



Resource
Toolkit

CIHI Reference Data Model Toolkit

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Revision history

This section/table is necessary for most documents in order to track who has been modifying it, how and when.

Date	Version	Description	Author
05-13-11	0.1	Created draft with initial content	D. Nicolson and T. Shea
07-07-11	0.2	Added content to usage and change control sections; completed CRDM content tables	T. Shea
09-12-11	0.3	Refined content	T. Shea
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03-12-18	4.1	Updated Sex at Birth and Gender value domains and Authority Issuing Client Identifier	S. Palli
07-10-18	4.1	Updated value codes and labels for Health Device Type and value codes for Provider Role, Specimen Type	F. Flores and S. Palli

Introduction

Toolkit purpose

This toolkit provides the information and resources needed to understand and use the CIHI Reference Data Model (CRDM). It includes sections on

- The purpose and benefits of the CRDM;
- Use of the CRDM in new developments and re-engineering projects;
- CRDM content; and
- The CRDM Data Dictionary (DD).

Audience

The audience for this toolkit is business and technical users, as well as anyone who would like more information about the CRDM.

Please send any questions or comments about the CRDM to crdm@cihi.ca.

What is the CRDM?

The CRDM is a standardized, high-level, corporate-wide reference data model.

The CRDM identifies

- Concepts (categories of data) that are of interest to CIHI — concepts can be a person, thing, place or event;
- Relationships between the concepts; and
- Core attributes — key information about each concept.

There is also metadata associated with the CRDM that includes

- Concept definitions;
- Core attribute definitions;
- Value domains or a list of permissible values for the core attributes; and
- Concept relationship descriptions.

CRDM metadata is detailed in the CRDM Data Dictionary section of this document.

Purpose and benefits

The CRDM contributes to CIHI's goal of semantic interoperability (i.e., common terminology and meaning) and data integration to provide the following benefits:

- Better meet the needs of current and future analyses and reports by facilitating data integration across the continuum of care;
- Support the use of health information in health system decision-making (also known as health system use [HSU]);
- Provide the possibility to use the electronic health record (EHR) as a source of data in the future through alignment with EHR standards; and
- Reduce development and maintenance costs for application systems and data assets.

Development approach

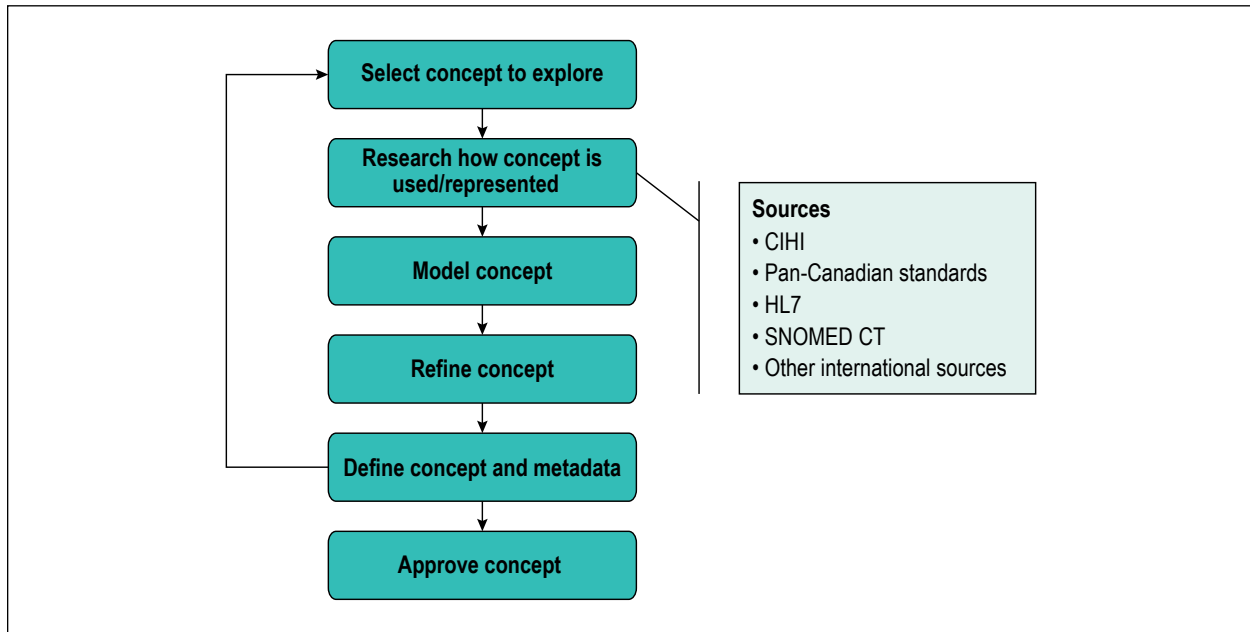
Work began on the CRDM in 2005. Subject matter experts (SMEs) from across CIHI's business areas were responsible for validating and approving CRDM concepts.

The model was developed to be

- **Standards-based:** Based on pan-Canadian and International EHR standards
- **Adaptable:** Minor changes can be made to content to reflect new business requirements or changes to standards
- **Pragmatic:** Developed to be usable and not perfect; a perfect model may not be usable
- **Achievable:** The model was developed using the 80-20 approach; strong consensus and quality definitions in a small subset of concepts means the core aspects of CIHI's business are covered

The approach to concept development is illustrated and described below.

Concept development



Notes

HL7: Health Level Seven International.

SNOMED CT: Systematized Nomenclature of Medicine — Clinical Terms.

Concept selection is based on the following criteria:

- How many business areas use the concept?
- Is the concept significant? Is it associated with a priority area?

SMEs from across CIHI’s business areas provide their business requirements for the concept. External research is also conducted on how the concept is represented in pan-Canadian and international models and sources, such as HL7, Canada Health Infoway’s pan-Canadian EHR standards and SNOMED CT.

This research and CIHI’s business requirements are used to model the concept and draft the concept name, definition, relationships and associated metadata.

The SMEs are then consulted to confirm whether the concept meets the needs of the business areas. The concept is refined based on input from the SMEs.

