
Harnessing Digital Health Technologies for Connected Care

Digital Health Canada – CHIEF Fall Symposium
October 2024



CONNECTED DIGITAL TOOLS AND HEALTH DATA ARE ESSENTIAL TO MODERNIZE THE HEALTH SYSTEM

- **Canadians should have easy access to their own health records online**, in a manner that is safe and secure and allows them to share their health data with clinicians and caregivers.
- **Harnessing health data will drive integrated care and break down health system silos**, enabling Canada to realize the vision of a world-class health data system.



Empowering Individuals

To improve their health outcomes with access to their complete health record.



Empowering Clinicians

With complete patient information, to support team-based care and the best patient outcomes



Driving Innovation and Research

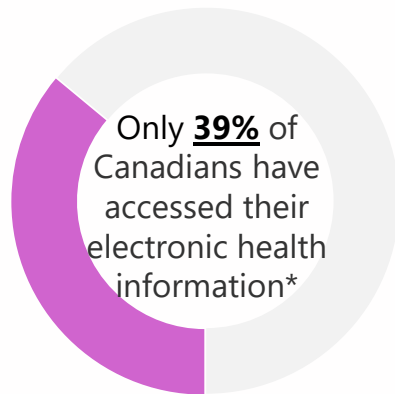
To improve the efficiency of care, treatment and diagnostics



Informing and advancing Policy Decisions

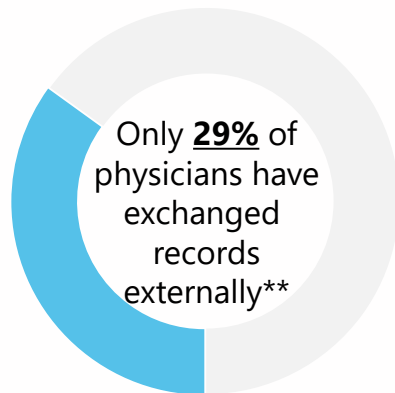
To improve health system efficiencies and public health responses

SIGNIFICANT FRAGMENTATION HAMPERS CANADA'S ABILITY TO DELIVER HIGH-QUALITY CARE AND IMPACTS HEALTH OUTCOMES



Current Issues:

- Digital health care solutions cannot connect
- Lack common standards to enable connectivity
- Data locked in proprietary systems



Impacts:

- Increased risk to patient safety with incomplete data to inform health decisions and public health responses
- Canadians lack access to their own health records
- Providers face unnecessary stress and administrative burden
- Canada falling behind other countries with legislated adoption of standards and prohibited data blocking

*Source: 2023 Canadian Digital Health Survey

**Source: 2024 National Survey of Canadian Physicians

THE PANDEMIC UNDERSCORED THE IMPORTANCE OF FPT COLLABORATION ON HEALTH DATA



FPT Action Plan on Virtual Care and Digital Health

Focus on enabling equitable access to virtual care and co-developed a Shared Pan-Canadian Interoperability Roadmap



An Expert Advisory Group (EAG) on health data provided advice to FPT governments

- Charting a Path Toward Ambition
- Building Canada's Health Data Foundation
- Toward a World-Class Health System



Collaboration on Health Data Management

FPT Governments collaborated on a pan-Canadian strategy for health data management, outlining a common vision, principles and key elements for collective action.

The Shared Pan-Canadian Interoperability Roadmap is a guide for industry and provinces and territories to follow to support objectives of connected care.



HISTORIC HEALTH CARE INVESTMENTS IN 2023 INCLUDE FOCUS ON COLLABORATIVELY IMPROVING HEALTH DATA

10-YEAR FEDERAL FUNDING COMMITMENT

Over \$200 billion over 10 years, including \$46.2 billion in new funding

BILATERAL AGREEMENTS

10-year funding commitment of \$25 billion, to advance shared health priorities, including modernizing the health system with digital tools and data, with provinces and territories

SUPPORTING FEDERAL PARTNERS

\$505 million over five years to the Canadian Institute of Health Information (CIHI), Canada Health Infoway, and federal data partners to leverage health data for health care



