



Development of the Pan-Canadian Health Data Content Framework:

Focus on Immunization for the Public Health Surveillance Community

September 5, 2024

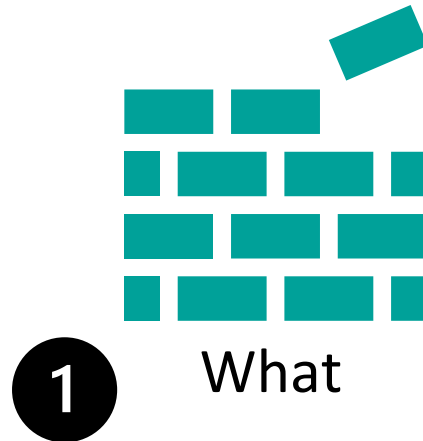


Canada Health Infoway
Inforoute Santé du Canada

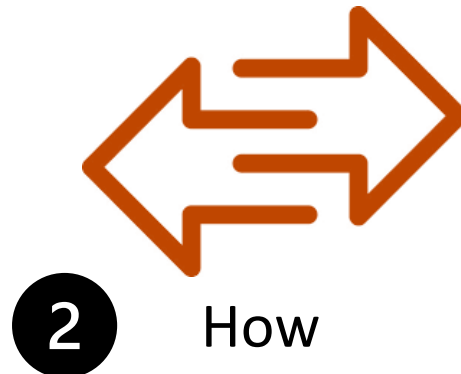


Canadian Institute
for Health Information
Institut canadien
d'information sur la santé

CIHI and Infoway are partnering to modernize health information flows to create a connected health system



Health data content foundation:
CIHI is defining the underlying data content and data structure (i.e., data necessary for diagnosis and treatment)

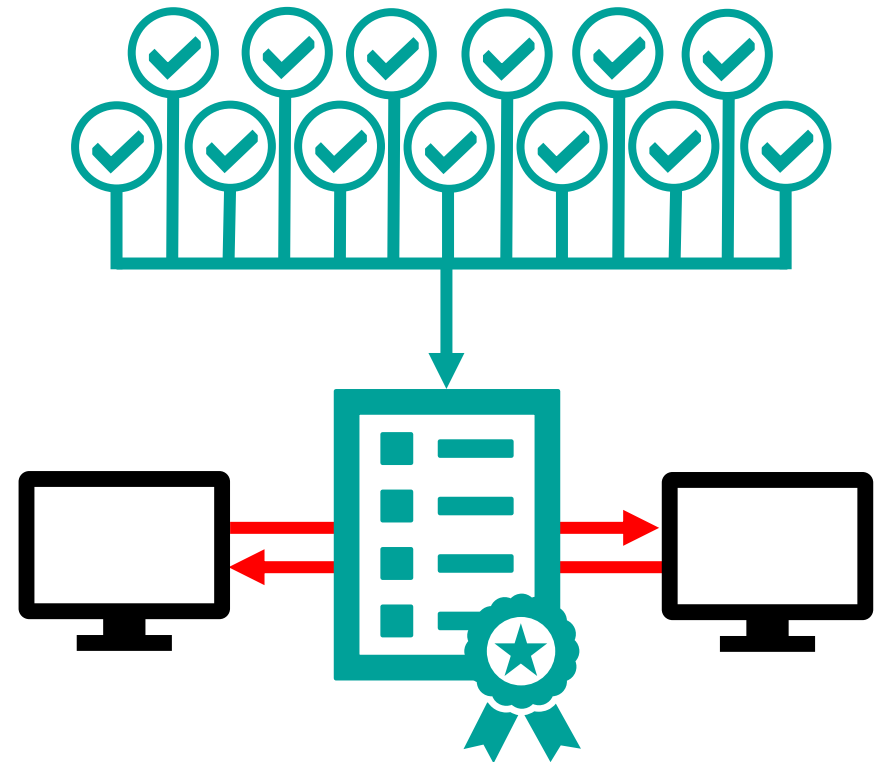


Data exchange “transport” standard:
Infoway is building the technical exchange standards that enable information to flow between systems

Definition | The Pan-Canadian Health Data Content Framework

One common **data content standard**, **data architecture** and **business glossary** for all health-related data in Canada

- **Purpose:** to improve data quality and consistency of health data, leading to more trust and use of the data for patient safety
- **What it does:** it defines and standardizes data to ensure meaningful exchange and interpretation across the health care system to achieve semantic interoperability (same meaning from sender to recipient).
- **Use:** It will be the “source of truth” that will define foundational data for health care delivery and management across all health sectors.