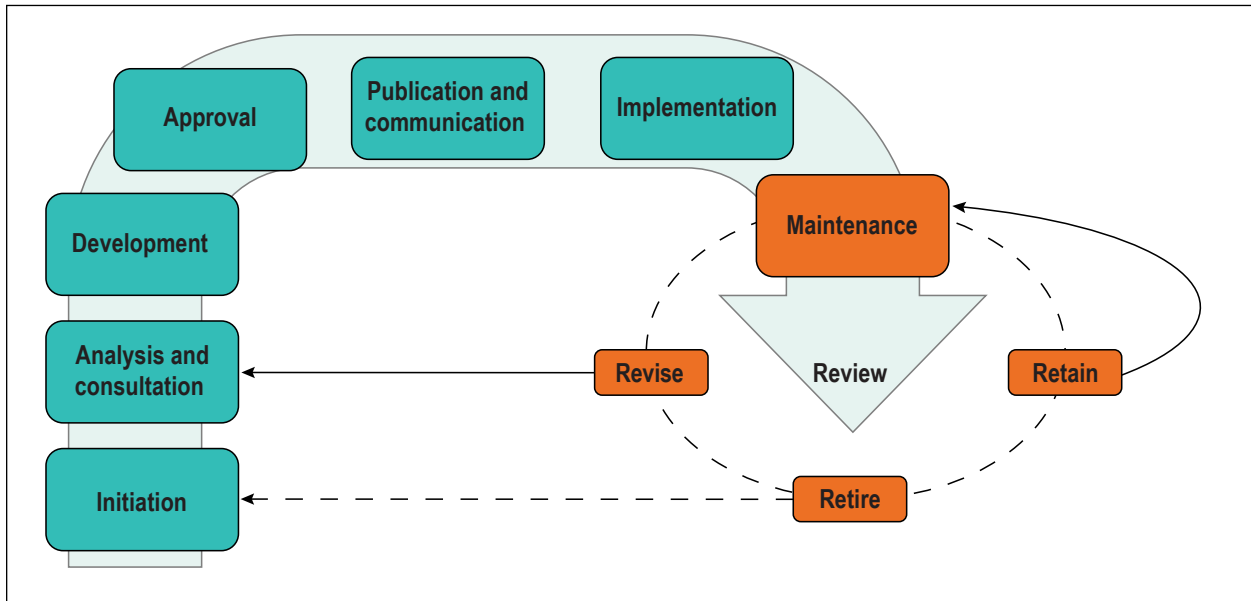
Once the SMEs have confirmed that the concept and associated metadata meet their needs, the concept is promoted for approval by the SMEs.

Standards life cycle

Existing CRDM content is regularly reviewed using the CIHI Standards Life Cycle.

This life cycle consists of 7 phases, as illustrated and described below. The CRDM is in the Maintenance phase of the life cycle.

CIHI Standards Life Cycle: Overview



Phase	Description
Initiation	Submission of a request for a new standard. Requests are assessed and prioritized. Based on this assessment, a decision is made on whether to proceed with the request.
Analysis and consultation	An environmental scan is performed to identify existing internal and external standards. Information and requirements are gathered from SMEs. A recommendation is made on whether to adopt, adapt or develop a standard. The recommended approach (adopt, adapt, develop) is related to the scope, significance and likely impact of the request, and to the requirements and results of the environmental scan.
Development	The standard is developed based on the recommended approach: adopt, adapt or develop a new standard. Development may occur concurrently with the Analysis and consultation phase.
Approval	The approval process is coordinated. The approval process depends on the significance and impact of the standard and follows the appropriate approval governance process for the CIHI department. Approved standards are assigned the status CIHI Draft for Use.
Publication and communication	The publication and communication of an approved, revised or retired standard is coordinated. Release of new or revised standards follows a determined schedule. Education is developed and delivered.

Phase	Description
Implementation	<p>Guidance is provided on how to implement a new standard or revisions to existing standards.</p> <p>The status CIHI Approved Standard is assigned following implementation of the standard.</p> <p>Documentation to support an exemption from using the standard is required.</p> <p>Exemption from a standard is determined on a case-by-case basis by the appropriate governing committee.</p>
Maintenance	<p>This phase involves the ongoing review and updating of published standards. Compliance with standards is regularly assessed in order to determine when a new standard is needed and to identify standards that need to be revised. This phase also includes the retirement of redundant and obsolete standards.</p> <p>Retired standards are assigned the status CIHI Deprecated Standard.</p>

How the CRDM is used at CIHI

The CRDM enables data integration and semantic interoperability for national data holdings. Specifically, the CRDM is used

- As a key standard for the Integrated eReporting project;
- As a template for all of CIHI’s data holdings;
- As the underpinning for the CIHI Data Warehouse; and
- As a supporting standard for the CIHI Blueprint (CIHI’s conceptual architecture).

Guiding principles for the use of the CRDM have been established and are governed by the [CRDM Compliance Policy](#). The guiding principles for CRDM use are as follows:

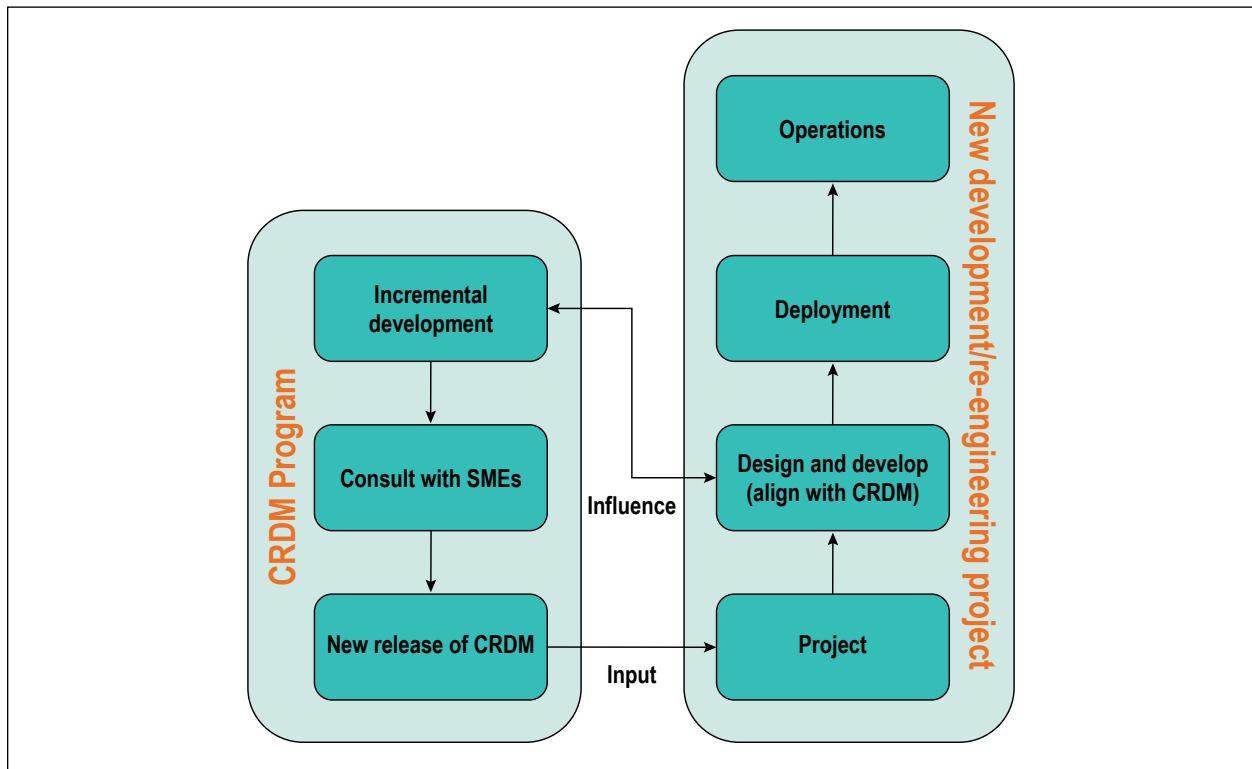
- The CRDM will be used as a reference template in new developments and re-engineering projects.
- CRDM terminology will be used, where possible.
- Adoption of the CRDM will be evolutionary, not revolutionary.
- Exceptions to using the CRDM will be documented and approved.

