for residential care. Appropriate access to home and community care may reduce caregiver distress. The Caregiver Distress indicator captures the proportion of unpaid caregivers who are distressed after home care services have started. It aims to represent a broad range of clients receiving home care services and is intended to capture the effectiveness of home care services related to unpaid caregiver experiences. In conjunction with other Shared Health Priorities indicators, it helps to measure access to home and community care.

Wait Times for Home Care Services

Anticipated release: Spring 2021

In support of A Common Statement of Principles on Shared Health Priorities, CIHI is working closely with federal, provincial and territorial governments to develop a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care.

Wait times reflect the ability of the health system to ensure timely access to services and are an important aspect of a client’s experience with care. The Wait Times for Home Care Services indicator provides information on how long Canadians are waiting for home care services.

Using Canadian Acute Care Data to Develop a Frailty Measure to Inform Quality of Care and Research on Seniors

Anticipated release: Fall 2021

Frail individuals are more likely to have increased care needs, hospitalizations, long-term care admissions and poor health outcomes. Identifying these individuals could lead to improved measurement of health system performance and better allocation of resources. This project aims to develop a frailty measure for acute care using routinely collected pan-Canadian administrative data — a measure that has yet to be developed in Canada.
Drug Use Among Seniors in Canada

Anticipated release: Spring 2022

Seniors are at a higher risk of adverse drug events due to age-related changes in the body and the higher number of drugs they often are taking, compared with younger populations. This report provides an in-depth look at the number and types of drugs prescribed to seniors, updating figures last published in 2018. New analyses will examine the prescribing of antibiotics among seniors and the impact of COVID-19 on the use of prescribed drugs among seniors.

Mental health and addictions

Care for Children and Youth With Mental Disorders — Infographic and data tables

Last updated: September 2020
Next anticipated update: Spring 2022

This infographic provides information on emergency department and inpatient hospitalization use by children and youth with mental disorders in Canada. The data tables provide this information disaggregated by age, sex, province and territory, and diagnosis. They also contain information on psychotropic medication use in this population. The infographic and data tables were originally released as companion products to the 2015 report Care for Children and Youth With Mental Disorders.

Common Challenges, Shared Priorities: Measuring Access to Home and Community Care and to Mental Health and Addictions Services in Canada — Volume 2

Released: August 2020
Anticipated release of Volume 3 report: Spring 2021

This companion report outlines the progress made to date on a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care. This annual report supports the yearly release of 3 Shared Health Priorities indicators, by

- Providing contextual information to help decision-makers and Canadians understand how to interpret the results;
- Clarifying data limitations; and
- Identifying factors that might influence the numbers.
Self-Harm, Including Suicide

Released: August 2020
Next anticipated update: Spring 2021

In support of A Common Statement of Principles on Shared Health Priorities, CIHI is working closely with federal, provincial and territorial governments to develop a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care.

Deliberate self-harm, regardless of suicidal intent, can be considered a sign of emotional distress that may result in accidental death or serious injury. The Self-Harm, Including Suicide indicator signals poor outcomes related to access to the right combination of services, treatments and supports, when and where people need them.

Wait Times for Community Mental Health Counselling

Anticipated release: Spring 2021

In support of A Common Statement of Principles on Shared Health Priorities, CIHI is working closely with federal, provincial and territorial governments to develop a set of common indicators focused on measuring pan-Canadian access to mental health and addictions services and to home and community care.

Wait times reflect the ability of the health system to ensure timely access to services and are an important aspect of a client’s experience with care. The Wait Times for Community Mental Health Counselling indicator provides information on how long Canadians are waiting for community mental health counselling.