Products | Pan Canadian Health Data Content Framework



Data Content Standard

CACDI

Business Glossary

Business Context Model

Use Cases

Metamodel

Information Model

Conceptual Data Model

Logical Data Model

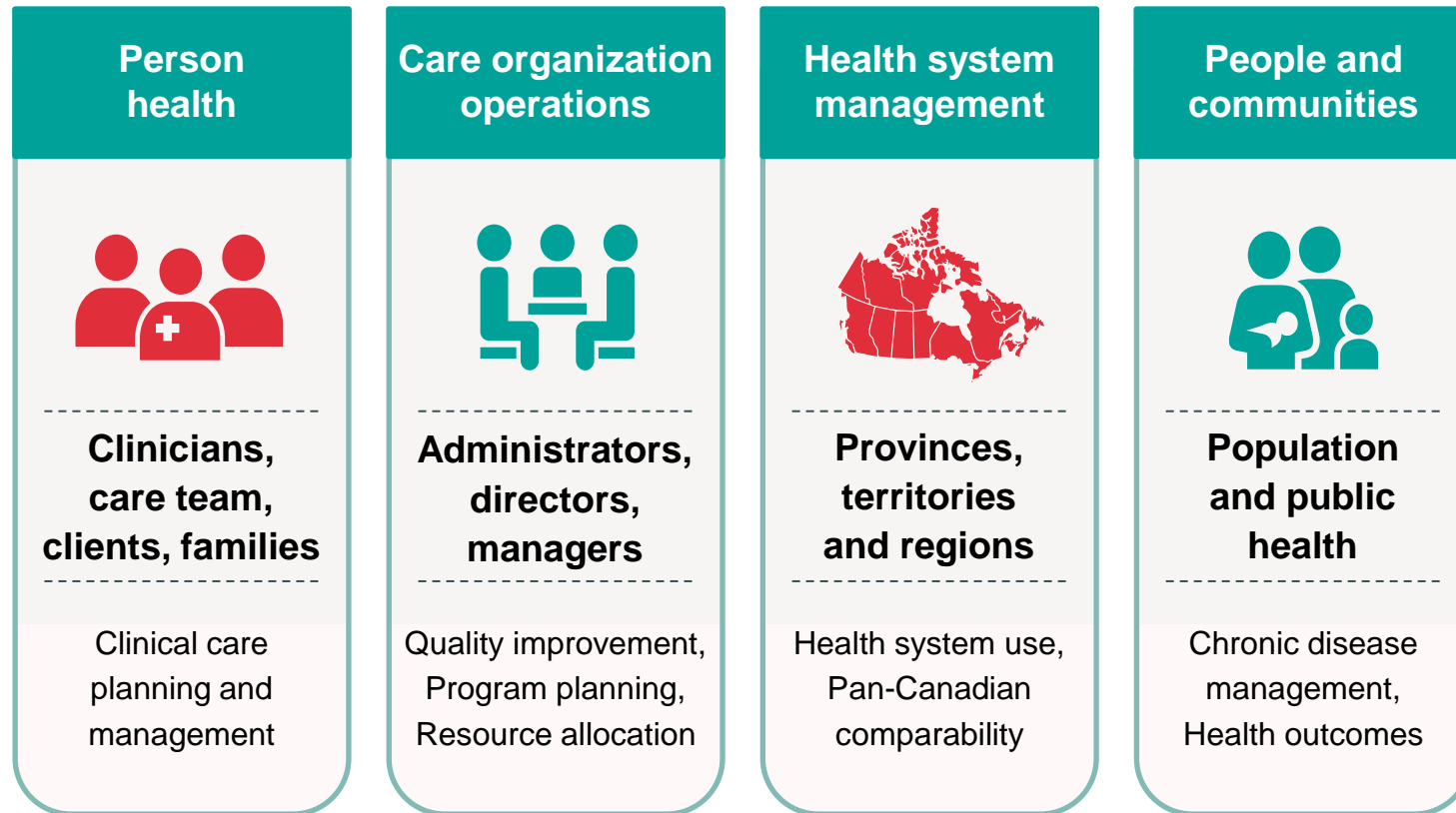
Metadata