Evolving the CRDM

CRDM usage is documented by the CRDM team in consultation with the project team. This feedback directly influences the evolution of the CRDM. For example, if several projects are not able to use a CRDM concept definition without substantially changing the meaning, a review of that concept definition may be necessary.

This iterative, bottom-up/top-down approach to maintaining the model, illustrated below, uses the lessons learned from each project to ensure that the CRDM continues to reflect CIHI's changing business needs.

Iterative, bottom-up/top-down approach to maintaining the CRDM

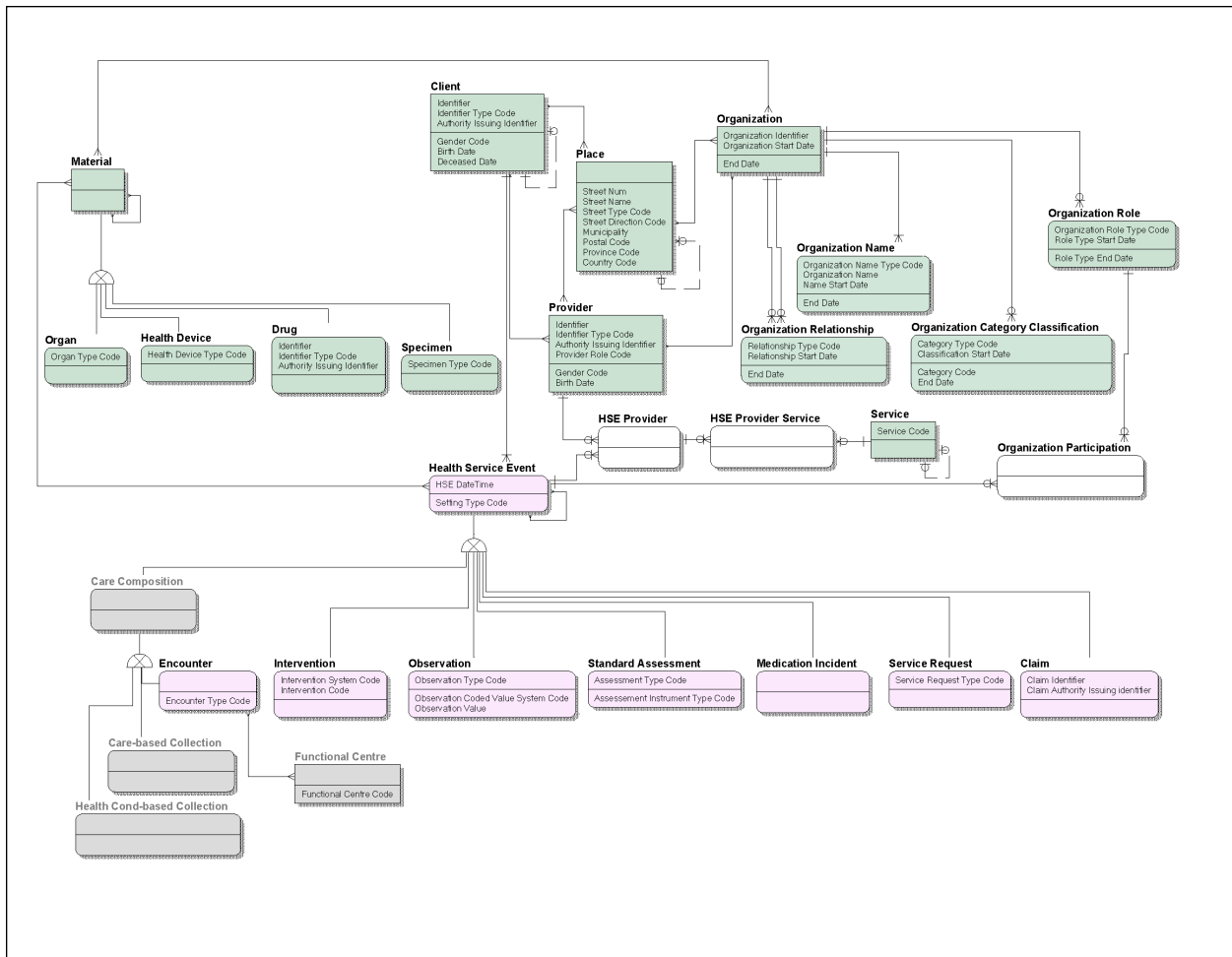


CRDM content

This section contains the CRDM and related views of the model.

The CRDM

The CRDM data model



Legend

- Green: Master data concepts
- Pink: Transactional concepts
- White: Linkage concepts
- Grey: Concepts to be developed
- Line: A relationship between concepts

The CRDM is composed of concepts, core attributes and relationships.

1. **Concepts:** Categories of data that are of interest to CIHI. A concept can be a person, place, thing or event. There are 4 concept types in the model:

Master data

Master data concepts in the CRDM are as follows:

- Material
- Organ
- Health Device
- Drug
- Specimen
- Client
- Place
- Provider
- Organization
- Organization Name
- Organization Relationship
- Organization Category Classification
- Organization Role
- Service

Master data is synonymous with reference data. It is the data that provides the context for transactional data (see below). It includes the details (definitions and identifiers) of internal and external objects involved in business transactions. It includes data about customers, products, employees, vendors and controlled domains (code values).

Source: *The DAMA Dictionary of Data Management*.

Transactional data

Transactional concepts in the CRDM are as follows:

- Health Service Event
- Encounter
- Intervention
- Observation
- Standard Assessment
- Medication Incident
- Service Request
- Claim

Transactional data is data about business events (often system transactions) that have historic significance or that are needed for analysis by other systems. Event data is atomic data that may be aggregated.

Source: *The DAMA Dictionary of Data Management*.

Linkage

Linkage concepts in the CRDM are as follows:

- Health Service Event Provider
- Health Service Event Provider Service
- Organization Participation

The inclusion of a linkage concept is a data modelling technique that is used to resolve a many-to-many relationship.

To be determined

Concepts to be determined are as follows:

- Care Composition
- Care-Based Collection
- Health Condition–Based Collection
- Functional Centre