Children and youth

Children and Youth With Medical Complexity in Canada

Released: October 2020

Children and youth with medical complexity (CMC) are those who have complex underlying chronic health conditions that are typically associated with significant functional status limitations. CMC live with complex chronic conditions, neurological impairment or medical technology assistance. As a group, CMC represent a small proportion of all children, yet they consume a large proportion of resources. This report provides a pan-Canadian picture of medically complex children and youth in Canada and drills down into the health characteristics, service use and transitions in care of this population.
Health system performance projects

Patient experience

Wait Times for Priority Procedures in Canada

Last updated: July 2020
Next anticipated update: Spring 2021

This annual update provides a snapshot of how long patients wait for a priority procedure and the proportion of patients who receive care within benchmarks for hip/knee replacements, hip fracture repair, cataract surgery, coronary artery bypass graft, radiation therapy, MRI scans and CT scans.

PREMs facility-level public reporting

Anticipated release: 2021–2022

Following a comprehensive engagement process, CIHI has identified 5 patient-reported experience measures (PREMs) for facility-level public reporting that reflect patient, facility-level and system-level voices. The 5 chosen measures are Communication With Nurses, Communication With Doctors, Involvement in Decision-Making, Discharge Management and Overall Hospital Experience. The measures will be publicly reported using CIHI’s Your Health System: In Depth web tool, and will support improvements in patient-centred care and enable benchmarking across hospitals. A multi-phased stakeholder engagement and communications strategy is in development to support readiness leading up to the release, and subsequent uptake and use. Methodological investigations, including a CIHI-led mode study, are in progress to ensure meaningful comparisons of results across participating facilities, regions and jurisdictions.

Quality and safety

Measuring Patient Harm in Canadian Hospitals: A Hospital Harm Data Update

Last updated: October 2020
Next anticipated update: Fall 2021

This data release provides updated pan-Canadian numbers for the Hospital Harm measure introduced in the 2016 report Measuring Patient Harm in Canadian Hospitals. The data tables provide information on the overall rate, as well as counts by category and clinical group for the most recent year of data.
Early Revisions of Hip and Knee Replacements in Canada: A Quality, Productivity and Capacity Issue

Released: August 2020

Given the high volume of and demand for hip and knee replacements in Canada, potentially avoidable early revision surgeries warrant attention. These early revisions take place relatively soon after the initial surgery; they are costly in terms of health care resources, and negatively impact patients’ experience and quality of life. This study provides a better understanding of who requires these revision surgeries and why, and quantifies the impacts on and costs to our health care systems. Findings from this report are intended to inform opportunities for system improvement in terms of policy and clinical practice to enable better patient outcomes.

Implantable Medical Devices in Canada: Insights Into High-Volume Procedures and Associated Costs

Released: August 2020

As the number of implantable medical devices in use rises, the safety, efficacy, cost and appropriateness of these devices are garnering greater attention from many stakeholders in Canada. Health Canada has released its Action Plan on Medical Devices, which includes steps to enhance medical device regulation, monitoring and reporting in Canada. Recognizing the value of CIHI’s data in informing best practices — and to enable future research on this emerging topic — this report provides insights into high-volume implantable medical device procedures and associated costs using pan-Canadian hospitalization and day surgery data.

International

How Canada Compares: Results From the Commonwealth Fund’s 2020 International Health Policy Survey of the General Population in 11 Countries

Released: February 2021

The 2020 Commonwealth Fund survey of the general population focused on the views of Canadians and of residents of 10 peer countries about their experiences and interactions with health care providers and their health care systems. The chartbook and accompanying analytical products cover a broad range of topics: behaviours affecting health, access to health care, person-centred care, coordination of care and cost barriers to care. The analytical products provide an important perspective on how well the health systems in Canada are meeting the needs and expectations of Canadians. Comparisons with peer countries enable learning from policies and best practices in these other countries.
COVID-19

CIHI is creating, curating and delivering COVID-19–related analytical products for use by governments, health systems, media, the public and other stakeholders. The following section includes released and planned products in support of this effort. The section will be updated as we identify new analytical work to be done on the impact of COVID-19 on health care systems and health of Canadians.

Health System Capacity Planning Tool

Released: April 2020 (version 2.1 in October 2020)  
Updated: February 2021 (version 2.2)

CIHI developed the Health System Capacity Planning Tool to help decision-makers understand expected health resource demands and supply shortfalls related to the COVID-19 pandemic. The 2.1 release had a new component that projects the number of health care workers and the amount of personal protective equipment required to care for hospitalized COVID-19 patients. The most recent version accounts for vaccination and reflects the most recent hospital requirements to care for patients with COVID-19.