Cross-Deliverable Mappings

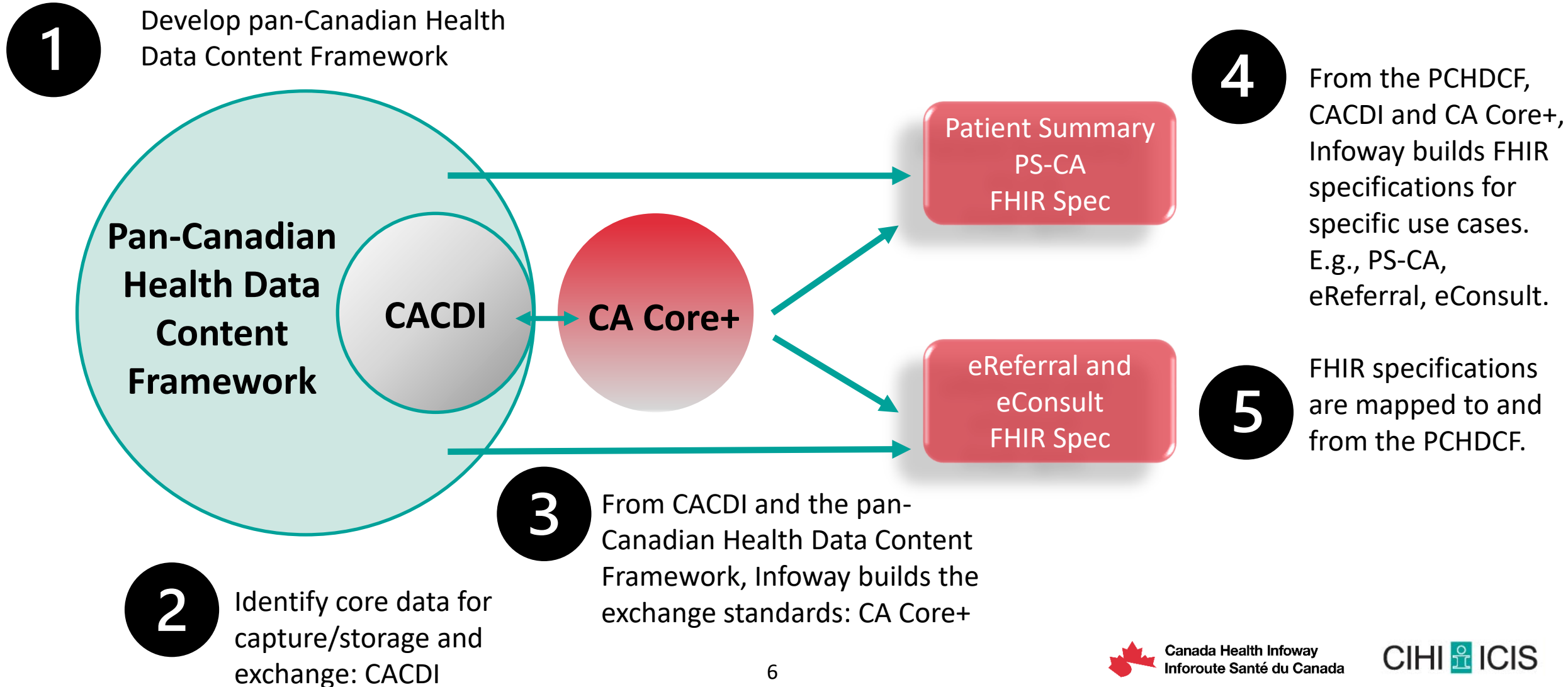
Feedback Disposition

Scope | Pan-Canadian Health Data Content Framework

The Framework provides one data content standard and architecture for all health-related data for **primary and secondary uses**



