

Draft Pan-Canadian Health Data Content Framework

Business Context Model

Version 1, September 2024

(for review and reference only, not an official version)



Canadian Institute
for Health Information

Institut canadien
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Introduction

The Canadian Institute for Health Information (CIHI) is developing the Pan-Canadian Health Data Content Framework, which defines, standardizes, and models the health data required to enable connected care in Canada.

The Business Context Model is one of several products packaged in the Pan-Canadian Health Data Content Framework.

What is the Business Context Model?

The Business Context Model defines the interactions between the Pan-Canadian Health Data Content Framework and key stakeholders as well as key information sources and key consumers. It defines those that influence and inform the content, the collaborators, and those that govern and fund it. It also defines the consumers of the Framework and the methods by which they will use it.

Audiences

The audiences for the Business Context Model are decision makers, policy makers, researchers, health care institution IT staff, clinical solution vendor technical staff, experts involved in standards development and data architecture, software developers, those interested in e-health and digital health modernization initiatives, and anyone who would like more information about the Pan-Canadian Health Data Content Framework.

Development approach

An environmental scan was conducted for existing health standards produced by Canadian organizations, international organizations, and various other authorities. A model structure was established that contains key concepts from those standards, which are also documented in the Pan-Canadian Health Data Content Framework's data content standard. The model structure was validated by internal and external stakeholders and was iteratively refined based on the feedback received.

Help us shape the Business Context Model

Your feedback is critical to the development of the Business Context Model. We are asking the public to help us identify key missing concepts, provide feedback on key concept definitions, and validate core relationships at a high level.

Please complete the [feedback survey](#) at this link.

Business Context Model

How to read the model

The Business Context Model is composed of information sources, collaborative groups, and key stakeholders. Relationships from each of those groups to the framework detail the type of relationship with each stakeholder and the exact documents referenced from each information source.

The screenshot shows a web interface for the Business Context Model. It features a table with columns for 'Entity Name', 'Entity Description', 'Relationship Name', and 'Associated Entity'. The first row is highlighted, showing 'Health Technology Facilitators' as the entity name, a detailed description of their role in advancing digital health, 'Health Data Exchange Standard' as the relationship name, and '«Archimate_BusinessObject» Pan-Canadian Health Data Content Framework' as the associated entity. Below the table, a section titled 'This includes:' lists three documents: 'Patient Summary Canadian, Source: Canada Health Infoway - FHIR web site', 'OntarioMD i4C Dashboard Specification, Source: OntarioMD', and 'EMR to EMR Data Transfer & Conversion Standard, Source: BC Physician Information Technology Office'. Red boxes and arrows labeled a-e point to these specific elements in the interface.

a) Entity Name

b) Entity Description

c) Relationship Name

d) Associated Entity

e) Relationship Details

- Entity Name: The name of the information source or stakeholder.
- Entity Description: Details describing the information source or stakeholder.
- Relationship Name: The type of information exchanged between the information source or stakeholder and the associated entity.
- Associated Entity: The entity related to the one detailed on the page.
- Relationship Details: Various details about the relationship. Exact document references will be listed here for relationships with information sources.

Maturity

A maturity model (Table 1) was designed to transparently document the readiness of artifacts within the framework, including data elements, value sets, and data architecture components. The maturity model facilitates tracking the evolution of these artifacts over time, enabling continuous refinement and enhancement based on feedback and emerging needs. The maturity of the framework’s deliverables will be re-evaluated with each release.

