



CIHI's Analytical Plan 2021 to 2023



Canadian Institute
for Health Information

Institut canadien
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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, 2021, and March 31, 2023, categorized by priority theme areas defined in CIHI's multi-year business plan. It also includes a theme on COVID-19 and provides information on recent and planned releases in support of this work.

Throughout the COVID-19 pandemic, CIHI has successfully modernized its analytical offerings to meet the needs of stakeholders by

- Streamlining the release of data and analyses based on the most current and relevant pandemic situation for easier accessibility and usability; and
- Continuously updating relevant COVID-19 products with new data and conducting stakeholder-driven analysis.

This analytical plan is strongly connected to our strategic plan, and our analytical products support the 3 goals in the current strategic plan (2016 to 2021). Significant progress has been made to align the focus of our analytical work on the priority populations identified in the strategic plan. Overall, close to 50 ad hoc projects (indicators and analyses) have been completed to fill identified knowledge gaps in priority populations. A few examples of these are provided below:

- **Seniors and aging**

- Indicators to measure access to home and community care: New Long-Term Care Residents Who Potentially Could Have Been Cared for at Home, Caregiver Distress and Wait Times for Home Care Services
- In-depth analyses: *Access to Palliative Care in Canada, Dementia in Canada and Seniors in Transition*
- CIHI Hospital Frailty Risk Measure to characterize the risk of frailty among seniors in hospitals

- **Mental health and substance use**

- Indicators to measure access to mental health and substance use services: Hospital Stays for Harm Caused by Substance Use, Wait Times for Community Mental Health Counselling and Self-Harm, Including Suicide
- In-depth analyses on opioids
- *Health System Resources for Mental Health and Addictions Care in Canada*

- **Children and youth**





- In-depth analyses: *Care for Children and Youth With Mental Disorders, Children and Youth With Medical Complexity in Canada and Hospital Stays for Harm Caused by Substance Use Among Youth Age 10 to 24*

This update of CIHI's analytical plan is as of March 1, 2022. 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.


Icon legend


Priority population themes


-  Seniors and aging
-  Mental health and addictions
-  First Nations, Inuit and Métis
-  Children and youth

Health system performance themes

-  Patient experience
-  Quality and safety
-  Outcomes
-  Value for money
-  International
-  COVID-19

 New entry in analytical plan

 Shared Health Priorities

 Indicator

 Virtual care

Priority population projects

Seniors and aging

Wait Times for Home Care Services

Released: May 2021

Next anticipated update: Fall 2022

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 substance use 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.

Death at Home/Not in Hospital

Anticipated release: Fall 2022

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 substance use services and to home and community care.

Many Canadians would prefer to receive end-of-life care at home rather than in hospital. When supports are available, death at home is an indication of a higher-quality death experience. The Death at Home/Not in Hospital indicator will help measure progress being made toward improving access to home-based end-of-life care.

[Frailty among hospitalized seniors: CIHI Hospital Frailty Risk Measure](#)

Released: December 2021

Frail individuals are more likely to have increased care needs, hospitalizations, long-term care admissions and poor health outcomes. Until recently, there was no standard way to measure frailty in acute care in Canada using routinely collected administrative data. The [CIHI Hospital Frailty Risk Measure \(HFRM\)](#) is a contextual measure developed to support planning and resourcing for seniors in hospitals across Canada. It can be used to ensure appropriate and targeted care for seniors with complex medical needs, and to support quality improvement and health research.

Drug Use Among Seniors in Canada

Anticipated release: Summer 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 analysis will include a series of data tables to provide an in-depth look at the number and types of drugs prescribed to seniors, updating figures last published in 2018. Additional tables will focus on drugs prescribed to seniors living in long-term care facilities.

Access to Palliative Care in Canada

Anticipated release: Winter 2023

Palliative care helps address the needs of people with life-limiting conditions to improve their quality of life and that of their families. With an aging population, improving access to palliative care in community settings has become a priority for federal, provincial and territorial governments. This report will update CIHI's 2018 baseline report [Access to Palliative Care in Canada](#). It will examine trends in where and how Canadians receive palliative care in the last year of life, whether Canadians have equitable and timely access to appropriate services and where data gaps remain.



