# Achieving connected care in the Canadian healthcare system.

TELUS® Health

Globally, healthcare systems have digitized health information to benefit patients and providers, especially in countries with universal healthcare. However, Canada has yet to fully realize the potential of data interoperability.

Healthcare interoperability ensures that disparate health information systems—whether they belong to primary care providers, hospitals, specialized clinics, pharmacies or public health agencies—can seamlessly exchange and interpret data, providing a unified view of the patient. This capability is crucial for enabling coordinated care, driving efficiencies and supporting population health management, especially in a system as complex and geographically dispersed as Canada. **Martin Bélanger,** SVP, Payor and Provider Solutions, at TELUS Health, says, "Canada needs a top-tier, interoperable health system that prioritizes patient-centric care and equips healthcare providers with the necessary tools to deliver informed and efficient healthcare services."

Strategically, investing in interoperability should be viewed as foundational to the digital transformation of healthcare. Interoperability is essential for leveraging emerging technologies like AI, machine learning and advanced analytics. These technologies rely on large, high-quality datasets that can only be achieved through seamless data integration across systems. As such, accelerating and achieving data interoperability can revolutionize Canadian healthcare, elevating patient care standards, enhancing healthcare experiences, and catalyzing robust public-private collaboration across the sector.

TELUS Health
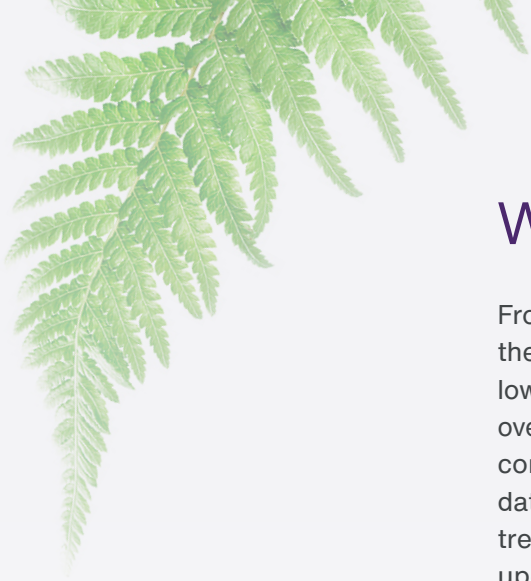
Why data interoperability matters.

From a strategic standpoint, interoperability is a cornerstone of achieving the Quintuple Aim: Improved patient experience, better patient outcomes, lower costs and better value for money, improved provider experience, and overall health equity. When systems are interoperable, clinicians can access comprehensive patient data at the point of care, regardless of where that data was generated. This reduces duplication of tests, minimizes delays in treatment, and ensures that all care providers are working with the same, up-to-date information, leading to better clinical outcomes and more efficient use of resources. Conversely, patients no longer have to carry paper records or recall every detail of their health history when visiting a new healthcare provider. This is crucial when caring for an aging population and patients with chronic illnesses who may have multiple healthcare providers. Data interoperability makes the process more convenient for providers and caregivers, reduces human error and empowers patients to take a more active role in their care.

Interoperability is also a key enabler for virtual care and telehealth solutions, which are increasingly important in providing accessible care across Canada's diverse and often remote populations. Bélanger states that interoperability becomes even more critical when care is not provided by a single healthcare provider or health entity.

> In a fragmented healthcare landscape, data interoperability ensures vital patient information can flow seamlessly between providers and systems, enabling coordinated quality care, reducing duplicative testing, and improving patient outcomes.

- Martin Bélanger,
SVP, Payor and Provider Solutions, TELUS Health

At the same time, interoperability isn't just about complying with standards or adopting new technologies. It's about creating an ecosystem where data flows freely and securely across the continuum of care, enabling better decision-making, enhancing patient outcomes, and driving operational efficiencies. "Accelerating interoperability requires political will, long-term vision and commitment to breaking down silos, promoting interoperability standards, and ensuring citizens and healthcare providers can fully participate in and benefit from an increasingly connected healthcare environment," says Bélanger.

TELUS® Health

The current state of data interoperability.

