1994 • 2019

CIHI's Annual Report, 2018–2019

25 Years of CIHI

Canadian Institute for Health Information

Institut canadien d'information sur la santé

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About CIHI

The Canadian Institute for Health Information (CIHI) is an independent, not-for-profit organization that provides essential information on Canada's health systems and the health of Canadians.

Health information has become one of society's most valuable public goods. It informs policy, management, care and research, leading to better, more equitable health outcomes for all Canadians.

CIHI has earned the trust of health systems as the main gatherer, packager and disseminator of information. To succeed in this role, we have evolved to be both knowledge leaders and service providers — in tune with the health systems' needs while setting the pace on data privacy, security, accessibility and innovation.

We are facing rapid change from a place of strength, thanks to the expertise, curiosity and integrity of our people, collaborating with stakeholders at every level throughout Canada's health systems.

Better data, better decisions, healthier Canadians: powered by a shared sense of purpose, the highest standards of excellence and trust.

Powered by CIHI, for 25 years.

Message from CIHI's Board Chair and President

Janet Davidson
Board Chair

David O'Toole
President and CEO

Looking back, moving forward

Reflections after 25 years

When Martin Wilk was asked to describe the state of health information in 1991, he likened it to an "unmapped forest with undefined boundaries."

After being tasked with assessing Canada's health information landscape, the former chief statistician of Canada recommended establishing a national health information coordinating council and an independent institute for health information.

This led to the creation of CIHI, which opened its doors on February 1, 1994. Over the past 25 years, we have provided policy-makers, health care leaders and Canadians with the information and evidence they need to further health care improvements.

Our team of passionate employees works to ensure that our data leads to better decisions for and improvements in Canada's health systems. CIHI has been successful, not only because of our staff, but also because of the collaborative effort between the provinces, territories, federal government and other system partners.

For 25 years now, CIHI has delivered comparable and actionable information to accelerate improvements in health care, health system performance and population health across the continuum of care, in a number of ways, including the following:

The development of a comprehensive set of databases that capture the health care experiences of Canadians — from 3 databases in 1994 to 28 in 2019

The release of a host of reports and tools, such as our annual National Health Expenditure Trends report, the Patient Cost Estimator tool in 2009, the Wait Times web tool in 2011 and focused reporting on Canada's opioid crisis in recent times, to name a few

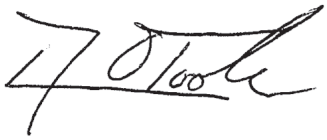
New digital products, such as Your Health System (our interactive public web tool, launched in 2013) and *Dementia in Canada* (CIHI's first fully digital product, released in 2018)

Over the next few years, we will continue to focus on the priority themes and populations identified in our current strategic plan: seniors; children and youth; recipients of mental health and addictions services; and First Nations, Inuit and Métis. Beyond 2021, we will continue to evolve to meet our stakeholders' expanding and broadening health data and information needs.

This annual report highlights our key accomplishments in 2018–2019, looks back at some of our achievements since CIHI's inception, and takes a glimpse at what lies ahead for the next 25 years.

Better data. Better decisions. Healthier Canadians.

Janet Davidson
Board Chair



David O'Toole
President and CEO

Following our path

Making progress with our strategic plan

We're more than halfway through our strategic plan for 2016 to 2021. Since mapping out the path in 2016, we have worked hard to deliver on our commitments to influence and improve Canada's health systems.

Our 3 strategic goals

1 Be a trusted source of standards and quality data

2 Expand analytical tools to support measurement of health systems

3 Produce actionable analysis and accelerate its adoption

Our strategic directions are tailored to meet the needs of priority populations identified by our stakeholders: seniors; those living with mental health and substance use issues; First Nations, Inuit and Métis; and children and youth. Key health system performance themes guide our work, including patient experience, quality and safety, outcomes and value for money. This year, we've strengthened relationships and explored new data and standards to support our priority populations. We've also aligned our analytical work so that more than 60% focuses on key priorities.

A targeted stakeholder survey confirmed that we are concentrating on the right priorities, and in November 2018 our Board of Directors indicated support for staying the course with an even greater emphasis on Indigenous health. Going forward, we'll continue our work on the priorities outlined in the strategic plan.

This year, much of our work dealt with seniors and individuals receiving mental health and addictions services. Reports like *Dementia in Canada* and *Access to Palliative Care in Canada* provide valuable information about how seniors — the fastest growing segment of our population — are faring, while our opioid reports and Hospital Mental Health Database Quick Stats focus on mental health and addictions. Our new area of work on the shared health priorities — which saw a lot of activity — also closely aligns with our priority populations and themes.

Next, we are bringing more attention to 2 of our other priority populations, children and youth, and First Nations, Inuit and Métis. On the children and youth front, we are developing projects, enhancing our partner relations and working to ensure we have the necessary data and tools to meet the unique needs of this population.

As part of the early implementation of our Indigenous Health Strategy, we have met with numerous First Nations, Inuit and Métis individuals and organizations to learn about their health priorities. Relationship building and engagement are key pillars of this work. Our staff have been keen to participate, and this year we stepped up efforts to deliver cultural responsiveness training at CIHI. To date, 314 of our staff have completed this training, which involves learning about the history of Indigenous peoples as well as cultural self-awareness.

We have also been looking at how we can better align with Indigenous principles of ownership, control, access and possession in the governance of Indigenous data holdings at CIHI.

As we celebrate 25 years, we look forward to the next 25 and reflect on what we have accomplished this year. This annual report includes just some of the highlights from 2018–2019, including our work on important health priorities, our efforts to access new and emerging data sources, and the development of valuable new indicators to help measure health system performance.

Land acknowledgement

As CIHI works toward better health for all Canadians, we are mindful that we live on the traditional territories of and work with First Nations, Inuit and Métis in a respectful way.

25 years of CIHI

Pre-1994

1988

National Health Information Council (NHIC) formed by Conference of Deputy Ministers to improve health information in Canada.

1991

Health Information for Canada, 1991: A Report by the National Task Force on Health Information (a.k.a. the Wilk Report) recommends creating a national health information coordinating council and an independent institute for health information.

1994 to 2006

1994

On February 1, CIHI opens doors through merger of Hospital Medical Records Institute (HMRI) and The Management Information Systems (MIS) Group.

Rhéal Leblanc becomes first CEO.

CIHI starts with 3 databases: Discharge Abstract Database (DAD), Ontario Trauma Registry (OTR) and Canadian Organ Replacement Register (CORR).

CIHI releases **first report on organ replacements**.

1995

Privacy, confidentiality and security policy is adopted.

1996

CIHI goes online with its first website.

First bilateral agreements signed with 9 provinces and territories. (CIHI now has one with every province and territory.)

1998

Richard Alvarez named CEO.

1999

Canadian Population Health Initiative (CPHI) established.

2000

CIHI releases **first report on nurses**.

2001

CIHI releases **first report on drug expenditures**.

First employee survey shows high staff satisfaction.

Work starts on implementing ICD-10-CA (*International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada*) and CCI (*Canadian Classification of Health Interventions*). Canada is the first country with electronic format.

2004

Glenda Yeates starts as CEO.

2005

Montréal office opens.

2006

CIHI produces **more than 50 analytical products** and is featured as **one of Ottawa's top 15 employers**.

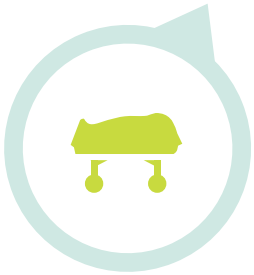
2007 to 2012

2007

CIHI Portal goes online.

CMG+ grouping methodology implemented (except in Quebec), developed with ICD-10-CA/CCI data; Canada is the only country with methodology that addresses both higher-cost patients and data quality.

First report on hospital standardized mortality ratio (HSMR) produced; eHSMR helps track mortality rates.



2008

After more than a decade of sounding out "C–I–H–I," **pronunciation officially changes to "KAI–HI."**

2009

Patient Cost Estimator released; innovative online tool provides data on costs of many inpatient health services.

CIHI takes to Twitter: first tweet is about drug spending.

2010

John Wright starts as CEO.

2011

Major study released: *Health Care Cost Drivers: The Facts*.

Wait Times web tool displays 4 years of comparable provincial data and allows for trending over time.

2012

Lean process improvements begin.

Submission to the Canadian Joint Replacement Registry (CJRR) is mandated for the first time in Canada, starting with Ontario and British Columbia.

2013 to 2019

2013

CIHI's first mobile app developed with Collaborative for Excellence in Healthcare Quality.

Interactive website created for general public: YourHealthSystem.cihi.ca.

The DAD made available to researchers and students at post-secondary institutions through the Data Liberation Initiative.

2014

David O'Toole takes the helm as new CEO.

CIHI awarded the **Patient Classification Systems International Innovation Award**.

2015

New patient-reported outcome measures (PROMs) program of work begins and CIHI hosts a pan-Canadian PROMs forum.

Funding received to support federal initiatives related to **prescription drug abuse**; CIHI starts publicly releasing opioid data.

First-ever Trends in Income-Related Health Inequalities in Canada report released, plus the supporting Health Inequalities Interactive Tool.

CIHI is ISO-recognized for having met and exceeded the world's highest standard for information security protocols.

2016

Canadian Patient Experiences Reporting System (CPERS) data holding added.

Our project **Care Planning Tools: Changing Practice Among Alberta First Nations Communities wins awards** from the Canadian Health Informatics Association and the Information Technology Association of Canada.

2017

CIHI commits to a meaningful partnership with the British Columbia First Nations Health Authority (BC FNHA) to work together to improve the health and well-being of First Nations individuals, families and communities in B.C. and to contribute to the broader national process of reconciliation.

2018

Now reporting weekly data on emergency department visits for opioid overdoses to Ontario's provincial government and expanding that coverage across Canada.

CIHI begins 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**.

Dementia in Canada released: our first fully digital product.

Version 2018 released of the ICD-10-CA/CCI classifications, the Canadian Coding Standards, and the DAD and NACRS (National Ambulatory Care Reporting System) abstracting manuals.

2019

CIHI recognized as one of the National Capital Region's Top Employers. The annual editorial competition, which forms part of Canada's Top 100 Employers, identifies those employers that lead in attracting and retaining employees.

Our accomplishments

Reports that started it all

Since 1994, CIHI has provided comparable and actionable data and information to accelerate improvements in health care, health system performance and population health across the country.

We release several flagship reports each year that our stakeholders use to gain insights about the effective planning and management of health care delivery across Canada.

Our National Health Expenditure Trends report, which we've been publishing for 22 years, provides an overview of how much is spent, in what areas money is spent and on whom, and where the money comes from. It features comparative data at the provincial, territorial and international levels from 1975 onward.

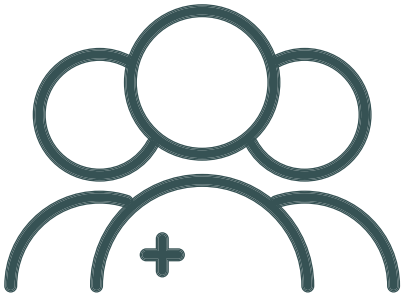
In 1997, we released our first report on physicians, and in 2000, we released our first report on nurses. Today, we continue to collect data on our health workforce — pillars of our health care system.

Looking back

From 1994 to 2018 | **Canada's total health expenditures**

64% from $2,614 to $4,295 per capita

Numbers have been calculated so that both years are comparable, after accounting for population growth and inflation, using constant 1997 dollars



Spotlight on our health workforce

Looking at who delivers health care services to Canadians

Canada's health workforce — individuals delivering health services and those involved in health management and administration — is one of our health care system's greatest assets.

CIHI collects detailed data on nearly 900,000 people representing 30 groups of professionals, including regulated nurses, physicians, pharmacists, physiotherapists and occupational therapists.

We publish annual updates on regulated nurses, physicians and 28 other allied health care professionals. Our latest data releases feature interactive data tables, indicators, provincial and territorial profiles, and digital content.

The annual update on regulated nurses offers an in-depth look at the supply and trends for registered nurses (including nurse practitioners), licensed practical nurses and registered psychiatric nurses. Our annual update on physicians includes data on supply, migration and service utilization. CIHI also works with governments and medical associations to produce information that supports physician fee negotiations. In 2019, we developed a new pan-Canadian methodology that measures medical travel and several other initiatives that support physician workforce planning.

> CIHI's health workforce data and information is used by a broad range of stakeholders to support diverse needs. Provincial and territorial governments — some of our key stakeholders — use this information to help determine the proper balance of health provider supply and payments to best serve their populations.