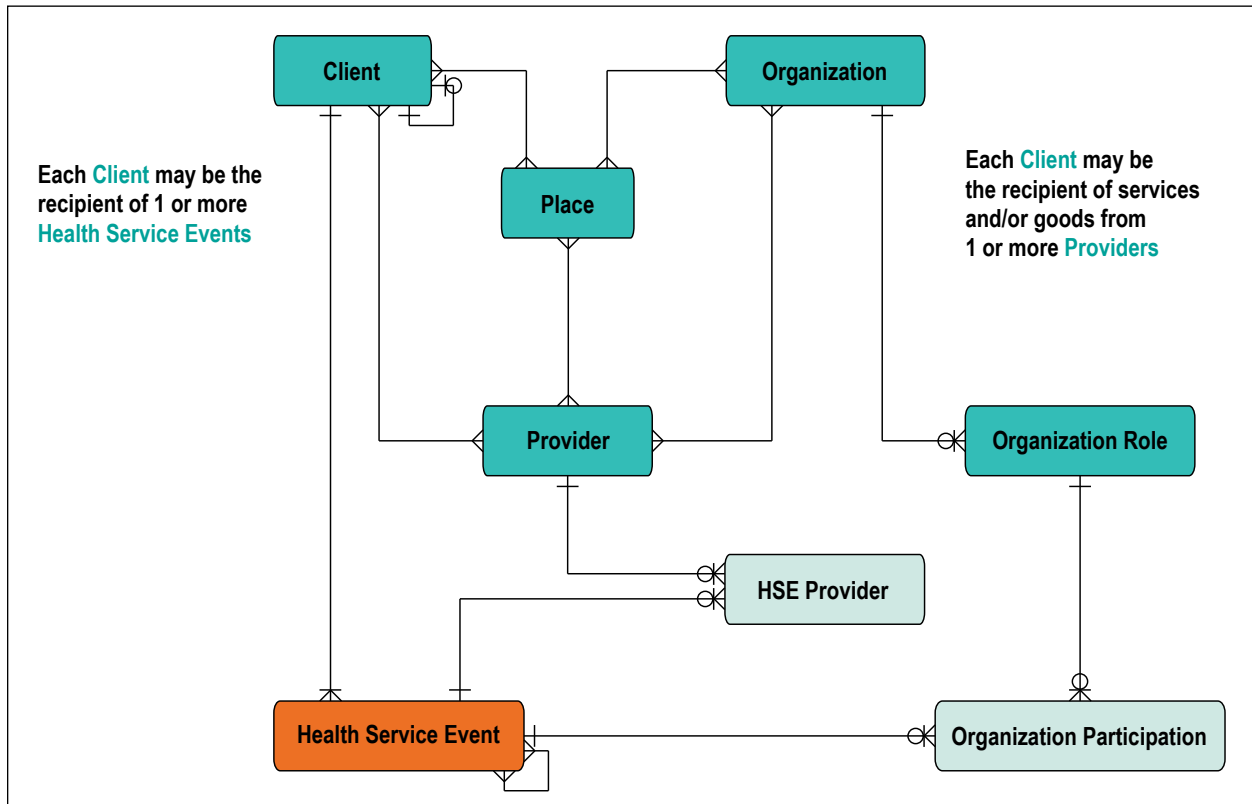
- 2. Core attributes:** Key information about a concept. Core attributes may have an associated CRDM value domain.
- 3. Relationships:** Relationships are described in the CRDM DD in the next section.

For concept definitions, notes, relationship descriptions, core attribute definitions and value domains, please refer to the CRDM DD in the following section.

The following views represent the core concepts in the CRDM.

Client view

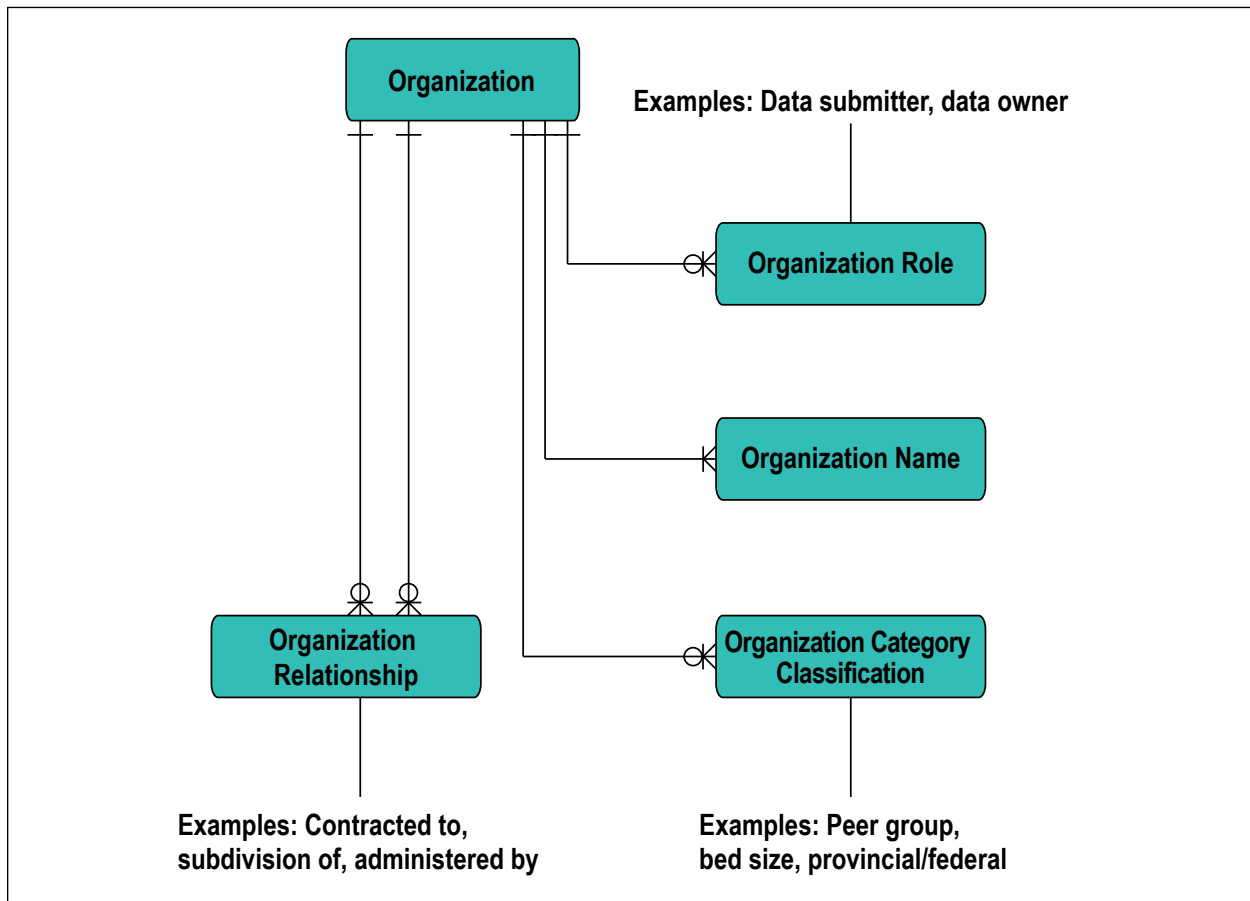
Client view of the CRDM



This view illustrates the core concepts and relationships associated with Client. Health Service Event (HSE) Provider is a linkage concept that resolves the many-to-many relationship between Provider and Health Service Event.