Mental health and addictions

Common Challenges, Shared Priorities: Measuring Access to Home and Community Care and to Mental Health and Substance Use Services in Canada — Volume 3

Released: May 2021

Anticipated release of Volume 4 report: Fall 2022

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 substance use 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.

Wait Times for Community Mental Health Counselling

Released: May 2021

Next anticipated update: Fall 2022

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 substance use 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 ongoing community mental health counselling.

Navigation of Mental Health and/or Substance Use Services

Anticipated release: Fall 2022

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 substance use services and to home and community care.

Canadians seek access to mental health and/or substance use services in various ways, many of which are not optimal. The Navigation of Mental Health and/or Substance Use Services indicator will report on the percentage of individuals who accessed care and felt they had the necessary support to move within and between mental health and/or substance use services in the past year.

Early Intervention for Mental Health and/or Substance Use Among Children and Youth

Anticipated release: Fall 2022

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 substance use services and to home and community care.

Mental health and substance use concerns often begin during childhood and adolescence. Early interventions can help to reduce symptoms and delay the incidence of these disorders. This indicator will provide an upstream measure of access to community-based mental health and/or substance use services among children and youth with early needs.



Children and youth

[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 findings and infographic disaggregate this information by age, sex, province and territory, and diagnosis. The infographic and data tables were originally released as companion products to the report *Care for Children and Youth With Mental Disorders*.



First Nations, Inuit and Métis Peoples

CIHI is committed to advancing [cultural safety and humility](#), respecting the principles of [Indigenous data sovereignty](#) and supporting work led by First Nations, Inuit and Métis Peoples to address their health needs and data priorities. In keeping with our *Policy on the Release and Disclosure of Indigenous-Identifiable Data*, analysis is undertaken only through partnerships and data is released only with permission from the appropriate Indigenous authorities.

CIHI released the discussion paper [Measuring Cultural Safety in Health Systems](#) in November 2021. It introduces a framework for measuring cultural safety, which is paired with a list of potential indicators. It is intended to contribute to the wider discussion about cultural safety and racism, and to lead to future measurement and reporting in health systems.

Health system performance projects

Patient experience

[Wait Times for Priority Procedures in Canada](#)

Last updated: June 2021

Next anticipated update: Spring 2022

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. The findings from the June 2021 release reflect wait times for patients who had their procedures done between April and September 2020 and provide comparisons with the same period in previous years (primarily 2019). In 2020, many health care services were cancelled, delayed or modified due to the COVID-19 pandemic.

PREMs facility-level public reporting

Anticipated release: Spring 2022

Following a comprehensive engagement process, CIHI identified 5 patient-reported experience measures (PREMs) for public reporting that reflect patient priorities and what care providers, hospitals and regions can focus on to improve patient experience. To ensure uptake and use, measure names were reviewed for plain language and will be reported as Communication With Doctors, Communication With Nurses, Involvement in Decision-Making and Treatment Options, Information and Understanding When Leaving the Hospital, and Overall Hospital Experience.

Measure results will be made available in CIHI's Your Health System: In Depth web tool and contextualized with a suite of companion products to ensure broad health system-level understanding. A multi-phased stakeholder engagement and communications strategy is in progress to support readiness leading up to the release. Methodological investigations, including a CIHI-led mode study, have been completed, with new methodologies now applied 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](#) **I**

Last updated: October 2021

Next anticipated update: Fall 2022

The findings provide updated pan-Canadian numbers and analyses to the [original Hospital Harm measure](#). The findings and infographic provide information on the overall rate, as well as counts and rates by category and clinical group of hospital harm for the most recent year of data.