The [Canadian Health Infoway Shared Pan-Canadian Interoperability Roadmap](#) highlights the importance of timely, consistent and reliable health information exchange for improving care and outcomes. In June 2024, the Canadian government proposed the Connected Care for Canadians Act (C-72) to facilitate secure access to health data for Canadians, empowering patients and enhancing their quality of care. In addition, Canada has significantly digitized health information over the past two decades. Electronic Health Records (EHRs), patient portals and other digital health tools have become commonplace. However, these systems often operate in silos, leading to fragmented access to personal health information. This fragmentation prevents the seamless data exchange across different care settings, limiting the potential benefits of digital health innovations.

Despite legislative and technological advancements, Canada is just now catching up to other jurisdictions, such as the Nordic countries, Australia and the United States, in implementing interoperability standards. These countries have moved faster, driven by government decisions to enforce standards, offer financial incentives, introduce legislation and regulations, and form public-private partnerships that have taken the lead in implementation. Examples from other countries illustrate the necessity of a coordinated approach that involves stakeholders across jurisdictions, sectors and levels of government.

TELUS® Health

This includes setting standards for sharing and protecting private health information and collaborating with the private sector on data management and governance.

> " The road to data interoperability in Canada must be a collaborative journey that involves provinces leading the way in implementing consistent standards that support the health of their citizens. "

- Martin Bélanger,
SVP, Payor and Provider Solutions, TELUS Health

Global trends in healthcare interoperability reveal that while the most advanced countries face challenges, strong governance and standardization efforts can significantly enhance the process. Denmark is a leading example with its Common Framework for Public Sector Digital Architecture (CFOSDA) and MedCom, which ensure secure, efficient, and interoperable digital solutions across the healthcare sector. Similarly, Australia's My Health Records Act of 2012 mandates interoperability by requiring healthcare providers to maintain and share patient records, setting a legislative foundation for connected care. On the other hand, countries like the Netherlands and the UK have struggled with fragmented e-health systems due to a lack of unified standards and incentives.

The path to full interoperability is complex and requires addressing several challenges. These include aligning on data standards, ensuring data privacy and security, managing legacy systems, consistent funding to enable rapid connected care and fostering collaboration among various stakeholders, including provincial and territorial governments, healthcare providers, vendors and regulators. Government relations director at TELUS Health, **Tom Chervinsky** states, "Canada is still early in its healthcare interoperability journey. We can learn from other countries' experiences to design effective governance, implement robust standards, and foster collaboration. This approach will enhance our healthcare system's connectivity and efficiency, while preserving the core principles that define Canada's distinctive healthcare model."

TELUS Health

A collective journey towards interoperability.

Achieving interoperability in Canada requires collaboration across its unique provincial and territorial healthcare ecosystems. The recent provincial-federal bilateral health care agreements, which include multi-billion dollar commitments over the next ten years, provide a framework for this collaboration. These agreements focus on shared healthcare priorities, including improving how health information is collected, shared, used and reported.

Adopting common standards that ensure data can be securely and effectively shared across different systems is essential to achieving interoperability in the Canadian healthcare ecosystem. The Shared Pan-Canadian Interoperability Roadmap provides a blueprint for these standards, but it is up to the provinces and territories to implement them. Furthermore, other countries have successfully implemented interoperable systems with financial incentives and legislative support (see Global Approaches to Data Interoperability in Healthcare P. 7). Canada and its provinces could follow suit by providing consistent funding and regulatory frameworks to enable and support interoperability efforts.

Ultimately, the goal of data interoperability is to create a healthcare system that is centered around the patient. By enabling standardized data to follow the patient across all care settings, interoperability can lead to more informed care provision and better health outcomes.

> " With the right policies, standards and collaborative efforts, Canada can build a healthcare system that meets the needs of its citizens today and sets a new standard for patient care and collaboration across the health sector. "
>
> - Ratcho Batchvarov,
> General Manager, EMR, at TELUS Health

As Canada moves forward on its data interoperability journey, it can seize this opportunity to create a healthcare system that is increasingly connected, integrated and centered around the needs and wellbeing of its citizens.

TELUS Health

Global approaches to data interoperability in healthcare.

Several countries worldwide have made significant strides in digitizing healthcare, but achieving full data interoperability remains a work in progress, even for the most advanced systems. In all these countries, strong governance, clear policies and collaboration between public and private sectors have been critical drivers of success. As Canada looks to enhance its own data interoperability, learning from these global examples can help set the foundation for a connected, efficient and patient-centered healthcare system.

