CIHI’s Analytical Plan
2019 to 2021
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, 2019, and March 31, 2021, categorized by priority theme areas defined in CIHI’s multi-year business plan.

This update of CIHI’s analytical plan is as of January 1, 2020. 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 any suggestions for CIHI’s analytical plan or would like more information, please send an email to analyticalplan@cihi.ca.
CIHI's Analytical Plan, 2019 to 2021

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

N New entry in analytical plan  I Indicator  SHP Shared Health Priorities

Priority population projects

Seniors and aging

Hospital Stay Extended Until Home Care Services or Supports Ready  I SHP

Released: May 2019
Anticipated update: Spring 2020

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.

This indicator signals whether Canadians are getting timely access to home care when they no longer need to be in the hospital. This can help

- Identify needs for community and home supports following hospital stays;
- Reduce potentially avoidable hospital costs; and
- Raise awareness of the need for early and coordinated discharge planning.
New Long-Term Care Residents Who Potentially Could Have Been Cared for at Home

**Anticipated release: Spring 2020**

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 will help identify seniors in residential care settings who might have been supported through better access to home care.

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**Caregiver Distress**

**Anticipated release: Spring 2020**

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.

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

**Anticipated release: 2020–2021**

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.
Mental health and addictions

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

Last updated: May 2019
Next anticipated update: Spring 2020

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.

Hospital Stays for Harm Caused by Substance Use

Released: May 2019
Anticipated update: Spring 2020

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.

Problematic substance use causes a significant burden for Canadians, their families and society. This indicator provides a signal as to whether Canadians are getting access to the information and help they need to prevent or manage problematic substance use.

Frequent Emergency Room Visits for Help With Mental Health and/or Addictions

Released: May 2019
Anticipated update: Spring 2020

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.

Frequent visits to emergency rooms (ERs), urgent care centres (UCCs) or hospitals are usually a sign that people are not getting access to the services and support they need in the community. This indicator looks at rates of repeat visits to the ER and/or UCC for mental health and/or addictions issues.
Common Challenges, Shared Priorities: Measuring Access to Home and Community Care and to Mental Health and Addictions Services in Canada

Year 1 report released: May 2019
Anticipated release of Year 2 report: Spring 2020

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.

Health System Resources for Mental Health and Addictions Care in Canada

Released: July 2019

This chartbook provides baseline information on the current state of available resources for people with mental health and addictions issues across Canada. Focusing on costs of care, number of beds, bed occupancy and health human resources, it will help set the foundation for future analytical work.

Opioid Prescribing in Canada: How Are Practices Changing?

Released: October 2019

This report uses data from Ontario, Manitoba, Saskatchewan and British Columbia from 2013 to 2018. It focuses at the patient level on those who started new therapy with prescribed opioids and those who took opioids long term. The report shows how dosing trends have changed since the opioid crisis began and within the context of interventions such as the release of *The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain*. 
Self-Harm, Including Suicide

Anticipated release: Spring 2020

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.

Quantifying the Effect of Concordance With Quality Standards on Patient Outcomes

Anticipated release: 2020–2021

This paper will explore the unique opportunity to evaluate the effect of concordance with quality standards on patient outcomes in mental health care, including change in clinical outcomes.

Patterns of Health System Use Among Those Who Self-Harm

Anticipated release: 2020–2021

Suicide is a tragic and potentially preventable cause of death that takes the life of more than 4,000 Canadians annually; it is a leading cause of death among youth. This work will describe the population affected by self-harm (including suicide) across Canada, focusing on children and youth. Cohort characteristics will be assessed using a retrospective approach to identify patterns associated with self-harm, encompassing basic demographics, diagnoses, interventions and prior health care utilization. Data permitting, social service use is another area that could be explored.
Children and youth

Hospital Stays for Harm Caused by Substance Use Among Youth Age 10 to 24

Released: September 2019

Building on CIHI’s Hospital Stays for Harm Caused by Substance Use indicator released in spring 2019, this report provides a Canada-wide snapshot of hospitalizations related to cannabis, alcohol, opioids and other substances among youth age 10 to 24 in 2017–2018. It includes analysis by substance type, age, sex, neighbourhood income and geographic location, and examines the proportion of hospitalizations that involved care for concurrent mental health conditions. Data tables provide results by jurisdiction. Taking a closer look at who is being hospitalized for harm, and for which substances, helps inform efforts to improve access to services for youth.