Pan Canadian Health Data Content Framework, CACDI, Patient Summary, eReferral, eConsult and how they relate



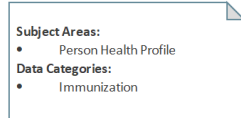
Snapshot of Pan-Canadian Health Data Content Framework

Data Content Standard – Immunization sample

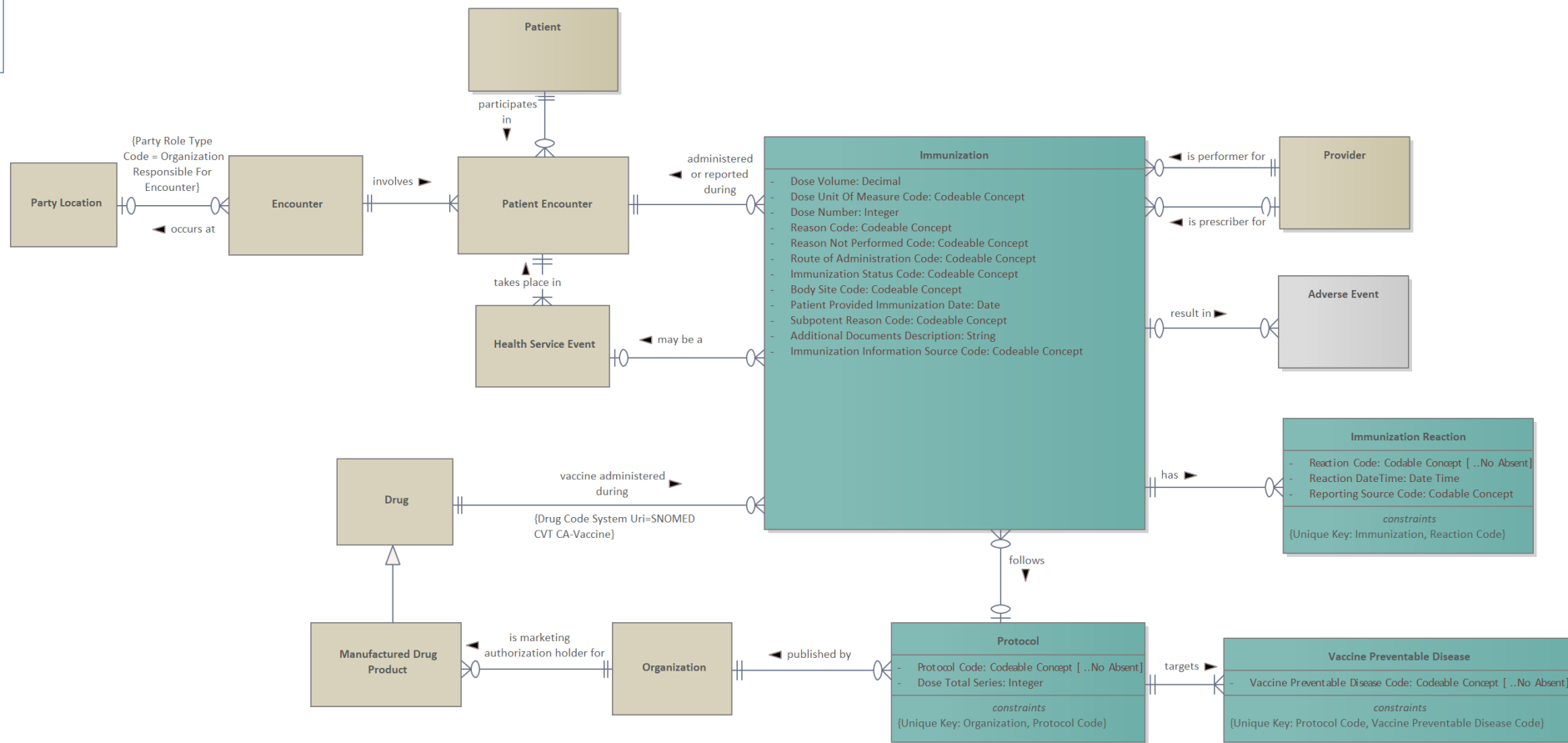
Data element name	Data element definition	Data element maturity	Value set (code system)	Value set examples	Value set maturity
Immunization Guideline Name	The name of the immunization protocol, including the dosing guide and schedule (e.g., hepatitis A immunization guide)	2: Proposed	n/a	n/a	n/a
Immunization Guideline Authority	The authority responsible for publishing the guidelines (e.g., Health Canada, Public Health Agency of Canada)	2: Proposed	n/a	n/a	n/a
Immunization Guideline Target Disease	The vaccine-preventable disease being targeted by the immunization	2: Proposed	VaccinePreventableDiseaseCode (SNOMED CT CA)	<ul style="list-style-type: none"> • Measles • Lyme disease • Typhoid fever 	2: Proposed
Immunization Reporting Source*	The source of information reporting the immunization event (e.g., person, provider)	1: Draft	Immunizationreportingsourcecode (SNOMED CT CA)	<ul style="list-style-type: none"> • Computer record of patient • Health care professional • Person 	1: Draft
