

Building the digital infrastructure for Canada's health and life sciences ambitions

Recommendation

HealthCareCAN recommends that the Government of Canada establish a 10-year federal health capital program with dedicated physical and digital infrastructure streams. Most digital funding should be deployed during the first five years, with predictable funding through year ten for maintenance, cybersecurity, interoperability and technological renewal.

This is not simply a call for additional health infrastructure funding generally. Hospitals and health systems unquestionably continue to require investment in conventional physical infrastructure. However, federal infrastructure policy must also recognize that digital systems, connectivity and interoperability, as well as data capacity are now essential components of healthcare infrastructure.

Canada is investing in interoperable health data, artificial intelligence, clinical research and life sciences competitiveness. These investments will not deliver their full value unless hospitals and health systems have the local digital infrastructure required to connect to national platforms, generate and use high-quality data, and deploy new technologies.

The infrastructure gap

Canada's publicly funded healthcare systems generate extensive clinical and operational data. Yet the value of this data cannot be realized while they remain fragmented across institutions, systems and jurisdictions. Health data must be standardized or interoperable, securely connected and usable under appropriate privacy, security and governance frameworks.

The infrastructure required to achieve this extends beyond software. Digitally enabled care depends on secure high-speed connectivity; Wi-Fi- and Bluetooth-enabled clinical environments; fibre-optic cabling; servers, cloud infrastructure and secure equipment space; interoperable clinical information systems; cybersecurity and privacy safeguards; data storage and processing capacity; and the physical retrofits needed to deploy emerging technologies safely.

This infrastructure enables virtual and remote care, connected medical devices, AI-assisted screening and diagnostics, advanced imaging, decentralized clinical trials, real-

world evidence generation and system-level capacity planning. Without it, promising tools cannot be deployed consistently and the data they generate cannot be connected or used at scale.

Many hospitals and health systems continue to operate with aging facilities, outdated servers, non-interoperable information systems, inadequate connectivity and insufficient data-processing capacity. These challenges are especially acute in rural, remote and Northern communities. Investing in buildings without also investing in their digital capacity risks creating or renewing facilities that cannot fully support modern care, research and innovation. Physical and digital infrastructure are distinct but interdependent capital needs.

Federal investments share a practical dependency

The federal government has laid important foundations through the \$25-billion [Working Together bilateral agreements](#), \$505 million for federal health-data partners and \$100 million for the [VITAL health-data platform](#), the [Shared Pan-Canadian Interoperability Roadmap](#) and [Pan-Canadian Health Data Charter](#). It has also advanced interoperability through [Bill C-72](#) and subsequently [Bill S-5](#), and committed \$200 million to a health-focused AI mission through its [AI for All strategy](#).

The federal [Pharmaceutical and Life Sciences Sector Task Force](#) similarly identified weak and fragmented health-data infrastructure as a barrier to clinical trials, technology commercialization and health-system productivity. Its recommendations reinforce the need for a sovereign, connected and accessible health and life sciences data ecosystem.

These strategies and national platforms share a practical dependency: hospitals and health systems must have the capacity to generate, connect and use the data on which they rely. National infrastructure cannot deliver results without corresponding local and regional infrastructure.

Budget 2025 created an opening—but left a gap

Budget 2025 announced a \$5-billion Health Infrastructure Fund over three years, beginning in 2026–27, as part of the Build Communities Strong Fund administered by Housing, Infrastructure and Communities Canada. The inclusion of hospitals, emergency rooms and urgent-care centres recognized the need to renew Canada's health infrastructure. To date, however, the fund's investments have not been directed toward the digital infrastructure hospitals and health systems require.

This is an important opportunity for federal alignment. New and renewed facilities require digital capacity from the outset, while targeted upgrades can enable existing facilities to

deliver digitally supported care, participate in clinical trials and contribute data to pan-Canadian initiatives. A dedicated digital stream would connect federal infrastructure investment with the government's health, innovation, AI, life sciences, research, productivity and sovereignty objectives.

Hospitals and health systems are essential implementation partners

Federal investments in VITAL, interoperability, AI and life sciences innovation will achieve their full impact only if the organizations expected to implement them have the necessary infrastructure.

Hospitals, health authorities, health research institutes and healthcare organizations are where much of Canada's clinical data is generated, clinical trials are conducted, and health technologies are validated, adopted and integrated into patient care. Currently, they are reliant on a patchwork of federal organizations, private, provincial and philanthropic contributions.