Organization view

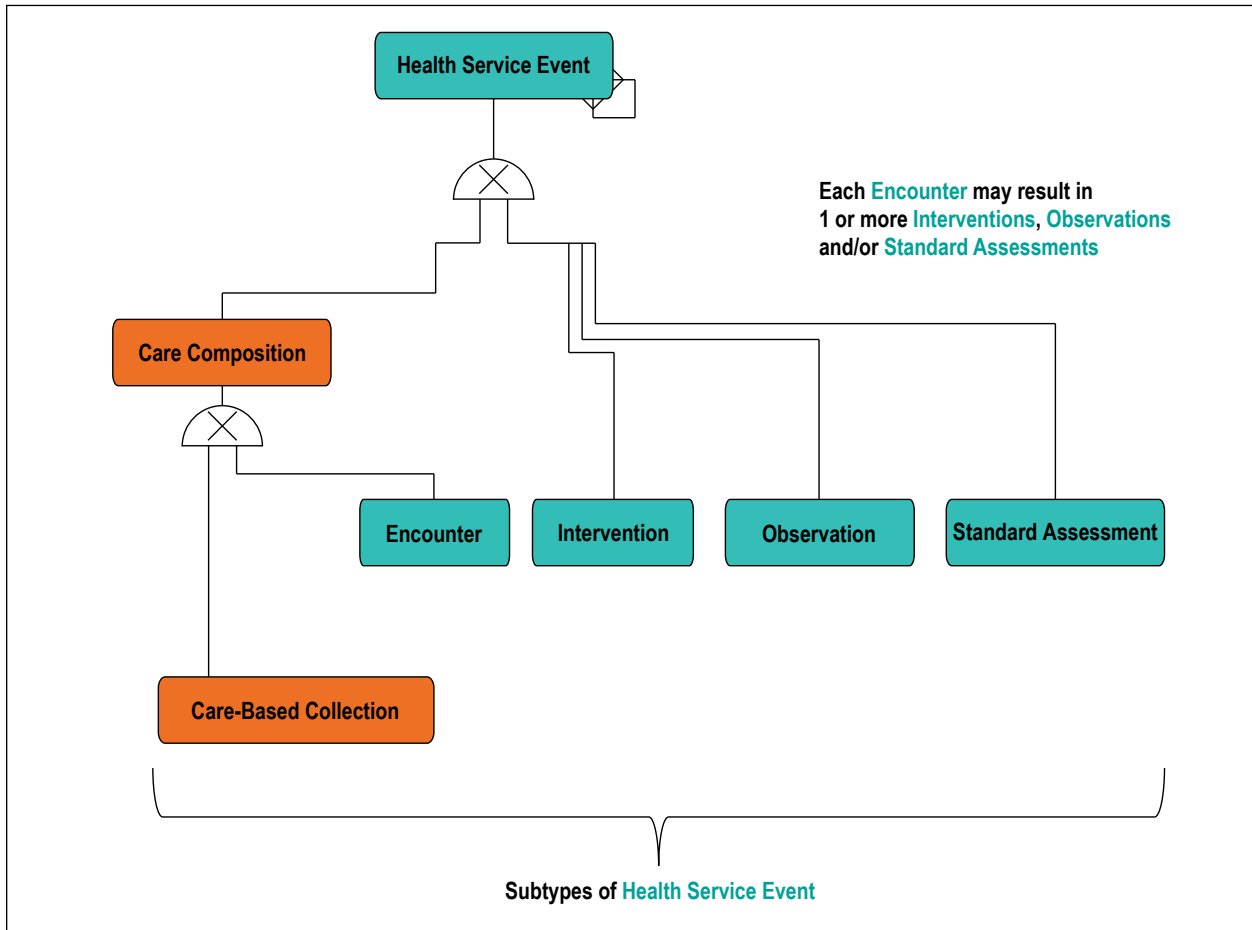
Organization view of the CRDM



This view illustrates the core concepts and relationships associated with Organization. An Organization can have roles and relationships. For example, an organization may have the roles of a data submitter, data owner or data source. If an organization submits data on behalf of another, then there is a relationship between the 2 organizations. An organization can be classified in many ways (e.g., by peer group, bed size, federal/provincial status).

Health Service Event view

Health Service Event view of the CRDM



This view illustrates the core concepts around Health Service Event. Encounter, Intervention, Observation and Standard Assessment are subtypes of Health Service Event. All subtypes have a setting type and a date/time. An example of a Standard Assessment is an interRAI assessment. The individual questions in the assessment are represented by the Intervention and Observation concepts.

CRDM Data Dictionary

The CRDM DD includes all of the associated metadata for the CRDM. The section Concepts includes the metadata for each concept, such as concept definitions, core attributes, attribute definitions and relationship descriptions. The section Value domains includes the metadata for the value domains associated with the CRDM core attributes. Metadata for the value domain includes the value domain definition and value codes.

Concepts

This section contains the following metadata for each concept:

Concept definition

A definition is provided for each concept. Notes about the concept are also provided and are important for clarity.

Synonyms

Synonyms are provided for each concept name, where they have been identified. For example, Client may also be known as Patient.

Core attributes

An attribute is information about a concept. The approved core or essential attributes for a concept are identified.

Core attribute definitions

A definition is provided for each core attribute of a concept.

Value domain

The value domain associated with the core attribute is identified. A value domain consists of a definition, the value codes, value labels and, if applicable, the value meanings for a domain. It may also contain additional metadata. At CIHI, a value domain is also known as a value set, permissible values, code set or domain. Metadata associated with that value domain is described in the section Value domains.

Concept relationships

Relationships between the concepts are identified and described.

Source standards

The source standards that were used to inform concept development are identified.

Throughout the dictionary, “n/a” means “not available” and “TBD” means “to be determined.”

Claim

Transactional data

Definition: An invoice for payment or reimbursement.

Note 1: A payment may have a value of 0.

Subtype of Health Service Event

Synonyms: Invoice, Statement

Core attribute	Definition	Value domain
Claim Identifier	Unique number or code issued for the purpose of identifying a claim.	Claim Identifier
Claim Authority Issuing Identifier	A code representing the jurisdiction responsible for submitting the Claim Identifier.	Claim Authority Issuing Identifier

Relationships:

Each CLAIM

Must be submitted on behalf of 1 and only 1 CLIENT

Must be for 1 and only 1 DRUG

May result from 1 and only 1 ENCOUNTER

May be associated with 1 or more OBSERVATIONS

May be associated with 1 or more PROVIDERS

Source standards:

National e-Claims Standard Initiative (NeCST), pan-Canadian EHR standards, HL7 Reference Information Model (RIM), SNOMED CT, International Organization for Standardization (ISO), *NHS Data Dictionary*, Conceptual Health Data Model (CHDM), CIHI sources

Client

Master data

Definition: A person who has received, is receiving or is eligible for health care–related services or goods.

Note 1: For the purposes of the CRDM, a Client applies to record-level data collected by CIHI for a person. The Canadian MIS Database (CMDB) collects aggregate data for categories of Clients, including groups and organizations. Future iterations of the model will evolve to accommodate management information systems (MIS) data should the CMDB collect record-level data for Client.

Note 2: The ultimate receiver of the health care–related service or goods is the Client, including when a person receives a health care–related service or good on behalf of a Client. For example, a family member can receive training on how to administer a drug to a Client or a family member can receive bereavement counselling following the death of a Client.