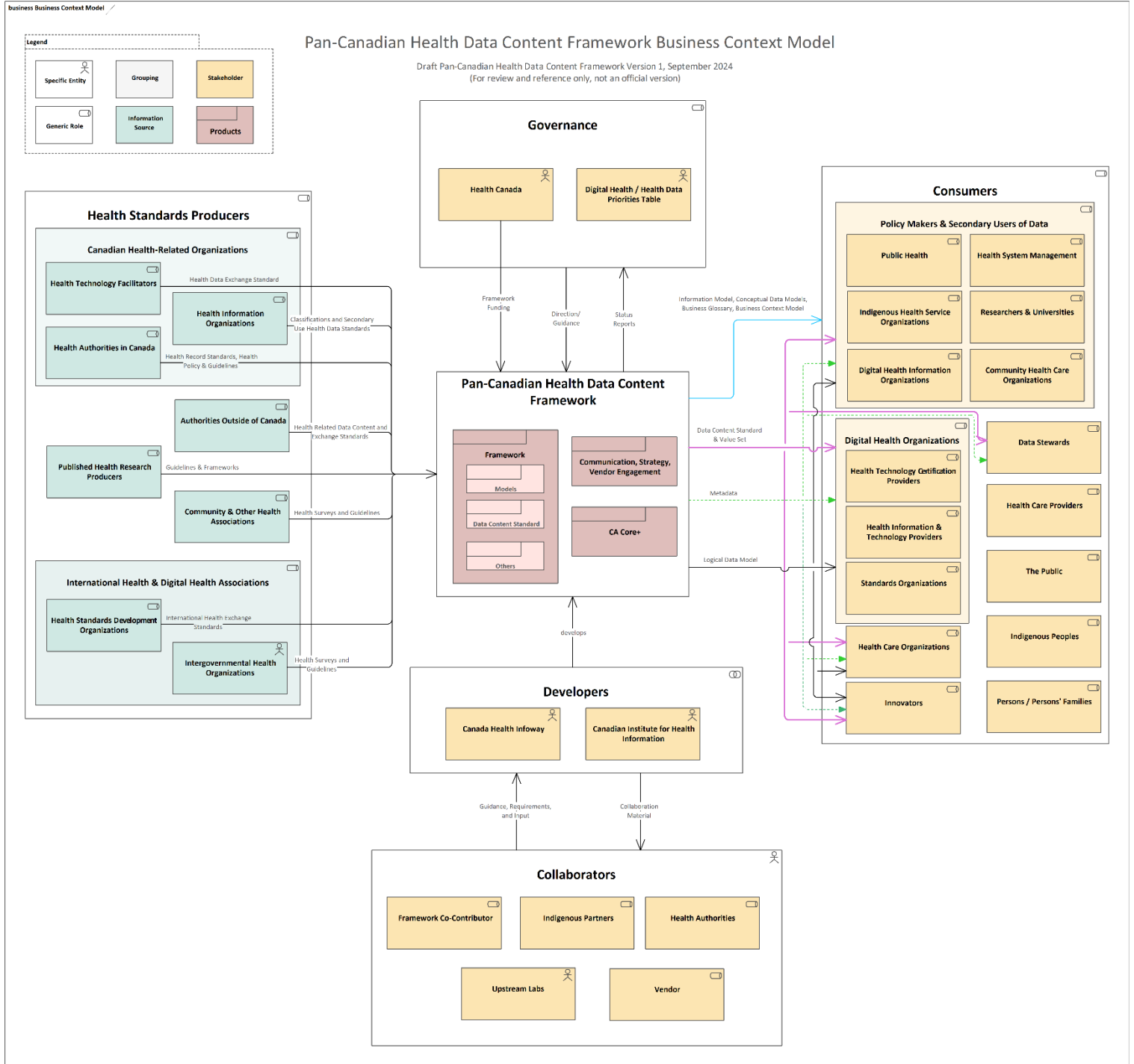
Table 1 Maturity model

Stage of maturity		Definition
	Future development	Coming soon
○ ○ ○	0: In development	Artifact is a work in progress
● ○ ○	1: Draft	Artifact incorporates input from experts
● ● ○	2: Proposed	Artifact has been through at least one round of open public review
● ● ●	3: Ready for use	Artifact is ready for implementation

The maturity level of the Business Context Model is currently 1: Draft.

Appendix A: Static Business Context Model

For details, definitions, and an interactive model, please refer to the zipped Business Context Model HTML file.