Michael Gaucher
Director, Pharmaceuticals and Health Workforce Information Services, CIHI

By collecting data and reporting on Canada's health workforce trends, CIHI supports decision-makers, policy-makers, health workforce planners and researchers in the planning, distribution and funding of the health workforce.

Looking back

In the last 25 years

The number of registered nurses employed in Canada

23%

slightly less than the increase in the Canadian population over the same time period

From 1994 to 2017

The number of family doctors in Canada

22%

per 100,000 people

Comprehensiveness of CIHI's data holdings

CIHI continuously works to enhance the scope and availability of our data for analysis and decision-making. The table Comprehensiveness of CIHI's data holdings as of March 31, 2019 provides a snapshot.

In 2018–2019, CIHI received new or expanded data from several jurisdictions:

- Emergency department (ED) data from Quebec;
- Patient experience survey data from Ontario, Alberta and British Columbia;
- Patient-reported outcome measures (PROMs) for hip and knee replacements from Ontario, Manitoba and Alberta;
- New ambulatory clinic data from Newfoundland and Labrador, Nova Scotia, Ontario and Saskatchewan;
- Patient-level physician billing data from Nova Scotia, Quebec and Ontario; and
- Structured primary care electronic medical record data from community health centres in Ontario.

Our accomplishments

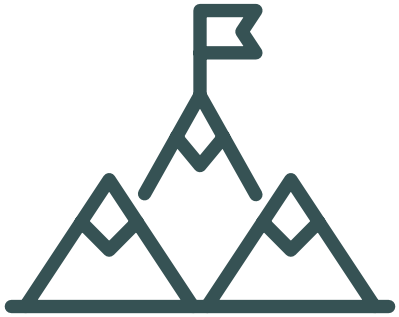
Health priorities are changing and so are we

In the past 5 years, we have developed new programs of work that concentrate on patients and substance use.

This year, our focus was on people who receive mental health and addictions services and seniors. We reported on these priority populations in products about the shared health priorities, opioids, alcohol harm, dementia and palliative care, among others.

Our recent health equity work also provides a big picture of population health across Canada. A new health equity toolkit provides guidance for other organizations that are looking to examine health outcomes across socio-economic factors such as income, race, sex, gender, education and geographic location.

In the coming years, we will continue to focus on populations identified in our current strategic plan, find new sources of data and invest in new and emerging technologies to support this work.



Common challenges, shared priorities

Working together to ensure that health care systems continue to respond to Canadians' evolving needs

Improving access to home care and mental health services is a priority for governments across Canada. In 2017, the federal/provincial/territorial (FPT) governments made a 10-year commitment that will lead to federal investments in these areas.

Over the past year, we've been busy facilitating the selection and leading the development of pan-Canadian indicators to measure access to home care and mental health services. The process involved the participation of the FPT governments and a diverse group of stakeholders, including the public, all of whom shared their expertise. Our health ministers endorsed 12 indicators in June 2018, which marked a huge step toward improving access to health services in sectors that are important to Canadians.

Our work on the shared health priorities aligns with our mandate and strategic plan, with the ultimate goal of improving Canadians' health.

The development of these new indicators has been a major collaborative effort between the ministries, system experts, CIHI and people with lived experiences. While it will take time for improvement efforts to be reflected in the indicators, health system decision-makers now have more tools to start discussions about how to target services and measure improvements, as well as to make better evidence-based decisions about how to deliver care to Canadians. CIHI is proud to be part of this effort to increase our knowledge of the mental health and addictions and home care sectors, which are very important services for all of us.

David O'Toole
President and CEO, CIHI

Selecting Pan-Canadian Indicators for Access to Mental Health and Addiction Services, and to Home and Community Care

Progress Report

Canadian Institute for Health Information
Institut canadien d'information sur la santé

> The Government of Canada has now signed bilateral agreements with all provinces and territories, setting out the details of how federal investments to improve access to home and community care and mental health and addictions services will be spent. I believe it is important that Canadians see the results for investments in these priority areas. The indicators will serve as an initial set of invaluable metrics to help track improvements to access needed health services for all Canadians.

Ginette Petitpas Taylor
Minister of Health

Over the next 4 years, we will publicly report results for 3 new indicators each year. The first release, in May 2019, included the following indicators:

Hospital Stays for Harm Caused by Substance Use

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

Hospital Stay Extended Until Home Care Services or Supports Ready

We will continue our work with FPT governments across Canada to report annually on these indicators and to build on data sources in order to enable more comprehensive reporting.

Small communities, big impact

Data shows that the opioid crisis is not just a big city problem

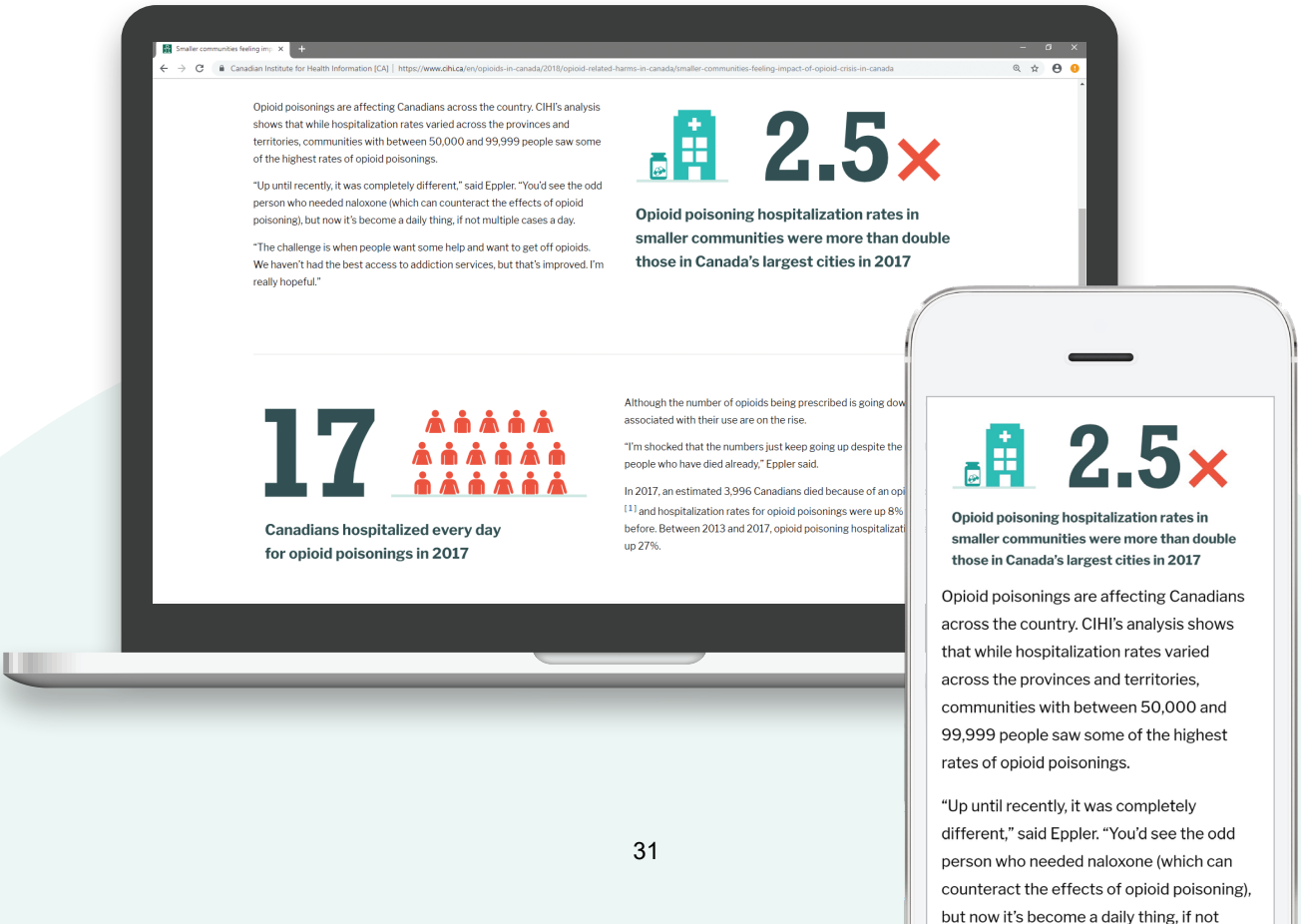
Opioid poisonings are still on the rise in Canada. Over the past 5 years, rates of hospitalization due to opioids have increased by 27%. Our latest report found that opioid poisoning hospitalization rates for smaller Canadian communities are more than double the rates for Canada's largest cities.

Since signing the Joint Statement of Action to Address the Opioid Crisis in Canada in 2016, we've supported efforts across the country to reduce opioid harms. We have worked with partners such as the Canadian Centre on

Substance Use and Addiction, Health Canada, the Public Health Agency of Canada, provincial and territorial governments, and other organizations to improve data collection and to produce timely, relevant information that can help inform harm reduction efforts.

Our work provides valuable information to public health officials, policy-makers and those working in the health care system. CIHI's monitoring of opioid-related harms and prescribing trends supports the work of Health Canada and our other partners across the country in their efforts to reduce the number of Canadians harmed each day by the opioid crisis.

David O'Toole
President and CEO, CIHI



> CIHI's reporting on opioid prescribing and harms provides essential information that we use to inform our Manitoba Monitored Drugs Review Committee, as well as efforts and initiatives to improve prescribing behaviours through education and feedback. Manitoba Health, Seniors and Active Living have several resources and programs aimed at reducing overdose harms and this data helps inform our work and helps measure if initiatives are working.

Dr. Patricia Caetano
Executive Director, Non-Insured Benefits Branch,
Manitoba Health, Seniors and Active Living

Opioid harms and prescribing data helps health system policy-makers track progress and see the impact their strategies have on the communities affected by this crisis. The data also helps determine which geographic areas have the highest rates of hospitalizations and ED visits due to harms caused by opioids.

This year, we released *Opioid-Related Harms in Canada* and *Pan-Canadian Trends in the Prescribing of Opioids and Benzodiazepines, 2012 to 2017*, which examined opioid harms and opioid prescribing trends across the country. Our next opioid report, scheduled for release in summer 2019, will focus at the patient level on those who start new therapy with prescribed opioids and those who have been taking opioids long term. This will be our last opioid-specific report under a 4-year special purpose funding agreement with Health Canada that ended March 31, 2019.

Alcohol harm on the rise

Examining alcohol harm numbers across Canada

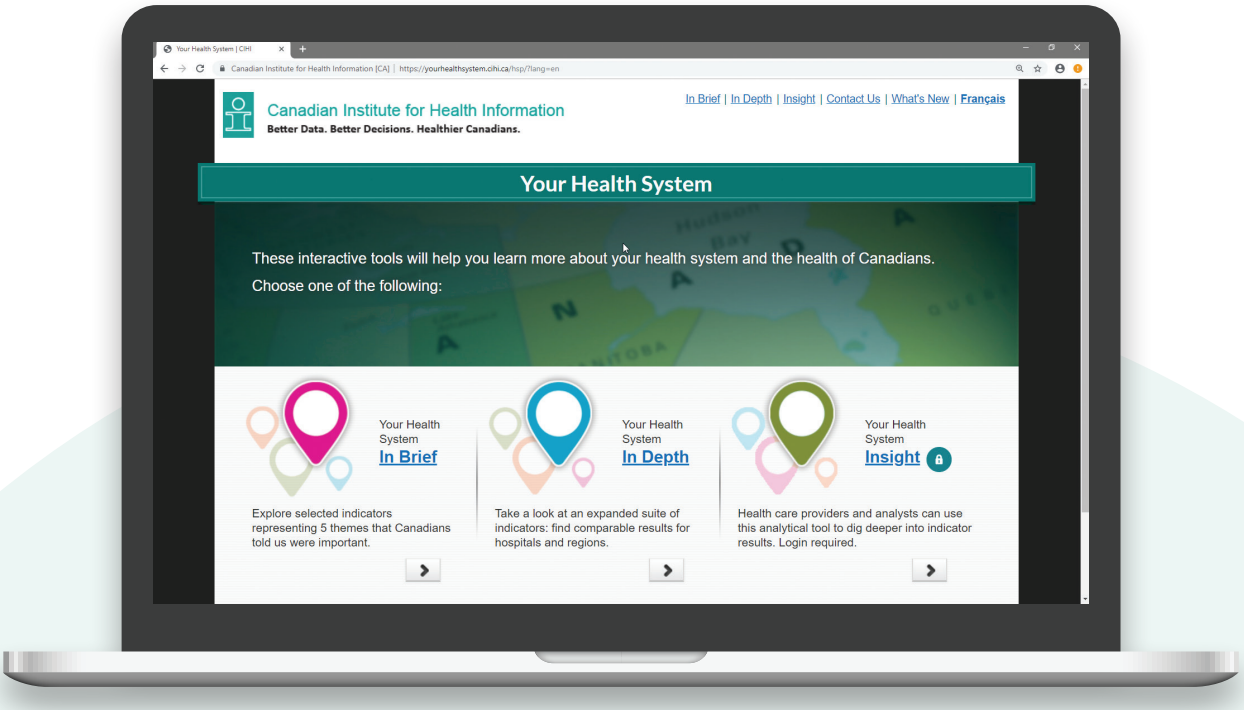
According to Statistics Canada, about 80% of the Canadian population drink alcohol and most drink moderately. However, our data on hospitalizations entirely caused by alcohol shows that harms from alcohol are on the rise, especially among women.