A JOINT ACTION PLAN ON HEALTH DATA AND DIGITAL HEALTH



Collecting and sharing high-quality and comparable information to improve health care for Canadians



Adopting common interoperability standards to better connect Canada's health care system



Implement aligned provincial and territorial policies to support health data sharing for the public good

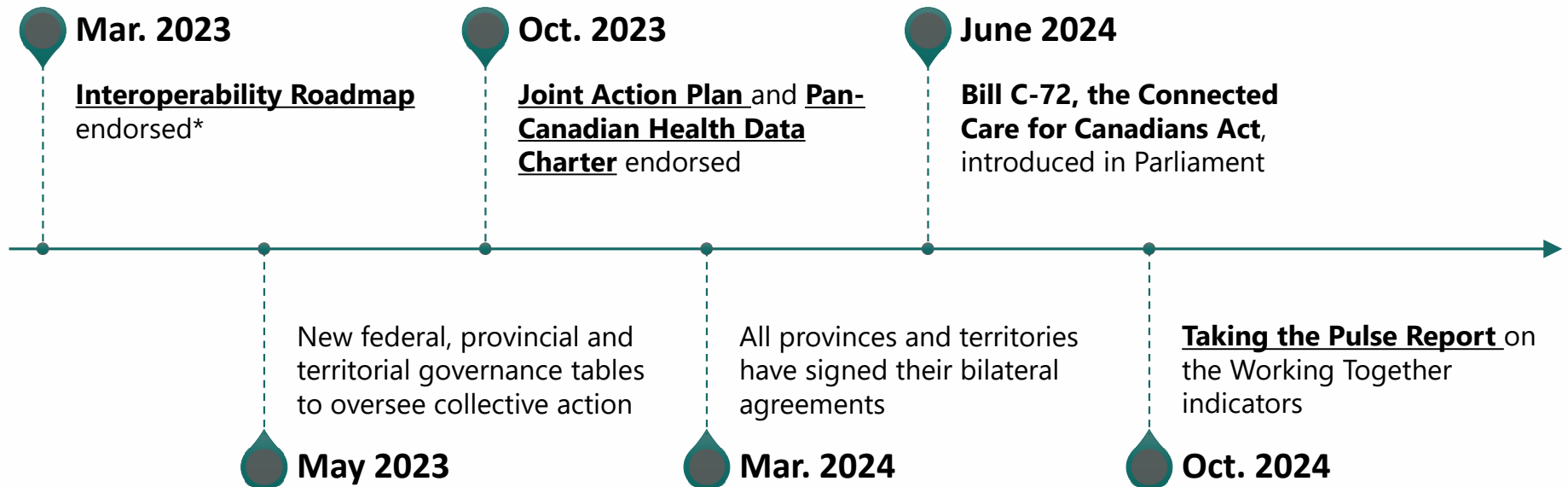


Advancing shared principles outlined in a Health Data Charter for the management of health data



Collecting and sharing public health data to support Canada's preparedness and response to public health events

SIGNIFICANT MOMENTUM AND PAN-CANADIAN COLLABORATION TO ENABLE CONNECTED CARE



PRIORITY ACTIONS OVER THE NEXT FEW YEARS...



Interoperability

- Infoway and CIHI release **interoperability standards** for seamless and secure flow of health data and work with Provinces and Territories, vendors and clinicians to adopt standardized digital tools and data
- Federal **legislative approach** (Bill C-72) to support standards adoption / prevent data blocking



Policy Alignment

- CIHI and partners work to develop and build consensus on a **framework for health data stewardship**
- Jurisdictions collaborate on guiding principles and actions for **ethical and responsible use of AI** for health



Apply Principles of Health Data Charter

- Define essential elements for **cybersecurity** programs suitable for health data systems and AI
- Advance federal, provincial and territorial strategy to **build trust and literacy** in health data and digital health



Improve public health data

- Launch a new framework for Federal/Provincial/Territorial/Indigenous public health data sharing
- Improve **interoperability of immunization data** through standards, governance and enabling technology