Immunization* (Essential)	<p>The immunizing agent identified through its trade name or generic name</p> <p>Additional guidance VaccineAdministeredTradeNameCode and PassiveAdministeredImmunizingAgentCode will be used to document an immunization event, while VaccineHistoricalNameCode and PassiveHistoricalImmunizingAgentCode can be used to record historical immunizations or when the specific immunization details are not known.</p> <p>The pan-Canadian recommended value sets are integrated in the National Vaccine Catalogue, which can be referenced for mapping to additional fields.</p>	2: Proposed	VaccineAdministeredTradeNameCode (SNOMED CT CA)	<ul style="list-style-type: none"> • Inf Xanaflu API • LZV ZOSTAVAX II MC • MMR-Var ProQuad Merck 	2: Proposed
			VaccineHistoricalNameCode (SNOMED CT CA)	<ul style="list-style-type: none"> • Pneu-C-7 pneumococcal conjugate 7-valent unspecified • COVID-19 whole inactivated virus unspecified • Inf influenza unspecified 	2: Proposed
			PassiveAdministeredImmunizingAgentCode (SNOMED CT CA)	<ul style="list-style-type: none"> • BAtx BAT Cang • CMVlg Cytogam KIB • HBlg HepaGam B KIB 	2: Proposed
			PassiveHistoricalImmunizingAgentCode (SNOMED CT CA)	<ul style="list-style-type: none"> • CMVlg Cytogam CSL • DATx Diphtheria antitoxin IOI • HBlg HepaGam B Cang 	2: Proposed