Twice a year, we update Your Health System (YHS), one of our most comprehensive tools that presents pan-Canadian health information. YHS allows us to look at the big picture of Canada's health systems and filter results by province/territory, city and local hospital. This year, our indicator Hospitalizations Entirely Caused by Alcohol showed that alcohol harms among women are rising.

Our indicator results, released in May 2018, show that the rate of hospitalizations entirely caused by alcohol is increasing faster for women than for men (2.6% versus 0.6%), although the hospitalization rate for alcohol-related conditions for men is double the rate for women. Younger women are also affected, with the rate of hospitalizations increasing faster for girls age 10 to 19 than for boys the same age (4.5% versus 1.6%).

Alcohol misuse is the direct cause of thousands of hospitalizations and deaths every year in Canada. It is troubling to see the rates for women increase so much faster than those for men. This information is important for health systems in order to identify areas for improvement and to monitor the impact of changes over time.

Kathleen Morris
Vice President, Research and Analysis, CIHI



Our YHS tool helps decision-makers in our health systems identify areas of potential improvement and see which initiatives have helped in other provinces and territories. The public can also access the most up-to-date data for alcohol harm, as well as for many other indicators that measure health outcomes.

Looking back

When we first began reporting in YHS in 2013, there were 15 indicators.

Today, we have over 50 indicators, with several new ones in development related to our work on the shared health priorities, in collaboration with the FPT governments.

Impact of dementia on seniors, caregivers and health systems

CIHI's first digital report delivers a comprehensive look at dementia

Approximately 76,000 new cases of dementia are diagnosed in Canada every year. This number is expected to continue to climb, as Canada's seniors population is projected to increase by 68% over the next 20 years. The growing number of people with dementia will place heavier demands on Canada's health care systems in the coming years.

CIHI's *Dementia in Canada* report explores the impact of this chronic illness on patients and caregivers, through their interactions with health services such as home care and end-of-life care, and with long-term care facilities, emergency departments and hospitals.

A cloak of invisibility gets put on people living with dementia and, to some extent, their family. People avoid eye contact, they avoid conversation and they struggle with their awkwardness and grief. We need to change this — we need strong communities supporting people to stay at home as long as possible, to stay rooted in their family.

Catherine Ann
Caregiver

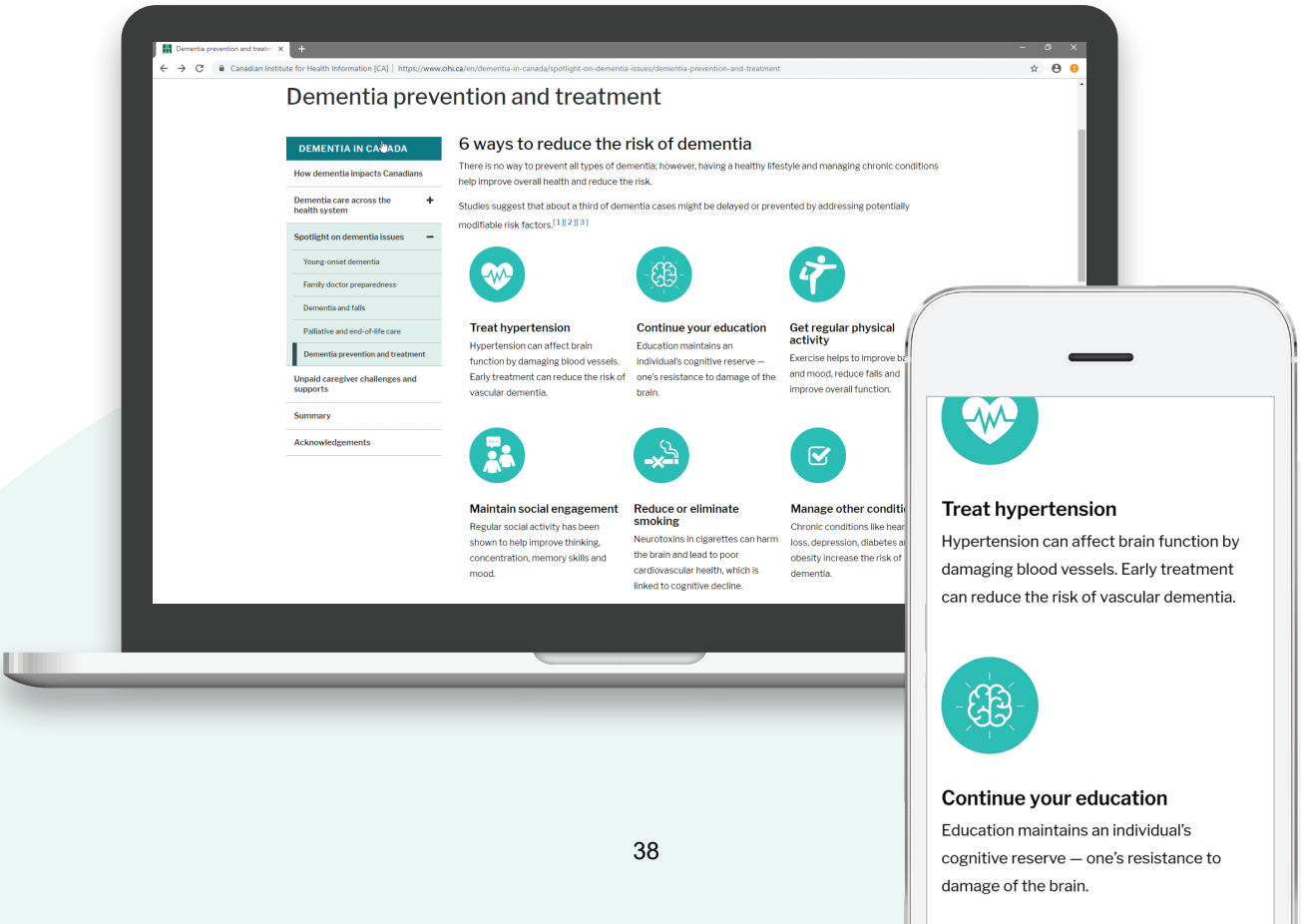
The report uses data and information from a number of sources including the Public Health Agency of Canada, with whom we collaborated closely. It incorporates caregiver perspectives and it highlights the importance of supporting not only people living with dementia but also their family members and others who provide care at home.

Unpaid caregivers devote so much time and energy to helping their loved one maintain their quality of life through the long course of this disease. We see that caregivers of seniors with dementia face significant challenges, especially as the disease progresses. We hope that our report will help spark conversation about how to better support caregivers, who play such an essential role in health care systems.

Kathleen Morris
Vice President, Research and Analysis, CIHI

Dementia in Canada — CIHI's first fully digital analytical report — includes information in an interactive format and provides readers with links to relevant resources such as related reports and available caregiver supports. This digital format allows us to see how many readers have viewed our report and how stakeholders interacted with our online products. These metrics help us understand how to best deliver our information moving forward.

This report is part of CIHI's commitment to focus on issues related to seniors and aging, in order to help those who make decisions about health care planning for future needs.



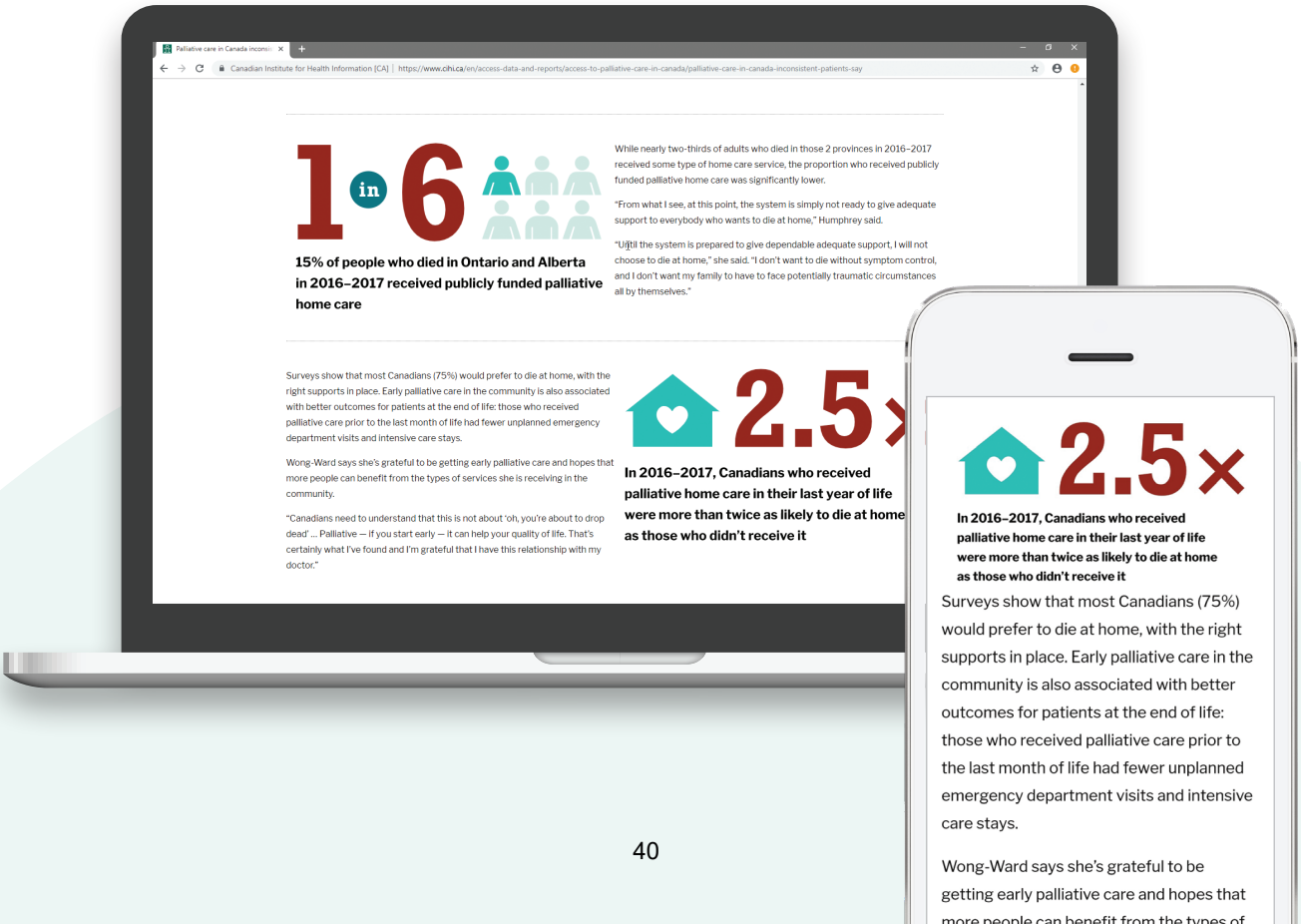
Access to palliative care

Providing baseline information on access to palliative care services

Most Canadians say they want to die at home. CIHI's report *Access to Palliative Care in Canada* reveals that people who access palliative home care services in their last year of life are 2.5 times more likely to die at home than in hospital. However, data also shows that few Canadians receive palliative home care in the last year of life.

Palliative care helps address the needs of people with life-limiting conditions to improve their quality of life and that of their families. *Access to Palliative Care in Canada* provides baseline information on what we know about palliative care services in the last year of life, on whether Canadians have equitable and timely access to appropriate services, and on existing gaps in palliative care.

The report shows that early palliative care can reduce the number of visits to intensive care and emergency departments for Canadians in their last month of life. As part of the report's release, patients and caregivers shared their experiences with palliative care services.