Report on Results

- Jurisdictions continue to collect and share data (including disaggregated data) with CIHI to **report on progress**;
- Expand and release **new common indicators** on Canada's shared health priorities, including for public health
- Co-development of a national set of cultural safety indicators



DRIVING FORWARD THE INTEROPERABILITY ROADMAP

Key near-term initiatives underway include:



Primary Care Data
Portability



Patient Summary




Patient Access to
Electronic Health
Data



eReferral and
eConsult

Establishing pan-Canadian specifications to support connectivity across systems:

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- Patient Summary
 - Pan-Canadian Data Content Framework & Canadian Core Data for Interoperability
 - eReferral & eConsult
 - HL7 FHIR
 - Reference Architecture

In parallel, Infoway is advancing many sector mobilization initiatives:

- Develop technical standards for Identity, Access, and Consent Management and advance on Trusted Exchange Framework
- A voluntary vendor conformance program, starting with patient summary
- Develop pan-Canadian Health Application Lightweight Protocol (HALO) specification to support secure third-party integration with EMRs
- Targeted investments to support physicians and vendors align with standards and modernize



BILL C-72, CONNECTED CARE FOR CANADIANS ACT

- Bill C-72 would support the goals of the Roadmap and Connected Care in Canada by:
 - **Establishing and maintaining requirements for interoperability** and health data standards that health information (IT) vendors must follow; and
 - **Prohibiting data blocking** by health IT vendors and determine reasonable and appropriate exceptions to prohibitions against data blocking.
- The proposed federal framework would act as a **backstop** when there is an absence of similar laws in provinces and territories.
 - Regulations would outline criteria and process to determine whether a province or territory has substantially similar legislation in place.
- It would complement existing privacy laws and **only enable, not compel, the secure access, use and exchange of health information** across health IT systems in Canada.
- Bill C-72 would **accelerate the aims of the Pan-Canadian Interoperability Roadmap**.
 - Regulations would specify requirements and standards to be adopted by health IT vendors to enable secure access, exchange and use of electronic health information.

SHIFTING CULTURE: RESPONSIBLE HEALTH DATA STEWARDSHIP

- The current custodian approach overlooks the impact of under-sharing, stifles innovation, and impedes system improvement.
- Shifting to a *stewardship* approach will support the alignment of policies, governance structures and tools for sharing data responsibly, securely and ethically; a key priority of the Action Plan.
- Based on FPT recommendations, CIHI is leading the development of a **pan-Canadian Health Data Stewardship Framework** in consultation with PTs, Indigenous partners, stakeholders and Canada Health Infoway.

<p>Health Data Charter Establishes the guiding principles for data stewardship.</p>	<p>Data Strategy Identifying shared data requirements for health system priorities.</p>	<p>Data Governance Establish clear accountabilities, authorities, legislation, policies, and agreements for trusted data management in the public good.</p>	<p>Data Collection & Use Quality, timely, and fit-for-purpose data for primary and secondary uses.</p>
<p>Data Management Collect, store, and share data in a fair, safe, and equitable way through:</p> <ul style="list-style-type: none"> • Data Standards • Data Quality • Data Architecture • Data Modeling • Data Lineage • Data Glossary • Master Data Management • Data Protection • Metadata • Data Operations • Interoperability • Data Access & Sharing • Analytics Infra. 			
<p>Indigenous Data Sovereignty Ensure support for, and alignment with, First Nations, Inuit, and Métis data principles and governance structures.</p>			
<p>Data Capacity & Literacy Increase health system skills and competencies needed to understand and use data.</p>			
<p>Public Trust & Engagement Provide meaningful civic engagement to ensure data stewardship reflects public values, needs, and expectations.</p>			



ACCELERATING RESPONSIBLE ADOPTION OF AI IN HEALTH

Pan-Canadian AI4H Guiding Principles will be brought this fall to Health Ministers for endorsement

Ongoing FPT collaboration with expert advisors and stakeholders to identify key action areas

PAN-CANADIAN AI FOR HEALTH (AI4H) GUIDING PRINCIPLES

The Guiding Principles outline shared values intended to guide federal, provincial and territorial governments in the responsible and ethical adoption and accelerated use of AI technologies, ultimately modernizing health systems, healthcare delivery and improving health outcomes.