Synonyms: Patient, Service Recipient, Resident

Core attribute	Definition	Value domain
Identifier	Unique number or code issued for the purpose of identifying a subject of (health) care.	Client Identifier
Identifier Type Code	A code that represents the type of identification used to uniquely differentiate clients. Note 1: This code can be based on geographical or administrative systems of identification. This attribute should enable a common scheme of identification between a variety of systems.	Client Identifier Type
Authority Issuing Identifier	A code representing the legal entity/organization responsible for assigning the Client Identifier.	Authority Issuing Client Identifier
Gender Code	A code used to indicate the gender or sex of a person. Note 1: At CIHI, submitted values for attributes and data elements using the Gender value domain may be based on societal or cultural roles, phenotype (the outward appearance of the individual) or genotype (the genetic constitution of the individual), depending on the needs of each data holding.	Gender
Birthdate	Numeric value to represent the day on which an individual was born.	Start End Date
Deceased Date	Represents the Client's date of death.	Start End Date

Relationships:

Each CLIENT

May be the subject of 1 or more CLAIMS

May be associated with 1 or more other CLIENTS

May be a participant in 1 or more ENCOUNTERS

May be a participant in 1 or more HEALTH SERVICE EVENTS

May be the recipient or the intended recipient of 1 or more INTERVENTIONS

May be involved in 1 or more MEDICATION INCIDENTS

May be the subject of 1 or more OBSERVATIONS

May be associated with 1 or more ORGANIZATIONS

May be associated with 1 or more PLACES

May be the recipient of services and/or goods from 1 or more PROVIDERS

May be the subject of 1 or more SERVICE REQUESTS

May be the subject of 1 or more STANDARD ASSESSMENTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, NHS Data Dictionary, CHDM, CIHI sources, Australian Institute of Health and Welfare's Metadata Online Registry (METeOR), UN Applied Technologies Group

Drug

Master data

Definition: Any substance or mixture of substances used in the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms, or that is used for non-medical purposes solely for its effects on the central nervous system.

Note 1: A Drug can be used to restore, correct or modify organic functions.

Note 2: A Drug can be used for disinfection in premises where food is manufactured, prepared or kept.

Subtype of Material

Synonyms: Medication, Medicine

Core attribute	Definition	Value domain
Identifier	A numeric code that uniquely represents a drug.	Drug Identifier
Identifier Type Code	A code that categorizes the type of drug identifier.	Drug Identifier Type
Authority Issuing Identifier	A code that represents the administration or jurisdiction responsible for assigning the Drug Identifier.	Drug Authority Issuing Identifier

Relationships:

Each DRUG

- May be a part of 1 or more CLAIMS
- May be associated with 1 or more other DRUGS
- May be prescribed or administered in 1 or more ENCOUNTERS
- May be associated with 1 or more HEALTH SERVICE EVENTS
- May be administered using 1 or more HEALTH DEVICES
- May be administered in 1 or more INTERVENTIONS
- May be part of 1 or more MEDICATION INCIDENTS
- May be involved with 1 or more OBSERVATIONS
- May be associated with 1 or more ORGANS
- May be associated with 1 or more ORGANIZATIONS
- May be prescribed or administered by 1 or more PROVIDERS

May be associated with 1 or more SERVICE REQUESTS

May be associated with 1 or more STANDARD ASSESSMENTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources, *Dorland’s Medical Dictionary*, Canada’s *Food and Drugs Act*: Chapter F-27

Encounter

Transactional data

Definition: An interaction between a Client and 1 or more Providers.

Note 1: The start and end of an Encounter currently varies with level of care.

Synonyms: Interaction

Core attribute	Definition	Value domain
Encounter Type Code	TBD	TBD

Relationships:

Each ENCOUNTER

Must be with 1 and only 1 CLIENT

Must be with 1 or more PROVIDERS

May result in 1 or more CLAIMS

May result in 1 or more other ENCOUNTERS

May be associated with 1 or more FUNCTIONAL CENTRES

May result in 1 or more INTERVENTIONS

May result in 1 or more MEDICATION INCIDENTS

May result in 1 or more OBSERVATIONS

May result in 1 or more SERVICE REQUESTS

May result in 1 or more STANDARD ASSESSMENTS

Source standards:

HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, METeOR, CHDM, *National Cancer Institute (NCI) Thesaurus*

Functional Centre

Definition: A subdivision of an organization used in a functional accounting system to record the budget and actual direct expenses, statistics and/or revenues, if any, that pertain to the function or activity being carried out.

Note 1: NSIR may be an exception.

Core attribute	Definition	Value domain
Functional Centre Code	A code used to identify a specific functional centre.	Functional Centre

Relationships:

Each FUNCTIONAL CENTRE

May be associated with 1 or more ENCOUNTERS

Source standards:

Standards for Management Information Systems in Canadian Health Service Organizations (MIS Standards)

Health Device

Master data

Definition: Equipment used in the assessment, diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms.

Note 1: A Health Device can also be used to restore, correct or modify a body function or body structure.

Note 2: Future work will explore the possibility of a Device supertype and non-health-related devices.

Subtype of Material

Synonyms: Equipment

Core attribute	Definition	Value domain
Health Device Code	A code identifying the type of health device.	Health Device Type

Relationships:

Each HEALTH DEVICE

- May be used with 1 or more DRUGS
- May be used in 1 or more ENCOUNTERS
- May be associated with 1 or more HEALTH DEVICES
- May be associated with 1 or more HEALTH SERVICE EVENTS
- May be used in 1 or more INTERVENTIONS
- May be used in 1 or more MEDICATION INCIDENTS
- May result in 1 or more OBSERVATIONS
- May be associated with 1 or more ORGANS
- May be associated with 1 or more ORGANIZATIONS
- May be associated with 1 or more SERVICE REQUESTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources, Health Canada Drug Product Database, *Canada's Food and Drugs Act*: Chapter F-27

Health Service Event

Transactional data

Definition: A past, current, planned or requested act.

Note 1: What constitutes a Health Service Event is influenced by the definition of “service.”

Note 2: Decisions about what is included in or excluded from the definition of “service” may be determined by CIHI business area requirements.

Supertype of Intervention, Observation, Standard Assessment, Medication Incident, Service Request, Claim

Core attribute	Definition	Value domain
HSE DateTime	The date and time of the health service event.	Health Service Event DateTime
Setting Type Code	TBD	TBD

Relationships:

Each HEALTH SERVICE EVENT

Must be with 1 and only 1 CLIENT

May be associated with 1 or more DRUGS

May be associated with 1 or more HEALTH DEVICES

May be associated with 1 or more other HEALTH SERVICE EVENTS

May involve 1 or more HEALTH SERVICE EVENT PROVIDERS

May be associated with 1 or more ORGANS

May be associated with 1 or more ORGANIZATIONS

May be associated with 1 or more MATERIALS

May be associated with 1 or more SPECIMENS

Source standards:

Pan-Canadian EHR standards, HL7 RIM

Health Service Event Provider

Linkage

Definition: An association between the Provider and the Health Service Event.

Note 1: The development of this concept was driven by a modelling need to resolve the many-to-many relationship between Provider and Health Service Event.

Core attribute	Definition	Value domain
TBD	TBD	TBD

Relationships:

Each HEALTH SERVICE EVENT PROVIDER

May be involved in 1 or more HEALTH SERVICE EVENTS

May be associated with 1 or more HEALTH SERVICE EVENT PROVIDER SERVICES

Source standards:

CRDM team

Health Service Event Provider Service

Linkage

Definition: An association between the Health Service Event Provider and the Service.