I was really surprised by how comforting [palliative care] was. Suddenly it felt like we were in control again. For so long, we were lurching from one crisis to another. It was like this rollercoaster ride, and suddenly I was in this office with this person who spent an hour listening to what I wanted, what my goals were, where I was at, and she basically indicated that her job was to shepherd me through what is the most difficult period of my life. It was, in the end, really reassuring.

Ing Wong-Ward[i]
Received palliative care while undergoing treatment for colon cancer

Providing quality palliative care in community settings — whether at home or in residential hospices — is a priority for FPT governments. This report supports health system planners and decision-makers and has been cited as a best practice in measurement by the federal government's new palliative care framework.

i. Ing Wong-Ward worked as a producer for 22 years at the CBC before entering the non-profit sector, where she was associate director of the Centre for Independent Living in Toronto. Ing passed away on July 6, 2019; she had been diagnosed with incurable colon cancer in 2017. She was a strong and passionate voice for palliative care patients and people with disabilities across Canada.

Health care for all

Making sure health inequalities don't go unchecked

Health equity is a key component of quality care and a growing priority for health systems in Canada. Performance reporting — a tool used by health systems to measure quality of care — usually focuses on results for the overall population. However, it doesn't typically break down or consider results for social, economic or demographic groups.

In April 2018, we released a report in collaboration with Statistics Canada that defines socio-demographic variables for measuring health inequalities. These variables — sex, gender, geographic location, income and education — can be used as the standard in performance measurement, reporting and data collection across the country.

The definitions and an inventory of socio-demographic variables are included in a recently released toolkit. Data analysts can also learn about our approach for health inequalities analysis through a 4-part series of eLearning courses. Together, these resources provide health organizations with the tools to measure and report on health inequalities.

Socio-demographic factors like income, geography and race can influence access to care and the health care experience. CIHI's Measuring Health Inequalities toolkit can support analysts and researchers in identifying health care inequalities to ensure that everyone receives appropriate and effective care. All Canadians deserve quality health care regardless of social, economic or demographic status.

Geoff Hynes
Manager, Canadian Population Health Initiative, CIHI

CIHI's toolkit provides a clear and helpful way to understand key indicators of health inequalities. Understanding the true meaning of indicator rates and their respective definitions is a critical component of public health surveillance. BC will use the toolkit as part of our ongoing capacity-building activities with summer students and conference delegates. Public health students and epidemiologists will welcome this resource as a useful tool for communicating the content, challenges and definitions associated with population health inequalities data.

Shannon Turner
Executive Director, Public Health Association of BC

We are expanding our work to develop racial group definitions, with considerations for ethnic and Indigenous identities. The use of consistent definitions of these variables will help improve future pan-Canadian measurement of inequalities in health and health care.

Our accomplishments

What's next?

As we look to the future, we will continue to work closely with our partners across the FPT governments to protect privacy, close data gaps and improve data coverage.

Protecting privacy

Conversations about a key component of health data governance

Data privacy has increasingly become an issue that affects many organizations across Canada and around the world. At CIHI, we have a robust Privacy Program that closely aligns with our Information Security Program. Both are informed by evolving best practices.

In October 2018, we hosted a privacy symposium that brought together thought leaders from across the country and internationally to exchange opinions and ideas about improving access to health data in a privacy-sensitive manner. Symposium participants discussed the benefits of health data access, current challenges, and strategies to overcome these challenges.

The privacy symposium was an important first step in exploring potential advancements related to pan-Canadian health data governance, where privacy will be a key component. The advice we heard at this event will help shape future conversations as we convene discussions around access to data to improve the health systems.

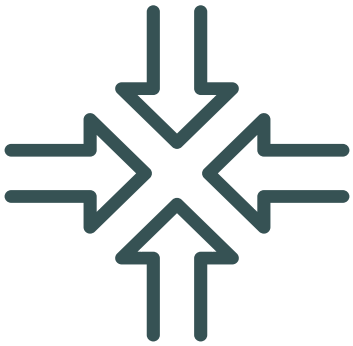
We have a strong reputation as an effective convener and we hope to continue conversations about privacy with our partners across Canada and internationally to ensure we safeguard privacy and anticipate challenges as technology and legislation evolve.

Rhonda Wing
Chief Privacy Officer and General Counsel, Privacy and Legal Services, CIHI

Looking back

Over the past 25 years, CIHI has moved from

having stand-alone privacy and security policies and practices to having an integrated and comprehensive program that recognizes the interdependencies between privacy and information security. The integration of our privacy and information security programs and policies is key to ensuring that they remain sound and responsive to change and innovation. One area where this has proven particularly effective is in the application of CIHI's Risk Management Framework.



Closing the data gaps

Stepping up data collection in 8 priority areas

We collect a lot of data at CIHI, but we're always looking to improve our data holdings so that our stakeholders have the information they need to make informed decisions about Canada's health care systems.

Our new Corporate Data Advancement Strategy aims to close the data gaps in 8 areas identified as priorities by internal and external stakeholders: primary health care, home care, community mental health, addictions, palliative care, pharmaceuticals, patient-reported outcomes and the health of Indigenous populations.

Our goals are to close gaps and expand data collection in each province and territory, to make the data submission process more user-friendly, to broaden adoption of CIHI data standards, and to have more timely and linked data for our stakeholders.

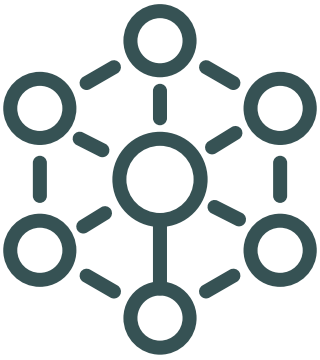
Quality data is critical to CIHI and to our stakeholders who rely on our data to make improvements to the health care systems. Canadians have identified certain priority areas where more data is needed, and we look forward to responding to these needs by working with our partners to fill data gaps and implement important standards.

Brent Diverty
Vice President, Programs, CIHI

Looking back

CIHI started with 3 acute care data holdings in 1994

(Discharge Abstract Database, Ontario Trauma Registry, Canadian Organ Replacement Register) and now has 28 data holdings across the care continuum, including data on finances, pharmaceuticals, community care and patient experience, to name just a few.



Improving data coverage

Expanding data on visits to emergency departments and ambulatory care clinics

CIHI's National Ambulatory Care Reporting System (NACRS) contains information about ED visits, as well as hospital- and community-based ambulatory care, including day surgery and visits to outpatient and community-based clinics.

Each year, NACRS provides insights on utilization patterns and trends for ED and ambulatory care at the national, provincial/territorial and local levels. In 2017–2018, CIHI reported on more than 11.4 million ED visits in 7 provinces and 1 territory. This included information on wait times and the length of ED stay for admitted patients — important measures of patient access and flow. NACRS also supports weekly reporting on ED visits for opioid overdoses in support of Ontario's opioid overdose surveillance and prevention strategy.

According to our NACRS data, the top 3 reasons for ED visits — abdominal and pelvic pain, throat and chest pain, and acute respiratory infection — remain consistent year to year. However, our latest data (2017–2018) found that pneumonia was among the top 10 reasons for ED visits for the first time in at least 5 years.

This data supports a range of health care management decision-making and facilitates national, provincial/territorial, regional and facility-level comparative reporting. Insights about why and when patients visit emergency departments can be used to improve efficiency and patient flow, and ultimately patient experiences and outcomes.

Greg Webster
Director, Acute and Ambulatory Care Information Services, CIHI

Our national ED coverage increased from 64% to 85% in 2018–2019, as Quebec started to submit data to NACRS. To achieve our goal of having complete ED visit data for Canada, we will continue to work with provinces and territories on providing flexible options to facilitate data submission flow to CIHI, making NACRS even more valuable to Canadians.

Looking back

In the last 25 years

Our National Ambulatory Care Reporting System (NACRS)

1997 — has grown from **1** British Columbia facility to **461** pan-Canadian facilities — 2019

that submit emergency department data

Advancing internationally comparable patient-reported outcome measures for hip and knee replacement surgery

PROMs are survey instruments that patients complete to provide information on certain aspects of their health status, including symptoms, functionality, and physical, mental and social health.

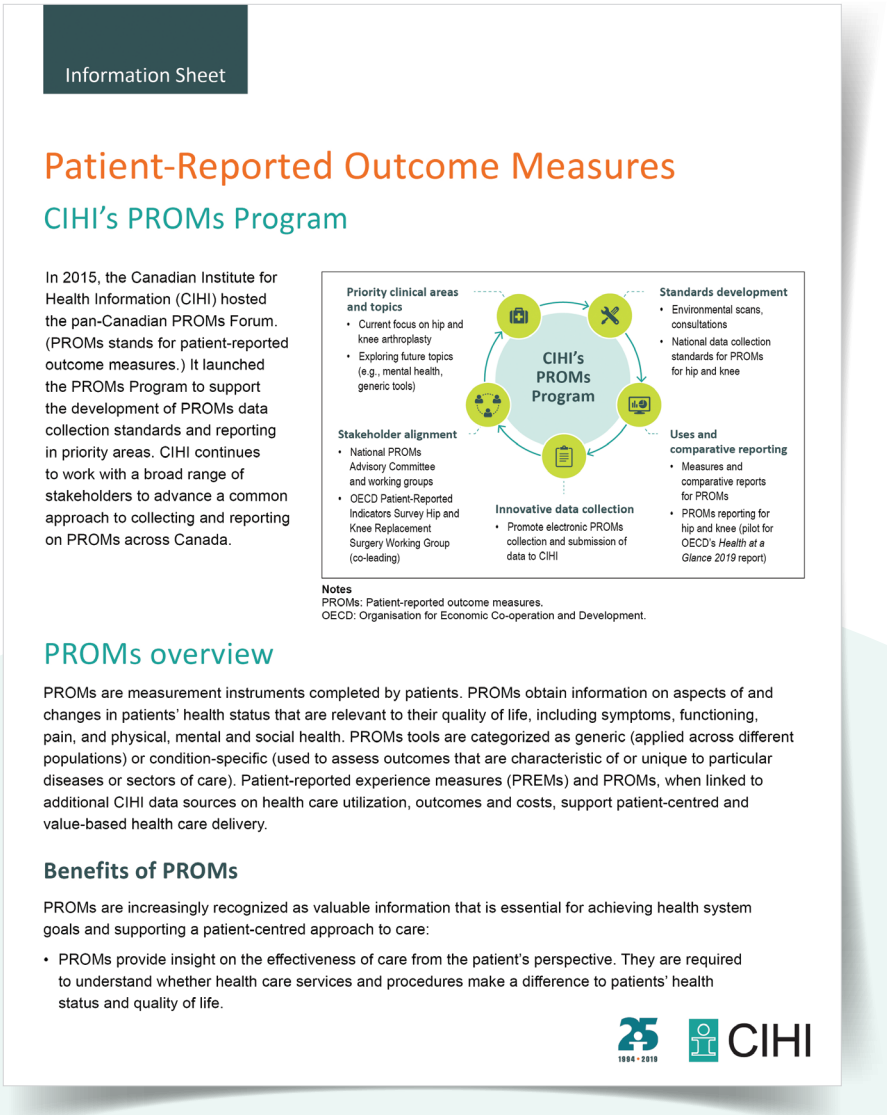
CIHI launched a PROMs program of work in 2015, with hip and knee replacements as a key area of focus. Most of these are elective surgeries intended to improve the quality of life of patients who often experience debilitating pain and limited mobility. PROMs are administered before and after surgery at certain time points to help measure the changes in health status from the patient's perspective.

Along with the Organisation for Economic Co-operation and Development (OECD), CIHI has been co-leading an international working group on patient-reported indicators for hip and knee replacement surgery since December 2017. This work is part of a broader OECD initiative that aims to advance the collection and reporting of comparable patient-reported measures to better monitor health system performance and drive continuous improvement among member countries.

This year, CIHI led the development and finalization of indicators and data specifications for countries to use for first-time reporting on hip and knee replacement PROMs in the OECD's upcoming

report *Health at a Glance 2019*. To test and refine these indicators, CIHI analyzed hip and knee PROMs data from 6 countries: Canada (using data from Alberta and Manitoba), the United Kingdom, Sweden, the Netherlands, Italy and Switzerland.

The next phase of the project is to develop and publish international guidelines on data collection for hip and knee replacement PROMs to promote future alignment and advance international comparative reporting.