Australia:

The My Health Records Act (2012) mandates that healthcare providers maintain interoperable EHRs. During the pandemic, the Australian government accelerated its digital health initiatives by improving the use of EHRs and increasing public and private sector collaboration to advance interoperability.

Denmark:

A leader in digital health, Denmark established the Common Framework for Public Sector Digital Architecture (CFOSDA) in 2017, ensuring secure and interoperable digital solutions. Additionally, MedCom, a public, non-profit organization, plays a key role in developing and implementing interoperability standards.

Sweden

Telehealth was introduced in the 1990s, with a national e-Health Strategy launched in 2006. While progress was initially slow, the COVID-19 pandemic accelerated digital health efforts. Sweden's focus on standardizing electronic health records (EHRs) across primary care and hospitals is fostering better care coordination.

TELUS® Health

Case study: Nova Scotia's leadership in data interoperability.

One of Canada's most promising examples of data interoperability is the recent initiative by the Government of Nova Scotia. In collaboration with TELUS Health, Nova Scotia launched the YourHealthNS app, allowing citizens to access their primary care information digitally. This initiative marks the first large-scale effort in Canada to standardize and connect primary care data.

Scott McKenna, Chief Information Officer at Nova Scotia Health (NSH), emphasized the strategic and pragmatic approach that the government took to overcome the challenges of data interoperability.

> One of our first steps was to declare on the international health data standard FHIR R4, which is endorsed by international health data experts, paving the way for our subsequent actions.

- Scott McKenna,
Chief Information Officer, Nova Scotia Health (NSH)

He further explained that adopting this standard allowed Nova Scotia to focus on the health system beyond the hospital setting, ensuring a comprehensive approach to digital transformation.

The YourHealthNS app has enabled citizens to view a consolidated collection of their health data from multiple healthcare settings in one place for the first time. "We've heard from citizens that having this data is empowering from an education and self-management perspective. It has also improved their preparation for health appointments and overall care experience," McKenna noted.

TELUS® Health

Nova Scotia's success is not simply the result of recent funding agreements. It results from consistent political support, centralized governance, and a relentless focus on putting citizens first. "Securing the endorsement of our most senior health and political leaders was crucial. It was important that our leaders understood not just the current digital landscape and interoperability limitations but also the transformative power of adopting an international health data standard," McKenna said.

Reflecting on the partnership with TELUS Health, McKenna highlighted that the initiative's success is rooted in a shared holistic approach to interoperability. "Interoperability is not just about technology. It's about data, architecture, workflows, and more. Both Nova Scotia Health and TELUS have knowledgeable team members across these various workstreams, which has been key to our success."

At the province's request, the team at TELUS Health developed and delivered the foundational health data platform infrastructure that enables the secure provision of data elements. This effectively delivers an enhanced version of the patient summary, going beyond what is outlined in Infoway's Pan-Canadian standards, to drive significant benefits at scale and provide a comprehensive experience for providers and patients. "We were purposeful in our interoperability implementation for this initiative, focusing on data standards and user experiences that would be valuable to the province's citizens and help the NSH deliver best-in-class healthcare in the long term," Batchvarov commented.

TELUS® Health

Looking ahead, NSH plans to expand its data sources and leverage the standardized data for research and analytics purposes. McKenna emphasized that interoperability will remain a central focus, with plans to include interoperability criteria in tenders and contracts for new systems and partner with universities and colleges for education and knowledge translation.

The province has demonstrated that rapid progress in data interoperability is possible with the right ingredients—political will, centralized decision-making, and alignment with both short-term and long-term objectives. These factors have been instrumental in Nova Scotia's progress to accelerate interoperability in its healthcare system and serve as a model for other provinces and stakeholders in Canada.

Data interoperability is poised to become a cornerstone of modern healthcare systems, serving as a powerful enabler for improved patient care, operational efficiency, and innovation. It is a fundamental building block for achieving better health outcomes, fostering collaboration, and driving the evolution of healthcare delivery. As more regions recognize its transformative potential, data interoperability will undoubtedly play a pivotal role in shaping the future of healthcare, setting new standards for patient-centric, data-driven care from coast to coast.

TELUS® Health

TELUS Health

For more information, contact us at

telushealth@telus.com