Note 1: The development of this concept was driven by a modelling need to resolve the many-to-many relationship between Health Service Event Provider and the Service.

Core attribute	Definition	Value domain
TBD	TBD	TBD

Relationships:

Each HEALTH SERVICE EVENT PROVIDER SERVICE

May be associated with 1 or more HEALTH SERVICE EVENT PROVIDERS

May be associated with 1 or more SERVICES

Source standards:

CRDM team

Intervention

Transactional data

Definition: An activity that is intended to observe, monitor, assess and/or change the state of the health of a Client.

Note 1: Definition includes planned, current and historic Interventions for a Client.

Subtype of Health Service Event

Synonyms: Procedure

Core attribute	Definition	Value domain
Intervention System Code	A code representing the code system containing health intervention values.	Intervention System
Intervention Code	A code that represents a health intervention.	Intervention

Relationships:

Each INTERVENTION

Must be with 1 and only 1 CLIENT

May be associated with 1 or more ENCOUNTERS

Must be performed by 1 or more PROVIDERS

May be associated with 1 or more DRUGS

May be associated with 1 or more HEALTH DEVICES

May be associated with 1 or more INTERVENTIONS

May be associated with 1 or more MATERIALS

May result in 1 or more MEDICATION INCIDENTS

May be associated with 1 or more OBSERVATIONS

May be associated with 1 or more ORGANS

May result in 1 or more SERVICE REQUESTS

May be associated with 1 or more SPECIMENS

May be associated with 1 or more STANDARD ASSESSMENTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, Canadian Classification of Health Interventions (CCI), CIHI sources, Canadian Classification of Procedures (CCP)

Material

Master data

Definition: A product, object or substance used in health care–related activities.

Supertype of Organ, Drug, Health Device, Specimen

Core attribute	Definition	Value domain
n/a	n/a	n/a

Relationships:

Each MATERIAL

- May be included in 1 or more CLAIMS
- May be used during 1 or more INTERVENTIONS
- May be associated with 1 or more HEALTH SERVICE EVENTS
- May be used with 1 or more other MATERIALS
- May be used in 1 or more MEDICATION INCIDENTS
- May be used during 1 or more OBSERVATIONS
- May be used in 1 or more ORGANIZATIONS
- May be used in 1 or more PLACES
- May be the subject of 1 or more SERVICE REQUESTS

Source standards:

CIHI sources, pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, Biomedical Research Integrated Domain Group (BRIDG) 3.0.1, NCI

Medication Incident

Transactional data

Definition: A preventable event that may cause or lead to inappropriate medication use or harm to the Client while the medication is in the control of the Provider, Client or consumer.

Note 1: Medication incidents may be associated with professional practices, drug products, procedures and systems, and include prescribing, order communication, product labelling/ packaging/nomenclature, compounding, dispensing, distribution, administration, education, monitoring and use.

Note 2: For the purposes of the CRDM, a Medication Incident involves a Client. Medication Incidents that occur without a Client (e.g., drug-labelling incidents) are considered exceptions.

Subtype of Health Service Event

Core attribute	Definition	Value domain
TBD	TBD	TBD

Relationships:

Each MEDICATION INCIDENT

- Must be with 1 and only 1 CLIENT
- Must include 1 or more DRUGS
- May be during 1 and only 1 ENCOUNTER
- May be associated with 1 or more HEALTH DEVICES
- May result in 1 or more INTERVENTIONS
- May be associated with 1 or more OBSERVATIONS
- May be associated with 1 or more ORGANS
- May involve 1 or more PROVIDERS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CeRx, CIHI sources

Observation

Transactional data

Definition: Information derived from the performance of a health-related activity.

Note 1: An Observation consists of a type and a result. The type and result of an Observation must be considered in combination to determine the meaning of the Observation — for example, initial diagnosis (type) = I01.1 (result).

Subtype of Health Service Event

Core attribute	Definition	Value domain
Observation Type Code	A code representing the type of Observation.	Observation Type
Observation Coded Value System Code	A code representing the code system containing observation values.	Observation Coded Value System
Observation Value	The information determined as a result of making the observation. Note: Possible data types include date, time, text, code and numeric.	Observation Value

Relationships:

Each OBSERVATION

- Must be completed for 1 and only 1 CLIENT
- Must be completed during 1 and only 1 ENCOUNTER
- May be completed by a CLIENT (in the case of a self-assessment)
- May be completed by 1 and only 1 PROVIDER
- May be included on 1 or more CLAIMS
- May be associated with 1 or more DRUGS
- May be associated with 1 or more HEALTH DEVICES
- May be associated with 1 or more INTERVENTIONS
- May result in 1 or more MEDICATION INCIDENTS
- May be associated with 1 or more other OBSERVATIONS
- May be associated with 1 or more ORGANS
- May be associated with 1 and only 1 STANDARD ASSESSMENT

Source standards:

Pan-Canadian EHR standards, HL7 RIM, HL7 Fast Healthcare Interoperability Resources (FHIR), SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources, Logical Observation Identifiers Names and Codes/pan-Canadian LOINC Observation Code Database (LOINC/pCLOCD)

Organ

Master data

Definition: A structure that contains at least 2 different types of tissue functioning together for a common purpose.

Subtype of Material

Core attribute	Definition	Value domain
Organ Type Code	A code identifying a structure that contains at least 2 different types of tissue functioning together for a common purpose.	Organ Type

Relationships:

Each ORGAN

May be associated with 1 or more INTERVENTIONS

May be associated with 1 or more HEALTH SERVICE EVENTS

May be associated with 1 or more MATERIALS

May be the subject of 1 or more OBSERVATIONS

May be associated with 1 or more ORGANIZATIONS

May be associated with 1 or more SERVICE REQUESTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources

Organization

Master data

Definition: A group of persons with a common purpose or function.

Note 1: May include public-, private- or voluntary-sector Organizations whose activities may encompass the funding, provision or regulation of health care and support services (e.g., ministries of health, regional health authorities, corporations, hospitals).

Core attribute	Definition	Value domain
Organization Identifier	A unique identifier for an organization.	Organization Identifier
Organization Start Date	The date an organization became effective.	Start End Date
End Date	The date an organization ended.	Start End Date

Relationships:

Each ORGANIZATION

Must be located at 1 PLACE at 1 point in time

May be associated with 1 or more HEALTH SERVICE EVENTS

May be associated with 1 or more MATERIALS

May be associated with 1 or more other ORGANIZATIONS

May have 1 or more ORGANIZATION ROLES

May be the employer of 1 or more PROVIDERS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources

Organization Category Classification

Master data

Definition: The grouping of organizations based on the assigned category (e.g., health system layer, acute hospital peer group, non–health care entities).