Information Sheet

Patient-Reported Outcome Measures

CIHI's PROMs Program

In 2015, the Canadian Institute for Health Information (CIHI) hosted the pan-Canadian PROMs Forum. (PROMs stands for patient-reported outcome measures.) It launched the PROMs Program to support the development of PROMs data collection standards and reporting in priority areas. CIHI continues to work with a broad range of stakeholders to advance a common approach to collecting and reporting on PROMs across Canada.

Notes
PROMs: Patient-reported outcome measures.
OECD: Organisation for Economic Co-operation and Development.

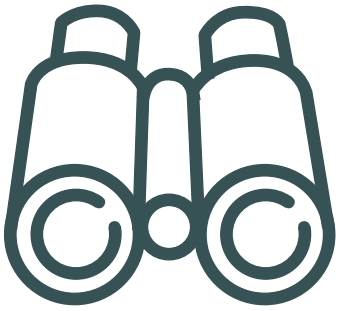
PROMs overview

PROMs are measurement instruments completed by patients. PROMs obtain information on aspects of and changes in patients' health status that are relevant to their quality of life, including symptoms, functioning, pain, and physical, mental and social health. PROMs tools are categorized as generic (applied across different populations) or condition-specific (used to assess outcomes that are characteristic of or unique to particular diseases or sectors of care). Patient-reported experience measures (PREMs) and PROMs, when linked to additional CIHI data sources on health care utilization, outcomes and costs, support patient-centred and value-based health care delivery.

Benefits of PROMs

PROMs are increasingly recognized as valuable information that is essential for achieving health system goals and supporting a patient-centred approach to care:

- PROMs provide insight on the effectiveness of care from the patient's perspective. They are required to understand whether health care services and procedures make a difference to patients' health status and quality of life.



A glimpse at our next 25 years

A digital future

Technology can change quickly, so our Information Technology and Services and Digital Innovation teams play key roles in our ability to meet and adapt to our stakeholders' needs. Embracing new technologies and modernizing our business processes allows us to better deliver on our strategic plan and our commitments to stakeholders.

Our Digital Innovation team continues to drive digital transformation within CIHI and explore how our stakeholders want to interact with our products and services. The goal is to create a simple, seamless and secure interaction with CIHI and a positive user experience.

In the next fiscal year, we'll continue modernizing our architecture and our IT infrastructure in the cloud using strategic partnerships to advance their implementation. We'll also focus on using electronic tools to enhance corporate processes and workflows.

Employee's visions

Meet Eric and Parisa. We asked them about their work at CIHI and their vision for the next 25 years.

Eric Sutherland
Executive Director
External Data and Information Governance

Dr. Parisa Naraei
Manager
Analytic Techniques and Tools

What brought you to CIHI?

Eric: After spending 20 years in the financial industry, I knew I wanted to be working in something more meaningful with respect to data. I think health care is one of the most meaningful fields you can work in. The ability to use data and information to form better decisions that can lead to better programs and ultimately save people's lives and improve the wellness of Canada — that's really what brought me here.

Tell me about your work.

Eric: My focus is on developing an approach for health data and information governance in Canada with an emphasis on action. Over the past months, I've travelled across the country and listened to individuals in every province and territory talk about practical ways in which we can use our data to improve the health of Canadians.

Data and information governance is very much like cleaning out your closet. First, we have to understand what we have. We then keep and categorize items we use regularly, place certain things in storage for the future and get rid of the clothes we know we don't need. Once we understand what we have in our closet, we can group certain pieces of clothing together, which allows us to create new outfits, giving us better value from our wardrobe.

Applied to data and information governance, this process allows us to understand what data we have and how it could be used and, through linking and analysis, to discover new insights that could lead to better outcomes. We also have a role in defining data standards to ensure data consistency and flow. We do this while ensuring that appropriate privacy and security controls are in place and that insights are sustained and spread wherever possible.

What do you enjoy most about working at CIHI?

Eric: Working at CIHI allows me to join my passion for data and information with the ability to make a meaningful difference in the lives of Canadians. I believe that through better data there will be better decisions and a healthier Canada — for me and my family.

What's your vision for CIHI?

Eric: CIHI will continue to be a leader in data standards and quality, as we have been for many years. We collaborate with partners, ministries and agencies in federal, provincial and territorial governments to address how we can govern the ever-evolving data landscape across the country.

Ultimately, my vision for Canada is that we have such a rich, diverse set of publicly held data assets that can ultimately lead to cures for disease, better treatments for better health outcomes and the road for a healthier Canada. I think CIHI can be a catalyst for getting some of those tangible, practical actions started.

Tell me about your background.

Parisa: I have a PhD in computer science, with expertise in cognitive science and artificial intelligence and their applications in health care. For my thesis, I worked in collaboration with St. Michael's Hospital, where I built a tool that helped to detect patients who were at risk of developing intracranial hypertension crisis. Alerting neurosurgeons of potential risks allowed them to provide treatment sooner to patients.

I joined CIHI in December 2018. The project I worked on at St. Michael's Hospital gave me an understanding of how health care solves problems and how computer scientists, like myself, can help fill in some gaps. I wanted to continue this journey and bring my learnings to CIHI to help patients across Canada.

Tell me about your work.

Parisa: My focus is on driving emerging digital, artificial intelligence and cloud solutions at CIHI. I am currently developing the corporate strategy on analytic software and technologies as well as developing learning programs on analytic techniques and software for CIHI analysts.

What do you enjoy most about working at CIHI?

Parisa: I really like that CIHI always looks for ways to improve and do better. CIHI has great connections with the industry, health sector and academia, which helps grow the organization in many different ways. The Advanced Analytics branch is very well structured and consists of educated, sharp-minded individuals who are passionate about what they do and supportive of each other. I truly value the people I work with.

What's your vision for the future of CIHI?

Parisa: My vision is that in the years to come, CIHI will be able to develop and introduce a variety of new products to our stakeholders, such as

- Predictive-analytic products that predict patient characteristics like health outcomes, wait times in emergency departments or readmission probability, for use by policy-makers and administrators to help understand the morbidity, health system use and health needs of target populations; and
- New data and analytical opportunities: Certain essential pieces of information that reveal a patient's journey — such as information from doctors' notes or CT scan images — are not considered to be structured data and currently are not collected or stored by CIHI. In the future, CIHI could become the source of not only standardized structured clinical data but also standardized unstructured clinical data. Moreover, through sentiment analysis and artificial intelligence, CIHI would be able to extract insights from unstructured data in order to analyze and predict the future status of the patient, which would allow us to have a more comprehensive understanding of the patient experience.

Our people

Our staff contribute knowledge and expertise toward our vision of better data, better decisions and, ultimately, healthier Canadians.

The folks at CIHI are some of the most highly skilled and dedicated I've ever worked with. Nobody comes to work wondering how they're going to spend their day.

David O'Toole
President and CEO, CIHI

CIHI employees know that this is a great place to work, but now it's official. We're one of the National Capital Region's Top Employers for 2019.

This special designation recognizes the employers in the Ottawa–Gatineau metropolitan area that lead their industries in offering exceptional places to work. The annual editorial competition, which forms part of Canada's Top 100 Employers, identifies those employers that lead in attracting and retaining employees.

CIHI's 708 full-time staff across Canada collectively participated in 9,800 hours of employee training last year.

Some employees have been with us since the beginning, while others have joined in recent years, making up a diverse team of exceptional individuals. In the pages below, a few staff members share how they came to CIHI.

Joseph Emmanuel Amuah

Senior Researcher, Your Health System Content

I work at CIHI because of the impact of our work on our health systems here in Canada. Our work directly influences the health care Canadians receive, and I'm glad to be a part of it. We have a lot of really smart and passionate people working together to ensure that our stakeholders have the information they need to make important decisions about health care. How long have I been at CIHI? You don't need carbon dating for that yet . . . it has been only 10 years.

Rose Teh

Operations Assistant, Technology Services

As a newcomer to Canada, I felt very lucky to be able to join CIHI in 1980 as a data entry operator. It had all the things I was looking for as a young professional — security, a friendly culture that emphasizes work–life balance and an opportunity to improve my skills. I'm grateful to be part of an organization where I have a chance to interact with staff from such diverse backgrounds and work experiences. CIHI is the only place I've ever worked and the only place I could see myself being for this long!

Sanya Palli

Analyst, Master Data Governance Office

I started working at CIHI in 2017. The most rewarding aspect of my work has been updating CIHI's Sex and Gender standards in the CIHI Reference Data Model Toolkit. Transgender populations have faced barriers to accessing quality health care. Based on consultation sessions with patient populations, Statistics Canada, the Ontario Ministry of Health and Long-Term Care and the Canadian Population Health Initiative team at CIHI, we have now included standards for Gender Identity, Lived Gender and Gender Diverse. When my mom asks me what it is that I do, I say, "We're using data to save the world!"

Scott Young

Team Lead, Creative

A job ad for a multimedia specialist in Ottawa intrigued me. I was young, ready with a couple of years of experience under my belt and willing to go anywhere (based on my wife's approval) for new challenges. 22 years later, I'm still here. The most rewarding part of being at CIHI has been the people, the knowledge I've gained from them and the long-lasting friendships.

Our leadership and governance

Board of Directors

as of March 31, 2019

Chair

Ms. Janet Davidson
Former Special Advisor and Deputy Minister
Alberta Health

Canada at large

Dr. Vivek Goel (Vice Chair)
Vice-President
Research and Innovation
University of Toronto

Dr. Verna Yiu
President and CEO
Alberta Health Services

Region 1 • British Columbia

Dr. David Ostrow
Former President and CEO
Vancouver Coastal Health
(Non-government)

Mr. Martin Wright
Assistant Deputy Minister
Health Sector Information, Analysis and Reporting
British Columbia Ministry of Health
(Government)

Region 2 • Prairies

Mr. Réal Cloutier
President and CEO
Winnipeg Regional Health Authority
(Non-government)

Mr. Milton Sussman
Deputy Minister
Alberta Health
(Government)

Region 3 • Ontario

Ms. Janet Beed
Former President and CEO
Markham Stouffville Hospital
(Non-government)

Ms. Helen Angus
Deputy Minister
Ontario Ministry of Health and Long-Term Care
(Government)

Region 4 • Quebec

Dr. Denis Roy
Vice President
Science and Clinical Governance
Institut national d'excellence en santé et en services sociaux
(Non-government)

Ms. Sylvie Vézina
Director
Information and Performance Integration Management
Ministère de la Santé et des Services sociaux du Québec
(Government)

Region 5 • Atlantic

Mr. Gilles Lanteigne
President and CEO
Vitalité Health Network
(Non-government)

Ms. Kim Critchley
Deputy Minister
Prince Edward Island Department of Health and Wellness
(Government)

Region 6 • Territories

Mr. Bruce Cooper
Deputy Minister
Northwest Territories Department of Health and Social Services
(Government)

Health Canada

Mr. Simon Kennedy
Deputy Minister
Health Canada

Statistics Canada

Mr. Anil Arora
Chief Statistician
Statistics Canada

The Board met in June 2018, November 2018 and March 2019.