Value for money

Unnecessary Care in Canada **N**

Anticipated release: Fall 2022

CIHI has partnered with Choosing Wisely Canada — the national voice for reducing unnecessary tests and treatments in health care — since 2015. In 2017, we jointly released a [baseline report](#) that estimated the degree of potentially unnecessary tests and treatments for 8 Choosing Wisely recommendations. The upcoming 2022 report and companion products will explore the changing landscape of overuse in Canada and the impact of the COVID-19 pandemic by providing updates on several recommendations from the baseline report as well as new analyses.



International

How Canada Compares: Results From the Commonwealth Fund's 2021 International Health Policy Survey of Older Adults in 11 Countries

Anticipated release: March 2022

The 2021 Commonwealth Fund survey of older adults focuses on the views of people age 65+ in Canada and 10 peer countries about their experiences and interactions with health care providers and their health care systems. The chartbook and accompanying analytical products will cover a broad range of topics: access to health care; person-centred care; coordination of care; experience with specialists, hospital care and home care; and end-of-life care planning. The analytical products will provide an important perspective on how well Canada's health systems are meeting people's needs and expectations. Comparisons with peer countries will 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 the health of Canadians.

[COVID-19 Intervention Scan and Timeline in Canada \(regarding measures to reduce COVID-19 spread and improve outcomes\)](#)

Last updated: January 2022

Next anticipated update: Spring 2022

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, vaccines, 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 advance copies of the updates, email populationhealth@cihi.ca.

[COVID-19 cases and deaths in health care workers in Canada](#)

Last updated: August 2021

Next anticipated update: March 2022

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. CIHI expects to update this information quarterly with new content relevant to the evolution of the pandemic.

Health workforce in Canada: Highlights of the impact of COVID-19

Released: August 2021

Next anticipated update: Summer 2022

This digital report compiles 2020 health workforce data to help inform how the pandemic has affected health care workers and the care Canadians received. Health care workers are the foundation that keep our health care systems running. While some of this data was collected before the pandemic began in Canada, additional information has been pulled in where possible to provide COVID-19 context and to highlight key areas to monitor as new data becomes available. The report covers topics such as health workforce supply, health workforce capacity, health workforce in virtual care and health care workers in long-term care.

Long-term care homes in Canada: How many and who owns them?

Released: September 2020

Updated: June 2021

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

How many long-term care beds are there in Canada?

Released: June 2021

The infographic and data table contain information on the number of long-term care homes and beds in Canada. The infographic includes the number of long-term care beds per 1,000 population age 65+ in each jurisdiction. The data table includes the number of long-term care homes, beds and beds per 1,000 population age 65+, by province and territory.

[Impact of COVID-19 on Canada's health care systems](#)

Last updated: December 2021

This series of analyses explores how the COVID-19 pandemic affected the functioning of provincial health care systems (including emergency departments, hospital services and physician services) from March 2020 to June 2021. The analyses investigate the effects by type of care and by jurisdiction, describing the differences and similarities between the COVID-19 period and the pre-pandemic 2019 calendar year. Updated information from the *Unintended Consequences of COVID-19* reports (on [harms caused by substance use](#), [self-harm behaviour](#) and [accidental falls](#)) released in spring/summer 2021 and from the report [The Impact of COVID-19 on Long-Term Care in Canada](#) released in March 2021 has also been added to this series.

[Unintended Consequences of COVID-19 \(harms caused by substance use, self-harm behaviour and accidental falls\)](#)

Released: May 2021 and July 2021

This series of analyses explores 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 explore changes in hospitalizations and emergency department visits for accidental falls, self-harm and harms caused by substance use during the pandemic. Changes by month, jurisdiction, age, sex and other relevant breakdowns are included.

Impact of COVID-19 on patient experience in acute care hospitals

Anticipated release: Winter 2022

Rapid changes in Canada's health care systems in response to the COVID-19 pandemic have affected the delivery of hospital care and, consequently, patient experiences. CIHI's Canadian Patient Experiences Reporting System (CPERS) has continued to capture acute inpatient experiences throughout the pandemic from Ontario, Manitoba and Alberta. This Snapshot report will explore patient experiences during the pandemic.