Examples from HealthCareCAN members:

Santé Quebec West-Central Montreal Health and Social Services University Network (CIUSSS) has co-built the [Connected Health Record](#), with Harris Healthcare technologies and a philanthropic investment of \$90 Million. They have launched its first module, the Patient Timeline, which allows medical staff across the entire CIUSSS to access consistent and up-to-date information about each patient through a single digital platform, streamlining their daily tasks.

The Jewish General Hospital (a part of CIUSSS)'s [Hospital@Home](#) program, which enables early discharge, requires significant digital infrastructure such as IoT-enabled remote monitoring, connected devices, integration of clinical data, and 24/7 dashboards. By incorporating Signal1 AI software the program has been expanded to identify more eligible patients and even divert some from hospital admissions. The organization's AI-First Organization Strategy and AI Centre for Value-Based Health, has earmarked approximately \$12.5 million in technology and data-enabling investments over the next six years, not including the people and governance resources required to deliver these capabilities and further many such initiatives.

CHU de Québec–Université Laval, with five hospital sites and serving the population of nearly 2 million people in eastern Quebec and northwestern New Brunswick, is working to build a strong digital and health data ecosystem to support care improvement, operational innovation, research and the responsible use of AI. Investments from the province of Quebec and the Canadian Foundation for Innovation are attempting to make health data

more secure, reliable, and useful, while ensuring that its use remains governed, ethical, and aligned with value for patients and the health system. Together, initiatives such as the operational analytics infrastructure, [SCIENTA](#), [bioinformatics and proteomics infrastructure](#), [MedOnco](#) and the [Research Access Centre](#) will create a coherent foundation for transforming data into knowledge, decisions and measurable impact but not without significant investments.

The Saskatchewan Health Authority, along with eHealth Saskatchewan, Saskatchewan Cancer Agency and other health-system partners have established a connected, collaborative approach through a health system-wide digital health strategy. They have identified critical investments required to address challenges in healthcare facilities and clinical services, including unreliable connectivity, fragmented patient information, aging infrastructure, limited rural access, manual workarounds, cybersecurity risks and insufficient capacity to use health data effectively. Multiple programs such as a Clinical Information System, long-term care charting, digital pathology, connected devices, Primary Health Care access, virtual care and Artificial Intelligence all depend on reliable connectivity, security and data infrastructure. The investments required range from approximately \$1 Million a year for reliable routers, Wi-Fi, and cloud connectivity to nearly \$1 Billion to integrate a centralized information system that would replace the current 500 fragmented systems across acute, primary, community, long-term care, and virtual settings.

Designing a dedicated digital stream

A dedicated stream would give provinces, territories and health organizations greater clarity; prevent digital projects from being displaced by highly visible construction needs; and allow the federal government to establish eligibility criteria and outcomes appropriate for digital capital. The stream should:

- Recognize digital infrastructure as a distinct capital need, complementary to conventional physical infrastructure;
- Support foundational infrastructure, including connectivity, interoperability, cybersecurity, data storage and processing, cloud and computing capacity, secure equipment space and required physical retrofits;
- Prioritize alignment with pan-Canadian health-data, AI, clinical research and innovation initiatives, while addressing the needs of rural, remote and Northern organizations; and
- Front-load implementation so health organizations can address urgent deficiencies and connect to federal initiatives now, while maintaining predictable funding

through year ten for cybersecurity, renewal, expansion and long-term interoperability.

Aligning federal infrastructure investment with Canada's digital health and life sciences agendas would improve care and productivity, strengthen Canada's competitiveness in clinical trials, help Canadian technologies move from development to adoption, and secure the value of Canadian health data for Canadians. It would turn a collection of important initiatives into a coherent, mutually reinforcing national advantage.

About HealthCareCAN

HealthCareCAN is the national voice of Canada's hospitals, health authorities, health research institutes and healthcare organizations.

Our members operate at the intersection of care, research, commercialization and system adoption. They train Canada's health and research workforce, conduct clinical trials, validate and adopt Canadian technologies, connect researchers with innovators, and provide the physical and digital infrastructure that helps innovation move from discovery to commercialization and, ultimately, to patient care.

HealthCareCAN's members are not peripheral to Canada's life sciences economy. They are essential to making it possible.