Estimating Planned Surgical Cancellations Due to COVID-19 Using Historical Data

Released: May 2020

This analysis provides data and information on planned surgeries that happened in hospital operating rooms and day surgery clinics between February 1 and April 30, 2019. It is designed to help decision-makers determine the scope of efforts needed to restart planned surgeries that jurisdictions cancelled to create capacity for an anticipated surge in COVID-19–related hospital admissions.
COVID-19 Intervention Scan and Timeline in Canada (regarding measures to reduce COVID-19 spread and improve outcomes)

Released: June 2020 (scan), September 2020 (timeline)
Updated: February 2021 (updated every 2 months)

The COVID-19 Intervention Scan is a comprehensive Excel document of federal, provincial and territorial government interventions, announcements and other measures introduced to reduce the spread of and improve health outcomes related to COVID-19. It includes information about case-finding and management, openings and closures, physical distancing, health workforce capacity and other measures. It provides detailed information and important contextual information regarding COVID-19 interventions and pandemic events. The COVID-19 Intervention Timeline in Canada is an interactive tool that highlights similar information. It allows users to create a customized timeline of COVID-19 interventions and daily case counts to focus on a jurisdiction, time period and type of intervention. To receive a copy of the updates, email cphi@cihi.ca.

Pandemic Experience in the Long-Term Care Sector: How Does Canada Compare With Other Countries?

Released: June 2020

This snapshot analysis examines how Canada’s pandemic experience in long-term care and retirement homes compares with that of 16 other countries in the Organisation for Economic Co-operation and Development (OECD). Specifically, it focuses on 3 areas of comparison: COVID-19 outcomes in long-term care homes (cases and deaths), baseline sector characteristics and policy responses to address the pandemic.

COVID-19 Cases and Deaths in Health Care Workers in Canada

Released: September 2020
Updated: February 2021 (updated quarterly)

Health care workers across the country play a critical role in the COVID-19 pandemic. CIHI has compiled the number of COVID-19 cases and deaths in health care workers in Canada. This information is made available using a data visualization and data tables. The information is pulled from publicly available sources, the majority of which have been validated by provinces and territories, along with case report data published by Statistics Canada. It also includes a breakdown of cases in Canadian Armed Forces personnel who provided emergency relief to areas of the country where it was needed. CIHI expects to update this information quarterly, depending on the evolution of the pandemic.
Long-Term Care Homes in Canada: How Many and Who Owns Them?  
Released: September 2020

This project provides information on the number of long-term care homes in Canada. It includes breakdown information on the total number of homes and ownership type (public, private for-profit and private not-for-profit) for all provinces and territories.

Impact of COVID-19 on Canada’s health care systems  
Released: November 2020 (Wave 1)  
Next anticipated update: Spring 2021

This series of analyses explores how the COVID-19 pandemic has affected the functioning of provincial health care systems (including community care, emergency departments, acute care and home care). The analyses investigate the effects by type of care and by jurisdiction, describing the differences and similarities between the COVID-19 “wave” period and the same period in the previous year.

The Impact of COVID-19 on Long-Term Care in Canada: Focus on the First 6 Months  
Anticipated release: Spring 2021

This report will build on CIHI’s international comparison work to examine the impact of COVID-19 on long-term care in Canada. It will compare outbreaks in facilities across the country and identify the factors and policy choices associated with better infection control outcomes. It will also examine elements of care management during the pandemic, including which services were provided to residents, admission practices, and transfers to and from acute care.