Bibliography

- Alliance for Healthier Communities. [Model of Health and Wellbeing: Evaluation Framework Manual](#). November 2019.
- Australian Institute of Health and Welfare. [Glossary - Australian Institute of Health and Welfare \(aihw.gov.au\)](#). June 2024.
- Australian's Department of Health. [Primary Mental Health Care Minimum Data Set](#). November 2024.
- British Columbia's Ministry of Health. [B.C. Gender, Sex, Sexual Orientation \(GSSO\) Health Information Standard](#). September 2024.
- Bronfenbrenner, U. The ecology of human development: Experiments by nature and design. 1981.
- Canada Health Act 1984, c.6, s.1. (Canada).
- Canada Health Infoway. [Pan-Canadian Patient Summary \(PS-CA\)](#). No date.
- Canada Health Infoway. [SNOMED CT CA / SNOMED CT \(infoway-inforoute.ca\)](#). 2024.
- Canada Post. [Glossary](#). June 2020.
- Canada Post. [Addressing Guidelines](#). January 2022.
- Canada Revenue Agency (CRA). [When you need a business number or Canada Revenue Agency program accounts - Canada.ca](#). April 2023.
- Canada's department of Innovation, Science and Economic Development. [Naming a corporation – Overview \(canada.ca\)](#). August 2023.
- Canadian Institute for Health Information (CIHI). [CIHI Reference Data Model Toolkit](#). 2022.
- Canadian Institute for Health Information (CIHI). [Indicatory Library](#). 2024.
- Canadian Institute for Health Information (CIHI). [National Prescription Drug Utilization Information System](#). 2022.
- Canadian Institute for Health Information (CIHI). [Pan-Canadian Primary Health Care EMR Minimum Data Set for Performance Measurement Version 1.1](#). 2022.
- Centre for Disease Control and Prevention (CDC). [Health Literacy: Accurate, Accessible and Actionable Health Information for All | Health Literacy | CDC](#). February 2024.
- Cnr-Istituto di Linguistica Computazionale (CNR-ILC). [Lexical Semantic Relations \(cnr.it\)](#). No date.

Commonwealth Scientific and Industrial Research Organization (CSIRO). [Australian Core Data for Interoperability](#). June 2024.

Data. Management Association. International. The DAMA Dictionary of Data Management, 2nd Edition: Over 2,000 Terms Defined for IT and Business Professional. 2011.

eHealth Ontario. [Ontario's Electronic Health Record \(EMR\) Conceptual Information Model \(CIM\)](#). June 2019.

England's National Health Service. [NHS Data Model and Dictionary \(datadictionary.nhs.uk\)](#). 2024.

European Commission. [European Interoperability Framework – Implementation Strategy \(europa.eu\)](#). March 2017.

European Commission. [Microsoft Word - Glossary EN - updated legal references 08.2004.doc \(europa.eu\)](#). No date.

First Nations Information Governance Centre. [The First Nations Principles of OCAP](#). No date.

Friberg, J. C. Might the 4M Framework Support SoTL Advocacy? July 2011.

Government of Ontario – Information & Technology Standards (GO-ITS) Number 56.3, version 1.3, Information Modeling Handbook. [GO-ITS 56.3 Information Modeling Handbook – Appendices | ontario.ca](#). 2010.

Health Canada. [Canadian Clinical Drug Dataset](#). July 2024.

Health Canada. [Drug Product Database \(DPD\) - Canada.ca](#). March 2022.

Health Canada. [Licensed Natural Health Products Database \(LNHPD\)](#). January 2019.

Health Level 7. [Overview - FHIR v5.0.0 \(hl7.org\)](#). March 2023.

Health Level 7. [Reference Information Model \(RIM\) Downloads | HL7 International](#). December 2021.

Health Standards Organization. [HSO-MasterGlossaryList-2018E.pdf \(healthstandards.org\)](#). October 2018.

Health Standards Organization. [Primary Health Care Services - CAN/HSO 34015:2020 \(E\) – Health Standards Organization \(HSO\)](#). 2020.

International Standards Organization. [ISO/TS 5384 - Health informatics — Categorical structure and data elements for the identification and exchange of immunization data](#). May 2024.

International Standards Organization. [ISO 13972:2022 - Health informatics — Clinical information models — Characteristics, structures and requirements](#). 2022.

International Standards Organization. [ISO/TS 22220:2011 - Health informatics — Identification of subjects of health care](#). 2011.

International Standards Organization. [ISO 27269:2021 - Health informatics — International patient summary](#). 2021.

International Standards Organization. [ISO 13940:2015 - Health informatics — System of concepts to support continuity of care](#). 2015.

International Standards Organization. [ISO/IEC 11179-1:2023 - Information technology — Metadata registries \(MDR\) — Part 1: Framework](#). 2023.

International Standards Organization. [ISO/IEC TR 11179-2:2019 - Information technology — Metadata registries \(MDR\) - Part 2: Classification](#). 2019.

International Standards Organization. [ISO/IEC 11179-3:2023 - Information technology — Metadata registries \(MDR\) - Part 3: Metamodel for registry common facilities](#). 2023.

International Standards Organization. [ISO/IEC 11179-4:2004 - Information technology — Metadata registries \(MDR\) - Part 4: Formulation of data definitions](#). 2004.

International Standards Organization. [ISO/IEC 11179-5:2015 - Information technology — Metadata registries \(MDR\) - Part 5: Naming principles](#). 2015.