We would like to recognize the contributions of 4 departing Board members:

Ms. Nancy Naylor
(left the Board in August 2018)
Associate Deputy Minister
Delivery and Implementation
Ontario Ministry of Health
and Long-Term Care

Ms. Colleen Stockley
(left the Board in October 2018)
Deputy Minister
Nunavut Department of Health

Ms. Teri Collins
(left the Board in November 2018)
Assistant Deputy Minister
Health Sector Information, Analysis
and Reporting
British Columbia Ministry of Health

Ms. Jane Badets
(left the Board in March 2019)
Assistant Chief Statistician
Social, Health and Labour Statistics
Statistics Canada

Board committees

as of March 31, 2019

Finance and Audit Committee

Members

Gilles Lanteigne (Chair)
Réal Cloutier
Janet Davidson
Nancy Naylor/Helen Angus
Colleen Stockley/Bruce Cooper
Milton Sussman

Meetings

May 2018
November 2018
February 2019

Governance and Privacy Committee

Members

Vivek Goel (Chair)
Jane Badets
Teri Collins/Martin Wright
Kim Critchley
Simon Kennedy
Sylvie Vézina

Meetings

June 2018
November 2018
March 2019

Human Resources Committee

Members

Janet Davidson (Chair)
Janet Beed
Vivek Goel
David Ostrow
Denis Roy
Verna Yiu

Meetings

November 2018
March 2019

Senior management

as of March 31, 2019

David O'Toole
President and CEO

Brent Diverty
Vice President
Programs

Cal Marcoux
Chief Information Security Officer
Information Security and
Technology Services

Caroline Heick
Vice President
Corporate Services

Chantal Poirier
Director
Finance

Cheryl Gula
Director
Thematic Priorities

Connie Paris
Director
Strategy and Operations

Elizabeth Blunden
Director
Human Resources and Administration

Eric Sutherland
Executive Director
External Data and
Information Governance

Francine Anne Roy
Vice President
Eastern Canada

Gregory Webster
Director
Acute and Ambulatory Care Information
Services

Herbet Brasileiro
Director
ITS Product Delivery

Jean Harvey
Director
Canadian Population Health Initiative
Branch

Jeffrey Hatcher
Director
Advanced Analytics

Kathleen Morris
Vice President
Research and Analysis

Keith Denny
Director
Clinical Data Standards
and Quality

Kimberly Harvey
Vice President
Communications and
Client Experience

Mary MacDonald
Vice President
Western Canada

Mélanie Josée Davidson
Director
Health System Performance

Michael Gaucher
Director
Pharmaceuticals and Health
Workforce Information Services

Michael Hunt
Director
Spending, Primary Care and
Strategic Initiatives

Natalie Damiano
Director
Specialized Care

Rhonda Wing
Chief Privacy Officer
and General Counsel
Privacy and Legal Services

Ronald Huxter
Vice President and Chief Information
Officer
Information Technology and Services

Shawn Henderson
Director
Client Experience

Stefany Singh
Director
Digital Innovation

Stephen O'Reilly
Executive Director and Associate CIO
Office of the Associate CIO

Tracy Johnson
Director
Health System Analysis
and Emerging Issues

Financials and risk management

Internal Audit Program

1

Provides independent and objective assurance to add value to and improve our operations

2

Helps us accomplish our objectives by bringing a systematic, disciplined approach that both evaluates and improves our control and governance processes

3

Is prepared using a risk-based methodology that targets our audit resources at areas of highest risk, significance and value for the organization

In 2018–2019, activities included

- Penetration testing and vulnerability assessments of the information technology network, server infrastructure and selected applications;
- An audit of staff and consultant access rights to CIHI networks and databases;
- An internal audit of ISO 27001 and an ISO 27001 version 2013 surveillance audit;
- A privacy audit of a third-party data recipient (Hospital for Sick Children) to determine compliance with CIHI's Data Request Form and Non-Disclosure/ Confidentiality Agreement; and
- A compliance survey audit of third-party record-level data recipients.

We developed action plans to address the areas for improvement that were recommended by the consultants we contracted to specifically perform these activities.

In 2019–2020, the Internal Audit Program will continue to focus on information security and privacy. We will also complete a corporate fraud risk assessment.

Risk management activities

CIHI's Strategic Risk Management Program for 2018–2019 focused on identifying risks that could impede our ability to meet our commitments to stakeholders and to achieve the 3 strategic goals in our strategic plan for 2016 to 2021.

The program's goal is to foster reasonable risk-taking based on risk tolerance, and to create risk action plans that focus on actionable activities that will mitigate the risks in question. Our approach to risk management is to proactively deal with future potential events, consider what could go wrong and what needs to go right, and build consensus on how to deal with potential future events and their impact. Our Strategic Risk Management Program serves to ensure management excellence, strengthen accountability and improve future performance. It supports planning and priority-setting, resource allocation and decision-making.

CIHI is committed to focusing on corporate strategic risks that

- Cut across the organization;
- Have clear links to achieving our strategic goals and priorities;
- Are likely to remain evident for the next 3 years; and
- Can be managed by our senior leadership.

CIHI's Risk Management Framework (below) consists of 4 cyclical processes targeted toward the successful achievement of our future strategic goals and priorities:

CIHI's Risk Management Framework

Risk management activities for 2018–2019

The executive management team assessed a number of key risks that could prevent CIHI from achieving our strategic directions based on the likelihood of their occurrence and their potential impacts. 5 of these risks were identified as strategic risks due to their high level of residual risk (risk level after considering existing mitigation strategies).

Technology deficit

Our ability to achieve our strategic goals is contingent upon keeping pace with current and emerging technologies. To mitigate this potential risk, CIHI continued to implement its technology and business modernization initiatives, including our digital strategy and launching the move to the cloud. We also introduced strategic workforce planning to train and educate staff to increase relevant skills, and developed new partnerships and sourcing strategies to accelerate technical and process changes. Finally, we developed a comprehensive IT roadmap and continued to proactively monitor the technology landscape to ensure we responded to emerging technologies and evolving needs of our stakeholders and funders.

Maintaining focus to achieve the 2016 to 2021 strategic plan

In 2018–2019, there was a risk that the organization could lose focus on delivering the objectives that will provide the most value toward achieving the 2016 to 2021 strategic plan. We addressed this risk by introducing new approaches to help the organization assess and plan work, and to evolve decision-making processes. We also conducted a mid-point review of the strategic plan and defined and continue to monitor its end point. Finally, we continued to evolve our Performance Measurement Framework indicators, including setting annual targets to keep us on track to achieve our goals and objectives.

Listening and adapting to stakeholders' needs

Delivering products and services that stakeholders want in a timely and coordinated fashion was also identified as a risk for 2018–2019. To meet the needs of and to further engage stakeholders, we continued to update and implement our multi-year stakeholder engagement and communications strategy. We also conducted more supplemental analyses as well as a segmentation analysis to ensure local relevancy and to ensure that priority stakeholder needs are met. Finally, we reviewed our client service functions to reflect stakeholder feedback, including an enhanced approach to capacity-building activities.

Privacy and security

Our Privacy and Security Risk Management Program is one of our core strengths; however, there was a risk that current mitigation strategies would not meet emerging threats as social engineering techniques became more sophisticated, and as business processes and technologies evolved. We addressed this risk by continuing to mature the Privacy and Security Risk Management Program, including continuously reviewing the risk register and increasing staff awareness activities. We also incorporated privacy and security requirements and activities into new and existing processes, and we reviewed the Privacy and Audit programs to ensure that privacy and security risks are adequately addressed. Finally, we proactively monitored the privacy and security landscape to ensure that CIHI continues to respond to emerging risks and to the evolving privacy needs of our stakeholders, regulators and funders.

Pan-Canadian health organizations review

Mid-way through 2017–2018, a new risk emerged for CIHI with the announcement of the independent review of the pan-Canadian health organizations (PCHOs). With the aim of minimizing the impact to CIHI's mandate and/or strategic plan, in 2018–2019 we continued to support the review process and consulted with the Board of Directors. We will continue to work closely with Health Canada and the other PCHOs as the future direction is determined.

Leading practices

This section provides an overview of our operations and an explanation of our financial results. It should be read along with the financial statements in this annual report.

Who does what

- Management prepares the financial statements and is responsible for the integrity and objectivity of the data in them. This is in accordance with Canadian accounting standards for not-for-profit organizations.
- CIHI designs and maintains internal controls to provide reasonable assurance that the financial information is reliable and timely, that the assets are safeguarded and that the operations are carried out effectively.
- The Board of Directors carries out its financial oversight responsibilities through the Finance and Audit Committee (FAC), which is made up of directors who are not employees of the organization.
- Our external auditors, KPMG LLP, conduct an independent audit in accordance with Canadian generally accepted auditing standards and express an opinion on the financial statements. The auditors meet on a regular basis with management and the FAC and have full and open access to the FAC, with or without the presence of management.
- The FAC reviews the financial statements and recommends their approval by the Board of Directors. For 2018–2019 and previous years, the external auditors have issued unqualified opinions.

Disclaimer

This section includes some forward-looking statements that are based on current assumptions. These statements are subject to known and unknown risks and uncertainties that may cause the organization's actual results to differ materially from those presented here.

Revenue

Annual sources of revenue

Revenue source ($ millions)	2015–2016 Actual	2016–2017 Actual	2017–2018 Actual	2018–2019 Planned	2018–2019 Actual	2019–2020 Planned
Federal government — Health Information Initiative*	77.7	79.7	79.9	85.6	85.0	88.8
Provincial/territorial governments — Core Plan	17.4	17.4	17.7	18.1	18.1	18.4
Other†	5.7	5.8	6.9	6.5	7.4	5.6
Total annual source of revenue	**100.8**	**102.9**	**104.5**	**110.2**	**110.5**	**112.8**

Notes

* Reflects annual revenue on a cash basis, adjusted for the carry-forward projects. Therefore, excludes depreciation and CIHI pension plan accounting expenses–related revenue.

† Includes contributions from provincial/territorial governments for special-purpose programs/projects as well as lease inducements between 2015–2016 and 2016–2017.

Funding agreements

CIHI receives most of its funding from the federal government and the provincial/territorial ministries of health.

- The proportion coming from these 2 levels of government has evolved over time and Health Canada's proportion has grown since the renewal of the Health Information Initiative (HII) agreement.
- Our total annual source of revenue averaged $104.7 million between 2015–2016 and 2018–2019. This pays for our ongoing program of work related to our core functions and priority initiatives.

Since 1999, Health Canada has significantly funded the building and maintenance of a comprehensive and integrated national health information system. Funding has come through a series of grants and contribution agreements referred to as the Roadmap Initiative or HII.

- Our base HII funding is $77.7 million per year. The agreement also includes a 5-year program of work on prescription drug abuse, for a total of $4.42 million over 5 years (2014–2015 to 2018–2019).

- In 2017–2018, the HII funding agreement was renewed, providing $53 million over 5 years in addition to our base funding: $3 million in year 1 (2017–2018), $5 million in year 2, $10 million in year 3, $15 million in year 4 and $20 million in year 5.
- The 2019–2020 planned funding from Health Canada includes an approved carry forward of $750,000 from 2018–2019 related to key initiatives underway in 2018–2019 that will continue in 2019–2020. Similarly, the results presented for 2018–2019 include a carry forward of $1.8 million from 2017–2018, and the results presented for 2016–2017 include a carry forward of $832,000 from 2015–2016.

Through bilateral agreements, the provincial/territorial ministries of health continued to fund our Core Plan (a set of products and services provided to the ministries and identified health regions and facilities).

- These agreements provided $18.1 million in funding in 2018–2019.
- They were renewed in 2017–2018 for 3 years, through 2019–2020. $18.4 million has been budgeted for 2019–2020, which reflects a 2% increase as outlined in the 3-year agreement.

Expenses

Operating expenses

Operating expenses ($ millions)*	2015–2016 Actual	2016–2017 Actual	2017–2018 Actual	2018–2019 Planned	2018–2019 Actual	2019–2020 Planned
Salaries, benefits and pension expenses	78.6	77.7	79.9	84.4	85.4	86.8
External professional services, travel and advisory committee expenses	7.0	8.3	8.8	10.0	8.6	10.7
Occupancy, information technology and other expenses†	16.0	16.4	15.7	15.9	17.5	16.5
Total operating expenses	**101.6**	**102.4**	**104.4**	**110.3**	**111.5**	**114.0**

Notes

* Reflects operating expenses; therefore, includes amortization of capital assets and accounting pension plan costs.

† Effective April 1, 2018, CIHI changed its accounting policy related to the capitalization of capital assets. The capitalization threshold was increased from $1,000 to $2,500 to more accurately reflect the organization's assets with future economic value. CIHI has applied this policy change retrospectively, but only in CIHI's audited financial statements.

Total operating expenses, 2018–2019: $111.5 million

These include compensation costs, external professional services, travel expenses, occupancy costs and information technology costs required to deliver on several key project initiatives undertaken in 2018–2019. Additional information about employee remuneration is provided in the table below. Total remuneration paid to the CIHI Board of Directors was $33,025.

Occupational category	Salary ranges ($)	Taxable benefits ($)*	Number of employees†
Administration	35,400–54,420	78–234	7
Support	51,850–78,070	27–1,455	139
Professional/technical	75,840–113,730	35–2,520	505
Management	109,210–196,580	27–5,625	100
Vice presidents	188,880–236,090	3,687–6,030	7
President and CEO	298,190–372,740	11,191	1

Notes

* Taxable benefits paid include insurance benefits and car allowance.

† Number of employees as of March 31, 2019.

Total expenses variance relative to planned 2018–2019 activities: overspending of $1.2 million

The negative variance of $1.2 million in 2018–2019 is due mainly to the implementation of the new Capital Asset policy, which increased the capitalization threshold, leading to more assets being recorded under operating expenses. This increase in operating expenses is partially offset by savings due to delays in certain key initiatives that will be carried forward to 2019–2020, as approved by Health Canada. In addition, some reallocations were done between salaries and external and professional services based on resources requirements in order to deliver on CIHI's work plan.

