

Pan-Canadian Core FHIR Profile Set (CA Core+)

Introduction

Interoperability ensures seamless and secure data exchange between health care systems. Interoperability improves care coordination, collaboration between health providers and patients' access to and control over their health information. By breaking down data silos, it also reduces inefficiencies and redundancies within the health system.

Connection, collaboration and communication have never been more important for the health system. Increased use of virtual care has highlighted the need for safe and efficient electronic sharing of information across the circle of care. Continuing to improve Canadian health care will necessitate work in interoperability — connected systems are healthier systems.

The **Pan-Canadian Core FHIR Profile Set (CA Core+)** plays a critical role in advancing this interoperability. As Canada's national standard for healthcare data exchange, CA Core+ provides the foundation for consistent and efficient information sharing across the healthcare system.

Standardizing Data Elements and Value Sets

CA Core+ is Canada's national core set of essential HL7 FHIR (Fast Healthcare Interoperability Resources) profiles for data exchange. Its agnostic characteristics are designed to support consistent interoperability across common use cases and provincial health systems by defining a standard for healthcare FHIR profiles, data elements, value sets, constraints, and more.

CA Core+ forms the backbone of Canada's data exchange efforts and is one of Canada Health Infoway's building blocks for the connected care initiative. It aims to be adopted and utilized across Canadian healthcare systems while also being conformance testable. It establishes a reusable, interoperable framework that supports healthcare providers, vendors, and institutions in adopting a unified guide and standard for clinical information exchange and clinical workflow.

In support of the provinces and territories, Canada Health Infoway (Infoway) is facilitating a national collaborative effort to advance interoperability. While there are many interoperability-related challenges, this specification refers to a set of standards and implementation guidelines developed to facilitate the interoperable exchange of healthcare information in Canada.

Development of CA Core+

Canada Health Infoway, in partnership with the [Canadian Institute for Health Information \(CIHI\)](#), is taking a collaborative, iterative approach in developing the CA Core+ specification and the CACDI. The [Pan-Canadian Health Data Content Framework \(PCHFCF\)](#), led by CIHI, serves as the foundation for health data interoperability in Canada, providing a structured approach to defining, organizing, and exchanging healthcare data across different systems and jurisdictions. Within this framework, [Canadian Core Data for Interoperability \(CACDI\)](#) acts as a subset, focusing on defining a standardized set of essential health data elements and value sets. These elements are structured within a common data architecture to facilitate interoperability across Canada's healthcare ecosystem.

In contrast, **Pan-Canadian Core FHIR Profile Set (CA Core+)**, led by Canada Health Infoway, builds on this foundation by establishing FHIR-based profiles and implementation guides to enable standardized data exchange. It is the expression of constraints in the [Canadian Core Data for Interoperability \(CACDI\)](#), in the form of FHIR profiles. The CA Core+ specifications include a core set of common data exchange profiles, extensions, and value sets as well as domain-specific profiles that offer constraints applicable under certain contexts (e.g., patient summary, long term care).

Together, CACDI and CA Core+ work in tandem to enable standardized data exchange. CACDI establishes the core data elements needed for interoperability, while CA Core+ ensures these elements are structured according to FHIR-based standards.

This approach includes extensive consultations with a wide range of interest holders, including:

- People with lived experience and their families
- First Nations, Métis, and Inuit Peoples
- Clinicians and care providers
- Technology vendors and industry partners
- Researchers
- Provincial and territorial governments
- Federal departments
- Pan-Canadian health organizations
- International standards and digital health organizations
- Data architects and FHIR experts

By engaging with these diverse groups, CA Core+ reflects the needs of the health system and aligns with global best practices while supporting the unique requirements of Canada's health landscape. This collaborative approach for data exchange standard consensus also ensures alignment with Canada Health Infoway initiatives and data standards.

As standards in healthcare continue to evolve, it's important to refer to the latest versions of the CA Core+ specifications and stay informed about updates and revisions to ensure compliance with current best practices.

For more information, please refer to the [CA Core+ Interoperability Specifications](#).