Unintended Consequences of COVID-19  
Anticipated release: Spring 2021 (updated every 6 months)

This series of analyses will explore the effects of the COVID-19 pandemic on wider health impacts, including those indirectly attributable to either the pandemic or the associated public health response. The releases will explore the changes in hospitalizations and emergency department visits for unintentional falls, self-harm and the harms caused by substance use between March and September 2020 and a similar period in 2019. Changes by month, jurisdiction, age, sex and other relevant breakdowns will be included.
Equity projects

Measuring Health Inequalities: A Toolkit

Last updated: Spring 2020
Next anticipated update: Spring 2021

This web-based toolkit, released in October 2018, provides guidelines and resources to assist analysts and researchers with measuring and reporting on health and health care inequalities. It is organized by phase to help users plan, analyze and report on indicators stratified by socio-demographic variables, such as income and geographic location. The spring 2020 update included new information on the Proposed Standards for Race-Based and Indigenous Identity Data Collection and Health Reporting in Canada, along with updates to the resources, including the Equity Stratifier Inventory, SAS macros and methodology notes. This toolkit is accompanied by a series of 4 eLearning courses (see Measuring Health Inequalities Learning Pathway in CIHI’s Learning Centre).

Proposed Standards for Race-Based and Indigenous Identity Data Collection and Health Reporting in Canada

Released: July 2020

In 2018, CIHI released standards for measuring health inequalities in Canada by age, sex, gender, income, education and geography. Building on this, we are exploring standards to improve the collection of race-based and Indigenous identity data, with considerations for ethnicity. Pan-Canadian data standards ensure that high-quality data is consistently collected, analyzed and reported, thus improving our ability to monitor and compare health care access, quality and outcomes. This discussion document will be used to engage stakeholders across Canada to explore the value and acceptability of race-based, ethnic and Indigenous identity data standards. Feedback from ongoing engagement will inform pan-Canadian standards. To learn more about this ongoing work, please email cphi@cihi.ca.
Appendix

Annual reports, indicators and data releases

In addition to the new projects listed in this plan, CIHI also publicly releases updates of the following reports and indicators on a yearly or other regular basis. Releases that include information related to CIHI’s COVID-19 work have been indicated with the appropriate icon:

Types of care

- Canadian Organ Replacement Register (CORR): Treatment of End-Stage Organ Failure in Canada — Annual report and Quick Stats
- Continuing Care Reporting System (CCRS) — Quick Stats
- COVID-19 Hospitalization and Emergency Department Statistics (updated quarterly)
- Emergency Department Visits in Canada — Quick Stats
- Hip and Knee Replacements in Canada: Canadian Joint Replacement Registry (CJRR) — Annual report and Quick Stats
- Home Care Reporting System (HCRS) — Quick Stats
- Hospital Mental Health Database (HMHDB) — Quick Stats
- Hospitalization and Childbirth in Canada — Quick Stats
- Induced Abortions Reported in Canada — Quick Stats
- Injury and Trauma Hospitalizations and Emergency Department Visits — Quick Stats
- National Rehabilitation Reporting System (NRS) — Quick Stats
Health system performance

- Health Indicators e-Publication — A large inventory of health indicators for regions, provinces and territories measuring the health of Canadians and the performance of health systems, jointly produced by Statistics Canada and CIHI
- OECD Health Database — Canadian Segment
- Cardiac Care Quality Indicators — Pan-Canadian comparable information on outcomes related to selected cardiac interventions
- Your Health System: In Brief — Interactive web tool providing selected indicators in 5 themes, for health regions and acute care and long-term care facilities. This also includes the following previously released Shared Health Priorities indicators and applicable updates:
  - Hospital Stay Extended Until Home Care Services or Supports Ready
  - Hospital Stays for Harm Caused by Substance Use
  - Frequent Emergency Room Visits for Help With Mental Health and/or Addictions
- Your Health System: In Depth — Interactive web tool providing an expanded suite of indicators with comparable results for health regions and acute care and long-term care facilities

Health workforce and spending

- Health Workforce — Data tables
- Hospital Financial and Statistical Information (Canadian MIS Database) — Quick Stats
- National Health Expenditure Trends — Annual report and Quick Stats
- Prescribed Drug Spending in Canada — Annual report
- Physicians in Canada — Annual report and Quick Stats
- Regulated Nurses in Canada — Annual report and Quick Stats