KEY ACTION AREAS (In progress)

Ongoing collaboration to operationalize the principles through identification of key action areas to leverage health data work underway and accelerate the responsible adoption and use of AI for health across jurisdictions.



BUILDING PUBLIC TRUST AND LITERACY IN HEALTH DATA AND DIGITAL TOOLS, THROUGH ENGAGEMENT AND COMMUNICATIONS

Rapid Review
McMaster

Offers a comprehensive compilation of best practices, serving as a resource for jurisdictions to effectively plan and customize strategies for diverse populations.

Foundational Paper
HDRN

Explains the principles and benefits of health data sharing in Canada to build public trust and address challenges like misinformation.

Dialogue in a Box
SFU

Provides resources for meaningful engagement, including facilitator guides, discussion questions, and feedback forms, enabling FPTs to explore various topics on health data and digital tools effectively.

Health Data Training
CHIMA

Delivers online learning materials to enhance awareness of how the government collects, analyzes, shares, and uses health data and digital tools, empowering Canadians to make informed healthcare decisions and better understand the factors impacting their communities' health.

Small group discussions
IPS

Series of targeted small group discussions with leaders from community organizations and people with lived and living experiences from these communities. Will gather in-depth insights into the views, needs, and trust points for these communities related to health data.

Transparency Toolkit
WG

Offers templates and guidelines to assist FPT governments in clearly and effectively communicating online about their data collection, analysis, and sharing practices.

Public Messages
WG

Messages that will be disseminated nationally, and may be disseminated jurisdictionally, and within specific communities or diverse populations through a variety of mediums, including social media, infographics, fact sheets, and videos about health data

FNIM Approach

A collaborative approach with Indigenous experts, aligned with OCAP principles and Indigenous data sovereignty, utilizing existing resources to build public trust and data literacy in FNIM communities.

COLLABORATION ON HEALTH DATA AND DIGITAL HEALTH WILL DRIVE MEASURABLE RESULTS

- Empower individuals to access their health data, while ensuring privacy
- Support mobility by making health data accessible regardless of location or solution used
- Streamline interoperability requirements, aligning with international standards
- Drive competition with standardized, cost-effective e-health solutions
- Improve care access via connected solutions, especially in rural and remote areas
- Reduce administrative burden and enable access to integrated team-based care
- Enhance quality, inclusivity, and comprehensiveness of data for decision making

**Improving health and safety for all Canadians through connected
digital tools and health data**



Annexes

ANNEX A: THE PAN-CANADIAN HEALTH DATA CHARTER

To honour the duty to put people and populations at the core of all decisions about the disclosure, access and use of health information, the [Pan-Canadian Health Data Charter requires](#):

- 1. Person-centric health information** design to ensure that health data follows the individual across points of care to support individual, clinical, and analytical access and use while respecting individual privacy with regard to the handling of their information under existing privacy legislation.
- 2. Inclusion of diverse members of the public**, patients, communities and other partners in culturally integrated health information system development and oversight.
- 3. Commitment to support First Nations, Inuit and Métis data sovereignty** and Indigenous-led governance frameworks.
- 4. Common standards** for terminology, health data design, stewardship, interoperability, access, and portability.
- 5. The quality, security and privacy of health data** to maximize benefits, build trust, and reduce harm to individuals and populations.
- 6. Timely availability and accessibility of meaningful and comprehensive health data** to individuals, decision makers, the health workforce, and researchers to support an individual's health needs, quality health programs and services, population and public health, and research.
- 7. The ethical use of health data** to support decision making, policies, programs, services, statistics, and research for better health outcomes , while respecting the importance of open science and being open-by-design.
- 8. Data-driven social and technological innovation** through partnership, invention, discovery, value creation and international best practice.
- 9. Literacy** regarding health data, health data analysis and digital methods for the public, decision-makers, the health workforce, and researchers.
- 10. Harmonization of health data governance**, oversight, and policy in areas jointly agreed to by FPT governments for pan-Canadian coordination.