Snapshot of Pan-Canadian Health Data Content Framework

Immunization Logical Data Model

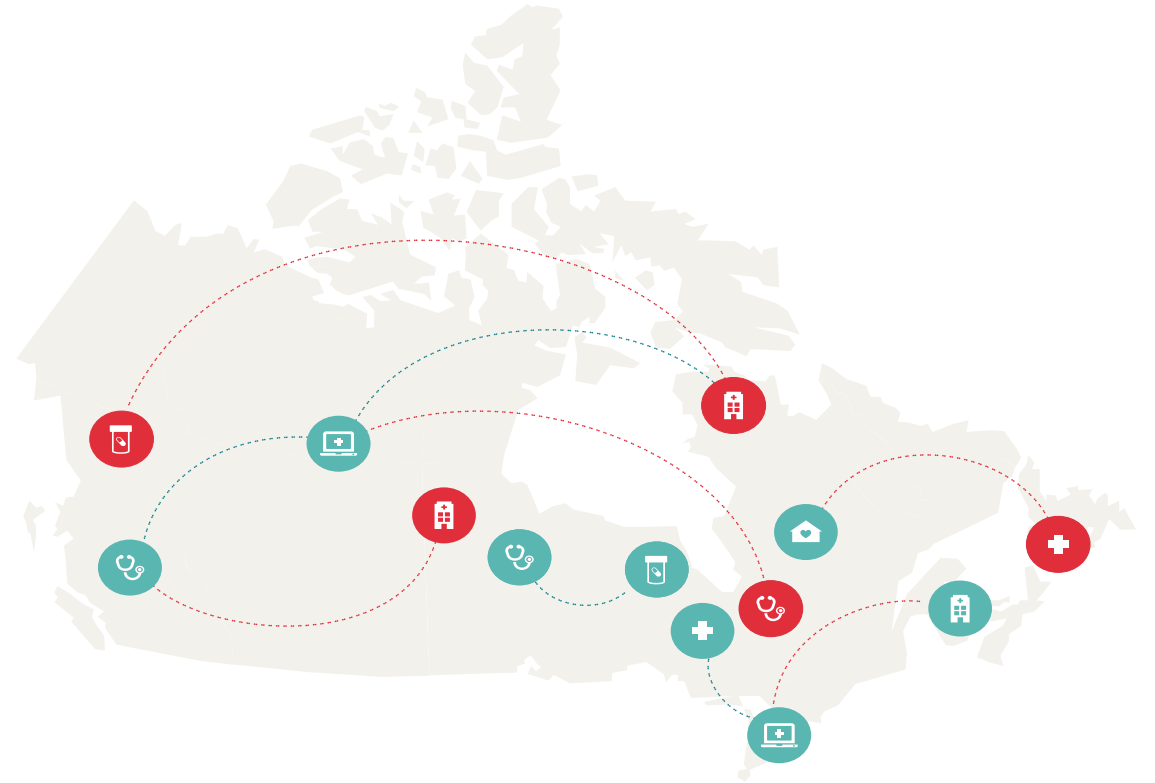


Immunization
Logical Data Model v.1.0



Open review: Pan-Canadian Health Data Content Framework

- Stakeholders were invited to provide feedback on the data elements, value sets and information model of the pan-Canadian Health Data Content Framework from March – May 2024
- Next release will be September 26, 2024



<https://www.cihi.ca/en/connected-care/pan-canadian-health-data-content-framework>

Open review feedback for discussion: Immunization Reason Value Set

- During the Pan-Canadian Health Data Content Framework open review period CIHI received a suggestion to add an additional concept to the immunization reason value set (e.g., high risk, routine) for self-selected vaccines
- The current immunization reason value set (ActImmunizationReason) contains only 2 concepts: High risk immunization, Routine immunization
- Question for PHS community:

Is there a need to add self-selection as an additional immunization reason?

Open review feedback for discussion: Identifying immunocompromised individuals

- In the pan-Canadian Health Data Content Framework there is no direct flag to identify immunocompromised individuals, other than potentially deriving based on current conditions/medications/diagnoses.
- During the open review period CIHI received a suggestion to add a direct identifier for “immunocompromised persons”
- Question for PHS community:

Is there a need to develop an identifier for immunocompromised individuals?

High-level timelines and what is next

Consult and validate

Feedback is sought from persons with lived experience, care teams, Indigenous Peoples, vendors, researchers, health system planners and decision makers.

Sept 2023 to
May 2024

May 2024 to
Aug 2024

Iterate

the pan-Canadian Health Data Content Framework based on engagement, consultation and feedback.

Release and Open Review

Pan-Canadian Health Data Content Framework

Draft Canadian Core Data for Interoperability (CACDI)

Sept 2024 to
Nov 2024

Watch this space for updates!

<https://www.cihi.ca/en/connected-care>

Thank you!



Canada Health Infoway



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