Capital investments

Capital investments ($ millions)	2015–2016 Actual	2016–2017 Actual	2017–2018 Actual*	2018–2019 Planned	2018–2019 Actual	2019–2020 Planned
Furniture and office equipment	0.1	0.2	0.1	0.7	0.0	0.0
Computers and telecommunications equipment	1.1	2.0	2.0	0.9	0.5	0.3
Leasehold improvements	0.2	0.7	0.2	0.7	0.6	0.0
Total capital investments	**1.4**	**2.9**	**2.3**	**2.3**	**1.1**	**0.3**

Note

* Effective April 1, 2018, CIHI changed its accounting policy related to the capitalization of capital assets. The capitalization threshold was increased from $1,000 to $2,500 to more accurately reflect the organization's assets with future economic value. CIHI has applied this policy change retrospectively, but only in CIHI's audited financial statements.

Acquisition of capital assets, 2018–2019: $1.1 million

- Capital investments for 2018–2019 were lower than planned, due mainly to a change in accounting policy. The assets below $2,500 have been recognized as operating expenses.
- Capital investments over the years are based on an ongoing roadmap of planned acquisitions and upgrades to ensure that equipment and software are robust and adequate to meet changing operational demands.
- The amount of capital asset disposals during 2018–2019 was $798,000.

Pension plan

- Our former registered defined benefit plan provided employees an annual retirement income based on length of service and final average earnings. It was funded by both employees and CIHI.
- In addition, we supplemented the benefits of employees participating in the plan who were affected by the *Income Tax Act*'s maximum pension limit.
- Following the November 2014 decision approved by the CIHI Board of Directors, the defined benefit and supplementary retirement plans were wound up effective December 31, 2015.
- In accordance with regulatory requirements, a windup valuation report as of December 31, 2015, was submitted to the Financial Services Commission of Ontario (FSCO) in June 2016 and was approved by FSCO in February 2017.

- In June 2016, we fully paid the estimated deficit of $306,525 as identified in the windup valuation report. In 2017–2018, we paid another $2,113,515 to cover the increased deficit due to revised assumptions. In 2018–2019, we paid an additional $82,590 to cover final payments and expenses.
- During 2017, CIHI paid the pension plan's obligation to the members, based on their selection. Members had 3 choices: receive an annuity/deferred annuity, receive the commuted value of their pension in cash/locked-in retirement account or transfer the commuted value of the pension to another registered pension plan (Healthcare of Ontario Pension Plan, British Columbia Municipal Pension Plan, other).
- As of March 31, 2018, the plan assets were $368,500 for the 2 remaining members still to be settled. As of March 31, 2019, all final payments were made to members. Plan assets have been fully liquidated.
- The plan assets were invested and professionally managed by Manulife Financial in a money market fund.
- On March 21, 2019, CIHI received confirmation from FSCO that the pension plan is now closed.
- Beginning January 1, 2016, CIHI employees joined the Healthcare of Ontario Pension Plan, the British Columbia Municipal Pension Plan or the Group RRSP.

Audited financial statements

Independent auditors' report

To the Board of Directors of the Canadian Institute for Health Information

Opinion

We have audited the financial statements of the Canadian Institute for Health Information ("CIHI"), which comprise:

- the statement of financial position as at March 31, 2019
- the statement of operations for the year then ended
- the statement of changes net assets for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements, present fairly, in all material respects, the financial position of CIHI as at March 31, 2019, and its results of operations and its cash flows for the year then ended in accordance with Canadian Accounting standards for not-for-profit organizations.

Emphasis of Matter – Change in Accounting Policy

We draw attention to Note 2B to the financial statements which indicates that CIHI has changed its accounting policy for the capitalization threshold of capital assets and has applied that change retrospectively.

Our opinion is not modified in respect of this matter.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the ***"Auditors' Responsibilities for the Audit of the Financial Statements"*** section of our auditors' report.

We are independent of CIHI in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing CIHI's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate CIHI or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing CIHI's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of CIHI's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the CIHI's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause CIHI to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants, Licensed Public Accountants

Ottawa, Canada
June 13, 2019

Statement of financial position

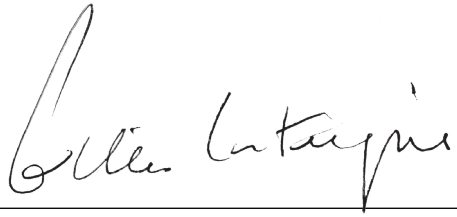
As at March 31, 2019, with comparative information for 2018

	Notes	2019	2018
			(note 2B)
Assets			
Current assets			
Cash and cash equivalents	3	$6,839,883	$9,019,671
Accounts receivable	4	8,256,380	6,928,332
Prepaid expenses		3,591,523	3,442,467
Accrued pension benefit asset	7d	0	42,900
Total current assets		**18,687,786**	**19,433,370**
Long-term assets			
Capital assets	5	4,564,628	5,476,999
Other assets	6	295,539	559,287
Total long-term assets		**4,860,167**	**6,036,286**
Total assets		**$23,547,953**	**$25,469,656**
Liabilities and net assets			
Current liabilities			
Accounts payable and accrued liabilities	9	$6,668,484	$5,588,162
Unearned revenue		1,378,268	1,746,968
Deferred contributions	10a	4,216,800	5,355,528
Total current liabilities		**12,263,552**	**12,690,658**
Long-term liabilities			
Deferred contributions			
Expenses of future periods	10a	292,733	545,479
Capital assets	10b	2,246,173	3,112,367
Lease inducements	11	1,654,253	2,010,067
Total long-term liabilities		**4,193,159**	**5,667,913**
Net assets			
Invested in capital assets		1,772,721	1,733,848
Unrestricted		5,318,521	27,606,048
Remeasurements — pension		0	(22,228,811)
Total net assets		**7,091,242**	**7,111,085**
Commitments	15		
Total liabilities and net assets		**$23,547,953**	**$25,469,656**

See the accompanying notes to the financial statements.

On behalf of CIHI's Board:

Director



Director

Statement of operations

Year ended March 31, 2019, with comparative information for 2018

	Notes	2019	2018
			(note 2B)
Revenue			
Core Plan	12	$18,067,078	$17,699,061
Sales		2,712,855	2,619,671
Funding — other	13	4,433,061	4,145,197
Health Information Initiative	10	86,206,647	80,211,226
Other revenue		215,842	164,606
Total revenue		**111,635,483**	**104,839,761**
Expenses			
Compensation		85,431,768	79,889,364
External and professional services		5,262,886	5,618,048
Travel and advisory committee		3,319,390	3,200,315
Office supplies and services		1,486,069	587,943
Computers and telecommunications		7,901,851	7,129,490
Occupancy		8,126,972	8,114,838
Total expenses		**111,528,936**	**104,539,998**
Excess of revenue over expenses		**$106,547**	**$299,763**

See the accompanying notes to the financial statements.

Statement of changes in net assets

Year ended March 31, 2019, with comparative information for 2018

	Notes	Invested in capital assets	Remeasurements — pension	Unrestricted	Total 2019	Total 2018
						(note 2B)
Balance, beginning of year	2B	$1,733,848	$(22,228,811)	$27,606,048	$7,111,085	$9,966,522
Excess of revenue over expenses		(633,517)	0	740,064	106,547	299,763
Change in invested in capital assets		672,390	0	(672,390)	0	0
Remeasurements — pension	7e	0	(126,390)	0	(126,390)	(3,155,200)
Other items related to pension		0	22,355,201	(22,355,201)	0	0
Balance, end of year		**$1,772,721**	**$0**	**$5,318,521**	**$7,091,242**	**$7,111,085**

See the accompanying notes to the financial statements.

Statement of cash flows

Year ended March 31, 2019, with comparative information for 2018

	Notes	2019	2018
			(note 2B)
Cash provided by (used in)			
Operating activities			
Excess of revenue over expenses		$106,547	$299,763
Items not involving cash			
Amortization of capital assets		1,913,430	2,174,498
Amortization of lease inducements		(355,814)	(415,744)
Pension benefits		(83,490)	(2,141,975)
Amortization of deferred contributions — capital assets		(1,246,379)	(1,477,999)
Loss on disposal of capital assets		51,516	42,209
Change in non-cash operating working capital	14	(765,482)	(1,468,546)
Net change in other assets		263,748	(48,091)
Net change in deferred contributions		(1,011,289)	3,015,752
Cash used in operating activities		**(1,127,213)**	**(20,133)**
Investing activities			
Acquisition of capital assets		(1,052,575)	(1,687,519)
Proceeds on disposal of capital assets		0	1,335
Cash used in investing activities		**(1,052,575)**	**(1,686,184)**
Decrease in cash and cash equivalents		**(2,179,788)**	**(1,706,317)**
Cash and cash equivalents, beginning of year		9,019,671	10,725,988
Cash and cash equivalents, end of year		**$6,839,883**	**$9,019,671**
Represented by			
Cash		$339,883	$519,671
Short-term investments		6,500,000	8,500,000
		$6,839,883	**$9,019,671**
Supplemental information			
Interest received		$212,352	$95,605
Interest paid		0	5

See the accompanying notes to the financial statements.

Notes to financial statements

1. Organization

The Canadian Institute for Health Information (CIHI) is a national not-for-profit organization continued under Section 211 of the *Canada Not-for-profit Corporations Act*.

CIHI's mandate is to deliver comparable and actionable information to accelerate improvements in health care, health system performance and population health across the continuum.

CIHI is not subject to income taxes under paragraph 149(1)(l) of Canada's *Income Tax Act*.

2. Significant accounting policies and change in accounting policy

A. Significant accounting policies

These financial statements have been prepared by management in accordance with the Canadian accounting standards for not-for-profit organizations in Part III of the *CPA Canada Handbook — Accounting* and include the following significant accounting policies:

a) Revenue recognition

CIHI follows the deferral method of accounting for contributions for not-for-profit organizations.

Funding contributions are recognized as revenue in the same period as the related expenses are incurred. Amounts approved but not received at the end of the period are recorded as accounts receivable. Excess contributions that require repayment in accordance with the agreement are recorded as accrued liabilities.

Contributions provided for a specific purpose and those restricted by a contractual arrangement are recorded as deferred contributions, and subsequently recognized as revenue in the same period as the related expenses are incurred.

Contributions provided for the purchase of capital assets are recorded as deferred contributions — capital assets, and subsequently recognized as revenue over the same terms and on the same basis as the amortization of the related capital assets.

Interest revenue is recorded as period income on the basis of the accrual method.

Restricted investment revenue and investment losses on restricted contributions are debited or credited to the related deferred contributions account and recognized as revenue in the same period as eligible expenses are incurred.

b) Capital assets

Capital assets are recorded at cost and are amortized on a straight-line basis over their estimated useful lives, as follows:

Assets	Useful life
Tangible capital assets	
Computers and telecommunication equipment	5 years
Furniture and equipment	5 to 10 years
Leasehold improvements	Term of lease
Intangible assets	
Computer software	5 years

c) Lease inducements

Lease inducements, consisting of leasehold improvement allowances, free rent and other inducements, are amortized on a straight-line basis over the term of the lease.

d) Pension benefits

Until December 31, 2015, CIHI maintained a contributory defined benefit pension plan as discussed in note 7.

Pension benefits are accounted for using the immediate recognition approach. Under this approach, the amount of the accrued benefit obligation net of the fair value of the plan asset is recognized on the statement of financial position. Current service and finance costs are expensed during the year, while remeasurements and other items — representing the total difference between the actual and expected return on plan assets, actuarial gains and losses, and past service costs — are recognized as direct increases or decreases in net assets.

The accrued benefit obligation and the assets are nil at the date of the statement of financial position, as all the obligations have been settled.

e) Foreign currency translation

Revenue and expenses are translated at the exchange rates prevailing on the transaction date. Any resulting foreign exchange gains or losses are charged to miscellaneous income or expenses. Foreign currency monetary assets and liabilities are translated at the prevailing rates of exchange at year end.

f) Use of estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the year. Actual results could differ from management's estimates. These estimates are reviewed annually; as adjustments become necessary, they are recognized in the financial statements in the period they become known.

B. Change in accounting policy

Effective April 1, 2018, CIHI changed its accounting policy related to the capitalization of capital assets. The capitalization threshold was increased from $1,000 to $2,500 to more accurately reflect the organization's assets with future economic value. CIHI has applied this policy change retrospectively and has adjusted the comparative and opening balances accordingly.