Children and Youth With Medical Complexity

Anticipated release: Spring 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 will provide a pan-Canadian picture of medically complex children and youth in Canada and will drill 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: March 2019
Next anticipated update: Winter 2020

This annual update of the interactive Wait Times web tool provides a timely 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.

Patient Experience in Canadian Hospitals

Released: April 2019

The first large-scale release of pan-Canadian patient experience data, Patient Experience in Canadian Hospitals reports data collected through the Canadian Patient Experience Reporting System (CPERS) at an aggregate level, with a focus on how communication and information-sharing impact the overall patient experience.


Following a successful release, the findings were also published in Healthcare Quarterly in December 2019.

PREMs facility-level public reporting

Anticipated release: 2020–2021

CIHI is working toward publicly reporting a core set of facility-level patient-reported experience measures (PREMs) in its Your Health System: In Depth web tool. CIHI consulted with key stakeholders and patients to ensure that the most appropriate measures were selected for public reporting. Through the consultation process, 5 measures were identified for public reporting that reflect patient, facility-level and system-level voices; reporting on them will support improvement in patient-centred care and enable benchmarking across hospitals. Methodological investigations, including a CIHI-led mode study, are underway 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 2019
Next anticipated update: Fall 2020

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 using the most recent methodology.

Early Revisions for Hip and Knee Replacements in Canada: A Quality, Productivity and Capacity Issue

Anticipated release: Winter 2020

Given the high volume of and demand for hip and knee replacements in Canada, potentially avoidable early revision surgeries warrant attention. 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

Anticipated release: Winter 2020

As the number of implantable medical devices in use rises, the safety, efficacy, cost and appropriateness of these devices is garnering greater attention from many stakeholders in Canada. Health Canada recently released its Action Plan on Medical Devices, which included 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 will provide insights into high-volume implantable medical device procedures and associated costs using pan-Canadian hospitalization and day surgery data.
Value for money

Knee Arthroscopy in Canada

Anticipated release: Summer 2020

Knee arthroscopy remains a common surgical procedure despite strong evidence that it does not lead to long-term improvement in pain or function. This analysis provides a pan-Canadian perspective on this potentially unnecessary procedure and informs opportunities for improvement to enable better patient outcomes and efficient use of resources.

International

OECD Interactive Tool: International Comparisons

Released: November 2019

This eTool examines how Canada and its provinces compare with other countries in the Organisation for Economic Co-operation and Development (OECD) on health status, non-medical determinants of health, quality of care, patient safety, access to care and prescribing in primary care. More than 50 health indicators were updated and new indicators were added to the tool, including measures of opioid prescribing. An infographic was also developed in partnership with the Canadian Patient Safety Institute on how Canada lags behind other countries on measures of patient safety. International comparisons provide provincial governments with a broader context for benchmarking and peer learning.

How Canada Compares: Results From the Commonwealth Fund’s 2019 International Health Policy Survey of Primary Care Physicians

Released: January 2020

The Commonwealth Fund 2019 International Health Policy Survey focused on the views and experiences of primary care doctors in caring for their patients in 11 countries, including Canada. This report offers a closer look at the Canadian story, including provincial breakdowns and changes over time where possible, and shows how the experiences of primary care doctors in Canada compare internationally.
Equity projects

**Measuring Health Inequalities: A Toolkit**

Last updated: July 2019  
Next anticipated update: Spring 2020

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. This toolkit is accompanied by a series of 4 eLearning courses (see Measuring Health Inequalities Learning Pathway in CIHI’s Learning Centre).

**Measuring Trends in Health Inequalities in Cities**

Released: October 2019

Inequalities in health and health care persist: generally, richer Canadians tend to be healthier and live longer than poorer Canadians. Many Canadians are experiencing the effects of rising income inequality. However, the impact is particularly concentrated in major urban centres, where the income gap is greatest. Using data tables and infographics, this study will examine trends in income-related health inequalities over time in major cities across Canada, using hospitalization and day surgery indicators. This analysis will provide local-level evidence to inform planning, as well as the development of policy and programs to improve health.

**Race and Ethnicity Discussion Paper**

Anticipated release: Spring 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 data on race and ethnicity. Despite evidence that such information influences the quality of, access to and outcomes of health care, it is not consistently or routinely collected in Canadian health care systems. We will use this discussion paper to engage stakeholders across Canada to explore the value and acceptability of race and ethnicity data standards.
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:

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
- 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 Hospitalization 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
- 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
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