International Standards Organization. [ISO/IEC 11179-6:2023 - Information technology — Metadata registries \(MDR\) - Part 6: Registration](#). 2023.

International Standards Organization. [ISO/TR 23081-3:2011 - Information and documentation — Managing metadata for records - Part 3: Self-assessment method](#). 2011.

International Standards Organization. [ISO 23081-2:2021 - Information and documentation — Metadata for managing records - Part 2: Conceptual and implementation issues](#). 2021.

International Standards Organization. [ISO 23081-1:2017 - Information and documentation — Records management processes — Metadata for records - Part 1: Principles](#). 2017.

International Standards Organization. [ISO/IEC 11404:2007 - Information technology — General-Purpose Datatypes \(GPD\)](#). 2007.

Jacob, E.K. [Classification and Categorization: A Difference that Makes a Difference | IDEALS \(illinois.edu\)](#). 2004.

Logical Observation Identifiers Names and Codes (LOINC). [Home – LOINC](#). 2024.

Mental Health Commission of Canada. [Peer Support - Mental Health Commission of Canada](#). 2024.

National Cancer Institute Dictionaries. [NCI Dictionaries - NCI \(cancer.gov\)](#). March 2024.

National Library of Medicine. [The STAR Data Reporting Guidelines for Clinical High Altitude Research - PMC \(nih.gov\)](#). March 2018.

- Object Management Group. [PartyRole \(omg.org\)](https://omg.org). No date.
- Observational Health Data Sciences and Informatics. [Data Standardization – OHDSI](https://ohdsi.org). 2024.
- Office of the National Coordination for Health Information Technology. [United States Core Data for Interoperability \(USDCI\) Version 4](https://usdc.gov). October 2023.
- Ontario’s Ministry of Health Mental Health and Addictions (MHA). Data and Digital Initiative (DDI) Provincial Data Standard (PDS) Data Specification version 0.1.10. 2021.
- Oregon Health & Science University. [OHSU | Healing Begins with Discovery](https://ohsu.edu). 2024.
- Professional Records Standards Body (PSRB). [PSRB Standards](https://psrb.ca). January 2023.
- Public Health Agency of Canada. [Canadian immunization registry functional standards 2020 to 2024: Recommendations from the Canadian Immunization Registry and Coverage Network - Canada.ca](https://canada.ca). 2020.
- Public Health Agency of Canada. [The pan-Canadian Health Data Strategy: Expert Advisory Group: Reports and summaries - Canada.ca](https://canada.ca). 2022.
- Shreeve, S. [The Episode of Care \(Part 3\): A Primary Care Case Study – Scott Shreeve, MD](https://www.scottshreeve.com). 2019.
- SNOMED CT Browser. [SNOMED CT - Clinical finding \(finding\) \(ihtsdotools.org\)](https://ihtsdotools.org). 2024.
- SNOMED International Home. [SNOMED International Home - SNOMED International Confluence - SNOMED Confluence \(ihtsdotools.org\)](https://ihtsdotools.org). No date.
- Statistics Canada. [Census of Population](https://www150.statcan.gc.ca). July 2024.
- Statistics Canada. [NOC 2021 Version 1.0 - 31303 - Physician assistants, midwives and allied health professionals - Unit Group \(statcan.gc.ca\)](https://www150.statcan.gc.ca). 2024.
- Statistics Canada. [Postal Code Conversion File](https://www150.statcan.gc.ca). September 2024.
- The Open Group. [The TOGAF Standard, Version 9.2 - Definitions \(opengroup.org\)](https://opengroup.org). 2018.
- The Organization for Economic Cooperation and Development (OECD) iLibrary. [Classifying Health Care Products | A System of Health Accounts 2011 : Revised edition | OECD iLibrary \(oecd-ilibrary.org\)](https://oecd-ilibrary.org). March 2017.
- United States’s Office of the National Coordinator for Health Information Technology. [ONC’s Cures Act Final Rule](https://www.onc.gov). March 2024.
- Upstream Lab. [The Screening for Poverty And Related social determinants to improve Knowledge of and access to resources \(SPARK\) Tool](https://upstreamlab.com). December 2023.
- World Health Organization. [Health and Well-Being \(who.int\)](https://who.int). 2024.

World Health Organization. [International Classification of Health Interventions \(ICHI\) \(who.int\)](#). January 2024.

World Health Organization. [Introductory Module - Strengthening surveillance of and response to foodborne diseases.pdf \(who.int\)](#). No date.

World Health Organization. [Social determinants of health \(who.int\)](#). 2024.



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