Virtual care: A major shift for Canadians receiving physician services

Anticipated release: March 2022

This analysis will describe the shift from in-person to virtual care for physician services provided to patients. The work will include patient-level analyses broken down by patient age groups, sex, rurality and socio-economic status.

Virtual care: A major shift for physicians in Canada

Anticipated release: March 2022

This analysis will describe the shift in physician practice patterns from in-person care to virtual care that has occurred during the COVID-19 pandemic. The work will examine impacts on physician practice broken down by physician age groups, sex, rurality and location of MD graduation (Canadian medical graduate versus international medical graduate).

Equity projects

Measuring Health Inequalities: A Toolkit

Last updated: Spring 2020

Next anticipated update: Spring 2022

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 to help users plan, analyze and report on indicators stratified by socio-demographic variables, such as income and geographic location. The spring 2022 update will include a refresh of existing tools and resources. The toolkit is accompanied by 4 eLearning courses (see Measuring Health Inequalities Learning Pathway in [CIHI's Learning Centre](#)).

Race-Based and Indigenous Identity Data Standards and Guidance for Implementation

Anticipated release: March 2022

In 2020, CIHI released [Proposed Standards for Race-Based and Indigenous Identity Data Collection and Health Reporting in Canada](#). Since then, CIHI has engaged with a variety of stakeholders and partners to gather feedback on the proposed approach, leading up to a release of the final standards in March 2022. Pan-Canadian data standards ensure that high-quality data is consistently collected, analyzed and reported, thus improving our ability to identify and monitor health inequalities that stem from racism, bias and discrimination, and to inform interventions to improve equity in health care access, quality, experience and outcomes. To learn more about this ongoing work, please email populationhealth@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) — Annual Quick Stats
- COVID-19 Hospitalization and Emergency Department Statistics (updated quarterly) 
- Emergency Department Visits in Canada — Quick Stats (updated quarterly)
- Hip and Knee Replacements in Canada: Canadian Joint Replacement Registry (CJRR) — Annual report and Quick Stats
- Home Care Reporting System (HCRS) — Annual Quick Stats
- Hospital Mental Health Database (HMHDB) — Annual Quick Stats
- Hospitalization and Childbirth in Canada — Annual Quick Stats
- Induced Abortions Reported in Canada — Annual Quick Stats
- Injury and Trauma Hospitalizations and Emergency Department Visits — Annual Quick Stats
- National Rehabilitation Reporting System (NRS) — Annual 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 (final release will be July 2022)
- Your Health System: In Brief and In Depth — The fall 2021 release included the first release of Health System Performance indicator results that have been affected by the COVID-19 pandemic. Communication strategies were bundled with the update of [Impact of COVID-19 on Canada's health care systems](#) and included supporting documentation on CIHI's analytical approach and decision-making for public reporting of health system performance in the context of the pandemic. The spring 2022 release will include first-time reporting of facility-level patient-reported experience measures (PREMs).

- Your Health System: In Brief — An 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 Substance Use](#)
 - [New Long-Term Care Residents Who Potentially Could Have Been Cared for at Home](#)
 - [Caregiver Distress](#)
 - [Self-Harm, Including Suicide](#)
- Your Health System: In Depth — An 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 and Quick Stats 
- Hospital Financial and Statistical Information (Canadian MIS Database) — Hospital spending data release and 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 

Health workforce scopes of practice in Canada, 2021

Last release: December 2020

Next anticipated release: Spring 2022

With increasing demands on Canada's health care systems, the growing backlog of services and increasing pressure on an already taxed health workforce, the optimum utilization of the health workforce is a priority for federal, provincial and territorial ministries. At this time, there is limited pan-Canadian information available to understand what different health care providers are permitted to do. In response to this knowledge gap, CIHI released [Nurse Practitioner Scopes of Practice in Canada, 2020](#) in December 2020. The upcoming release will expand coverage of scopes of practice data to all regulated nursing types: registered nurses, licensed practical nurses and registered psychiatric nurses.

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