The following table provides a reconciliation of the net assets as at April 1, 2017, and the excess of revenue over expenses for the year ended March 31, 2018, as previously reported with those computed after increasing the capitalization threshold.

	Excess of revenue over expenses for the year ended March 31, 2018	Net assets as at April 1, 2017
Excess of revenue over expenses for the year and net assets, as previously reported	$211,520	$10,207,295
Capital assets under the revised threshold — expensed	(590,051)	(6,465,919)
Recognition of Health Information Initiative	576,892	4,887,937
Reversal of capital asset revenue	(344,892)	(3,867,032)
Reversal of amortization expense	446,294	5,204,241
Excess of expenses over revenue for the year and net assets, restated	**$299,763**	**$9,966,522**

The impact on the statement of financial position and cash flows for the year ended March 31, 2018, is as follows:

Statement of financial position

	As previously reported March 31, 2018	Change in accounting policy	Restated March 31, 2018
Capital assets	$6,882,434	$(1,405,435)	$5,476,999
Deferred contributions			
Capital assets	4,365,272	(1,252,905)	3,112,367
Net assets			
Invested in capital assets	1,886,378	(152,530)	1,733,848

Statement of cash flows

	As previously reported March 31, 2018	Change in accounting policy	Restated March 31, 2018
Amortization of capital assets	$2,620,792	$(446,294)	$2,174,498
Amortization of deferred contributions — capital assets	(1,822,891)	344,892	(1,477,999)
Net change in deferred contributions	3,592,644	(576,892)	3,015,752
Acquisition of capital assets	(2,277,570)	590,051	(1,687,519)

3. Cash and cash equivalents

Cash and cash equivalents are made up of cash and short-term investments that have a variety of interest rates and original maturity dates of 90 days or less.

4. Accounts receivable

	2019	2018
Operating	$4,114,590	$2,440,140
Funding — other	4,141,790	4,488,192
Total accounts receivable	**$8,256,380**	**$6,928,332**

Government refunds receivable at the end of the year are $1,983 (2018: $475,556).

5. Capital assets

	Cost	Accumulated amortization	2019 Net book value	2018 Net book value
Tangible capital assets				
Computers and telecommunication equipment	$10,333,392	$7,899,397	$2,433,995	$2,995,233
Furniture and equipment	4,010,596	3,961,248	49,348	139,090
Leasehold improvements	10,138,385	8,596,718	1,541,667	1,513,776
Intangible assets				
Software	10,452,560	9,912,942	539,618	828,900
Total capital assets	**$34,934,933**	**$30,370,305**	**$4,564,628**	**$5,476,999**

The capital assets include $ 0 (2018: $225,075) that are not in service at the end of the year.

6. Other assets

Other assets consist of rent deposits to landlords for office space as well as prepaid software, equipment support and maintenance expenses.

7. Accrued pension benefits

CIHI had a contributory defined benefit plan (the registered retirement plan) that offered its employees annual retirement income based on length of service and highest consecutive 5-year average earnings. In addition, CIHI supplemented this benefit to plan members who were affected by the application of the *Income Tax Act*'s maximum pension limit (through the supplementary retirement plan).

Following the November 2014 decision approved by CIHI's Board of Directors, the pension plans were wound up effective December 31, 2015. In February 2016, the supplementary retirement plan was settled.

In accordance with regulatory requirements, a windup valuation report as of December 31, 2015, was submitted to the Financial Services Commission of Ontario (FSCO) in June 2016 and was approved by FSCO in February 2017. The final windup procedures were completed in November 2018 and, as such, all the obligations have been settled. The administrator has settled all of the obligations of the plan, and the plan was officially closed on March 21, 2019, by FSCO.

The fair value of the plan's assets and accrued benefit obligations for accounting purposes are determined as at March 31 of each year. The following tables present the plan's funded status and amounts recognized in CIHI's statement of financial position.

a) Pension expense

The pension plan's expenses include the following components:

	2019 Registered retirement plan	2018 Registered retirement plan
Current service cost, net of employee contributions	$0	$0
Interest cost on accrued benefit obligation	6,900	3,764,900
Interest cost on valuation allowance	0	257,900
Investment income on plan assets	(7,800)	(4,051,300)
Pension expense (income)	**$(900)**	**$(28,500)**

b) Pension benefit obligation

Changes in the accrued benefit obligation are as follows:

	2019 Registered retirement plan	2018 Registered retirement plan
Defined benefit obligation, at end of prior year	$330,800	$139,439,800
Plan termination payments	(375,775)	(150,253,300)
Interest cost on accrued benefit obligation	6,900	3,764,900
Employee contributions	0	0
Benefits paid	0	(1,211,800)
Loss on settlement	38,075	8,591,200
Accrued benefit obligation, end of year	**$0**	**$330,800**

c) Pension assets

Changes in the plan's assets are as follows:

	2019 Registered retirement plan	2018 Registered retirement plan
Fair value of assets, beginning of year	$373,700	$150,046,125
Interest income	7,800	4,051,300
Employer contributions	82,590	2,113,500
Employee contributions	0	0
Plan termination payments	(375,775)	(150,253,300)
Benefits paid	0	(1,211,800)
Remeasurements — return on plan assets	(88,315)	(4,372,125)
Fair value of assets, end of year	**$0**	**$373,700**

The plan's assets consist of the following:

	2019 Registered retirement plan	2018 Registered retirement plan
Asset category		
Money market fund (Canada)	N/A	100%
Long-term bonds (Canada)	N/A	0%
Total	**N/A**	**100%**

d) Accrued pension benefit asset

CIHI recorded the assets and liabilities as follows:

	2019 Registered retirement plan	2018 Registered retirement plan
Accrued benefit obligation, end of year	$0	$(330,800)
Fair value of assets, end of year	0	373,700
Accrued pension benefit assets	**$0**	**$42,900**

e) Remeasurements — pension

Remeasurements, which are recognized directly in net assets rather than in the statement of operations, consist of the difference between the actual and expected return on plan assets, actuarial gains and losses, and changes in valuation allowance. For the year, the remeasurements for the pension plan amounted to $126,390 (2018: $3,155,200).

f) Actuarial assumptions

The actuarial assumptions, which represent management's best estimate assumptions used to determine costs and benefit obligations, were as follows:

	2019 Registered retirement plan	2018 Registered retirement plan
Service cost for years ended March 31		
Discount rate	N/A	2.70%
Rate of compensation increase	N/A	N/A
Accrued benefit obligations, as at March 31		
Discount rate	N/A	2.10%
Rate of compensation increase	N/A	N/A

8. Bank indebtedness

CIHI has a line of credit of $5,000,000 (2018: $5,000,000) with a financial institution bearing interest at the prime rate. This credit facility is secured by a general security agreement on all assets with the exception of information systems.

9. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities are operational in nature.

The government remittance payable at the end of the year is $260,318 (2018: $13,785).

10. Deferred contributions

a) Expenses of future periods

Since 1999, Health Canada has been significantly funding the building of a comprehensive national health information system and infrastructure to provide Canadians with the information they need to maintain and improve Canada's health systems and the population's health. Health Canada's funding contribution is received annually based on CIHI's capital resource requirements.

Deferred contributions related to expenses of future years represent unspent restricted contributions. The changes for the year in the deferred contributions — expenses of future years are as follows:

	2019	2018
Balance, beginning of year	$5,901,007	$3,885,573
Current-year contribution received from Health Canada	83,948,979	81,748,979
Amount recognized as funding revenue	(84,960,268)	(78,733,227)
Amount transferred to deferred contributions — capital assets	(380,185)	(1,000,318)
Balance, end of year	**4,509,533**	**5,901,007**
Less current portion	4,216,800	5,355,528
Balance, end of year, long-term portion	**$292,733**	**$545,479**

b) Capital assets

Deferred contributions related to capital assets include the unamortized portions of restricted contributions with which capital assets were purchased.

The changes for the year in the deferred contributions — capital assets balance are as follows:

	2019	2018
Balance, beginning of year	$3,112,367	$3,590,048
Amount received from Health Information Initiative	380,185	1,000,318
Amount recognized as funding	(1,246,379)	(1,477,999)
Balance, end of year	**$2,246,173**	**$3,112,367**

11. Lease inducements

The lease inducements include the following amounts:

	2019	2018
Leasehold improvement allowances	$545,734	$630,784
Free rent and other inducements	1,108,519	1,379,283
Total lease inducements	**$1,654,253**	**$2,010,067**

Amortization of leasehold improvement allowances was $85,050 (2018: $85,050). Amortization of free rent and other inducements was $270,764 (2018: $330,694).

12. Core Plan

The Core Plan revenue relates to a set of health information products and services offered to Canadian health care facilities, regional health authorities and provincial/territorial ministries of health. Provincial/territorial governments have secured CIHI's Core Plan on behalf of all facilities in their jurisdiction.

13. Funding — other

	2019	2018
Provincial/territorial governments	$4,272,879	$4,039,757
Other	160,182	105,440
Total funding — other	**$4,433,061**	**$4,145,197**

14. Change in non-cash working capital items

	2019	2018
Accounts receivable	$(1,328,048)	$(2,036,889)
Prepaid expenses	(149,056)	406,144
Accounts payable and accrued liabilities	1,080,322	137,703
Unearned revenue	(368,700)	24,496
	$(765,482)	**$(1,468,546)**

15. Commitments

CIHI leases office space under different operating leases, which expire on various dates. In addition, CIHI is committed under various agreements with respect to professional contracts and software and equipment maintenance and support. The minimum amounts payable over the next 5 years and thereafter are as follows:

2020	$11,229,871
2021	10,237,236
2022	9,110,695
2023	8,202,445
2024	8,141,967
2025 and thereafter	24,508,173

16. Financial instruments

Financial instruments are measured at fair value on initial recognition. Subsequent to initial recognition, they are accounted for based on their classification. Cash and cash equivalents as well as investments are measured at fair value. Accounts receivable net of allowance for doubtful accounts and accounts payable and accrued liabilities are carried at amortized cost. Because of the short-term nature of the accounts receivable as well as the accounts payable and accrued liabilities, amortized cost approximates fair value.

It is management's opinion that CIHI is not exposed to significant interest rate, credit, liquidity, current or other price risks arising from the financial instruments.

a) Interest rate risk

Interest rate risk refers to the adverse consequences of interest rate changes on CIHI's cash flows, financial position and investment income.

b) Credit risk

Credit risk relates to the potential that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur financial loss.

Credit risk concentration exists where a significant portion of the portfolio is invested in securities that have similar characteristics or similar variations relating to economic, political or other conditions. CIHI monitors the financial health of its investments on an ongoing basis.

c) Liquidity risk

Liquidity risk is the risk that CIHI will be unable to fulfill its obligations on a timely basis or at a reasonable cost. CIHI manages its liquidity risk by monitoring its operating requirements. CIHI prepares budget and cash forecasts to ensure that it has sufficient funds to fulfill its obligations.

In addition, as disclosed in note 8, CIHI has an available line of credit that is used when sufficient cash flow is not available from operations to cover operating and capital expenditures.

d) Other

Management does not believe that CIHI is exposed to significant current, foreign currency or other price risks.

There have been no significant changes from the previous period in the exposure to risk or in the policies, procedures and methods used to measure the risk.

17. Comparative information

Certain comparative information has been reclassified to conform to the financial statement presentation adopted in the current year.

Appendix

Text alternative for images

Looking back image, page 20

From 1994 to 2018, Canada's total health expenditures increased by 64%, from $2,614 to $4,295 per capita. Numbers have been calculated so that both years are comparable, after accounting for population growth and inflation, using constant 1997 dollars.

Looking back image, page 23

In the last 25 years, the number of registered nurses employed in Canada increased by 23%, slightly less than the increase in the Canadian population over the same time period.

From 1994 to 2017, the number of family doctors in Canada increased by 22% per 100,000 people: from 98 in 1994 to 120 in 2017.

Looking back image, page 52

In the last 25 years, our National Ambulatory Care Reporting System (NACRS) has grown from 1 facility in British Columbia (in 1997) to 461 pan-Canadian facilities (in 2019) that submit emergency department data.

CIHI's Risk Management Framework

The first process is Establish framework (which involves the policy and governance frameworks, as well as the process, methods and tools). The second process is Assess the risks (which involves identification of strategic goals and risks, as well as risk assessment). The third process is Risk response and treatment (which involves key risk indicators, strategy and action plans, and risk champions). The fourth process is Monitor and communicate (which involves reviewing the framework, Executive and Board oversight and risk management reporting).

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