Core attribute	Definition	Value domain
Category Type Code	A code that identifies groups of like Organization Categories.	Organization Category Type
Classification Start Date	The first date that the Category Classification is in effect for the Organization.	Start End Date
Category Code	A code that identifies the type of organization in terms of its relevance to the health system.	Organization Category
End Date	The last date that the Organization Classification is valid for the Organization. Note: If both the Start Date and End Date are specified, the Start Date must be equal to or earlier than the End Date.	Start End Date

Relationships:

Each ORGANIZATION CATEGORY CLASSIFICATION

May be associated with 1 or more ORGANIZATIONS

Source standards:

HL7, Data Management Book of Knowledge (DAMA), Merriam-Webster Dictionary, CIHI sources

Organization Name

Master data

Definition: A non-unique textual identifier or moniker that constitutes a label by which the organization is known and that is used in communication.

Core attribute	Definition	Value domain
Organization Name Type Code	A code that designates the type or purpose of the Organization Name. Note 1: Multiple organization names may be collected, each with an attribute for the Organization Name type. Note 2: Every Organization Name can have only one Name Type, which indicates the type of name being identified.	Organization Name Type
Organization Name	A non-unique textual identifier or moniker that constitutes a label by which the organization is known and that is used in communication.	Organization Name
Name Start Date	The date on which this organization name became effective.	Start End Date
End Date	The last date on which this name was in effect.	Start End Date

Relationships:

Each ORGANIZATION NAME

May be associated with 1 or more ORGANIZATIONS

Source standards:

CIHI sources, Health Information Standards Committee for Alberta (HISCA), HL7, ISO

Organization Participation

Linkage

Definition: An association between the Organization Role and the Health Service Event.

Note 1: The development of this concept was driven by a modelling need to resolve the many-to-many relationship between the Organization Role and Health Service Event.

Core attribute	Definition	Value domain
TBD	TBD	TBD

Relationships:

Each ORGANIZATION PARTICIPATION

May be associated with 1 or more ORGANIZATION ROLES

May be associated with 1 or more HEALTH SERVICE EVENTS

Source standards:

CRDM team

Organization Relationship

Master data

Definition: Describes the association between 2 or more organizations.

Core attribute	Definition	Value domain
Relationship Type Code	A code that identifies the type of association that could exist between 2 or more organizations.	Organization Relationship Type
Relationship Start Date	The first date on which the Organization Relationship is in effect.	Start End Date
Relationship End Date	The last date on which the Organization Relationship is valid.	Start End Date

Relationships:

Each ORGANIZATION RELATIONSHIP

May be associated with 1 or more ORGANIZATIONS

Source standards:

CIHI sources

Organization Role

Master data

Definition: The function, responsibility or competency that an Organization may play, perform or be assigned.

Core attribute	Definition	Value domain
Organization Role Type Code	A code that identifies the function, responsibility or competency that an organization may play, perform or be assigned.	Organization Role Type
Role Type Start Date	The date on which the Organization Role is established.	Start End Date
Role Type End Date	The last date on which the Organization Role is in effect.	Start End Date

Relationships:

Each ORGANIZATION ROLE

May be associated with 1 or more ORGANIZATIONS

Source standards:

HL7, DAMA, Merriam-Webster Dictionary, CIHI sources

Place

Master data

Definition: A physical point or area in space.

Note 1: A Place may be of varying levels of granularity.

Note 2: A Place can exist independently of a Service, Provider or Organization.

Note 3: A Place represents a physical place; it does not represent a virtual place (e.g., phone number, email address, IP address) or anatomical place.

Core attribute	Definition	Value domain
Street Num	The number of a building, house or lot alongside the street. Note: This does not number the street but rather the building.	Street Number
Street Name	The official name recognized by each municipality. Note: The street name should not be translated (e.g., “Main” cannot be translated to “Principale”).	Street Name
Street Type Code	A code that identifies the type of public thoroughfare in Canada.	Street Type
Street Direction Code	A code that identifies the directional reference used to qualify the street name.	Street Direction
Municipality	The name of the city, town, village or other community or delivery centre.	Municipality
Postal Code	A 6-character alphanumeric code that designates a region defined by the postal service. It is in the form of ANA NAN, in which “A” represents a letter of the alphabet and “N” represents a number.	Postal Code
Province Code	A code that refers to the name of a principal geographic boundary of Canada.	Canadian Province/Territory
Country Code	A code representing a geographical and/or political region of the world.	Country

Relationships:

Each PLACE

May be the location of 1 or more ORGANIZATIONS

May be the location of 1 or more other PLACES

May be the location of 1 or more PROVIDERS

May be the location of 1 or more CLIENTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources, Canada Post, NCI

Provider

Master data

Definition: An individual who has delivered, is delivering or has the potential to deliver health care–related services or goods.

Note 1: CIHI considers only persons to be Providers. Organizations are not considered Providers in the CIHI definition of Provider. CIHI has chosen to consider an Organization as a separate entity. This deviates from other definitions of Provider.

Note 2: Family members who deliver health care–related services to a Client are not considered Providers by CIHI.

Note 3: An individual who is registered with a health care licensing Organization but is unemployed may be a Provider with the potential to deliver health care–related services or goods (e.g., a physician who is registered with the college but is not currently practising medicine).

Note 4: A Provider may have 0 Clients and may participate in 0 Health Service Events at 0 Places.

Core attribute	Definition	Value domain
Identifier	Unique number or code issued for the purpose of identifying an individual health care Provider.	Provider Identifier
Identifier Type Code	A code that categorizes the type of Provider Identifier.	Provider Identifier Type
Authority Issuing Identifier	TBD	TBD
Provider Role Code	A code that represents a role type that is used to categorize a Provider.	Provider Role
Gender Code	A code used to indicate the gender or sex of a Provider. Note 1: At CIHI, submitted values for attributes and data elements using the Gender value domain may be based on societal or cultural roles, phenotype (the outward appearance of the individual) or genotype (the genetic constitution of the individual), depending on the needs of each data holding.	Gender
Birthdate	A numeric value to represent the day on which a Provider was born.	Start End Date

Relationships:

Each PROVIDER

- May be associated with 1 or more CLAIMS
- May be associated with 1 or more CLIENTS
- May be involved in 1 or more ENCOUNTERS
- May be involved in 1 or more INTERVENTIONS
- May be involved in 1 or more MEDICATION INCIDENTS
- May be involved in 1 or more OBSERVATIONS
- May be employed by 1 or more ORGANIZATIONS
- May be involved in 1 or more SERVICE REQUESTS
- May administer 1 or more STANDARD ASSESSMENTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources

Service

Master data

Definition: A branch of health care, specialty or administrative category representing a potential activity that may consume resources and is intended to directly or indirectly affect the health state of a Client.

Note 1: Service is essentially an administrative concept, whereas Health Service Event represents the activities that may result from the delivery of a Service.

Note 2: A Service may include a collection of Health Service Events.

Note 3: Services that are delivered are based on the needs as determined by the condition and/or goal of care.

Note 4: Services can contain Services.

Core attribute	Definition	Value domain
Service Code	TBD	TBD

Relationships:

Each SERVICE

May be associated with 1 or more HEALTH SERVICE EVENT PROVIDERS

May be associated with 1 or more other SERVICES

Source standards:

CHDM, CIHI Blueprint 2015, HL7 v3, pan-Canadian EHR standards, SNOMED CT, ISO, *NHS Data Dictionary*, NCI, METeOR, CIHI sources

Service Request

Transactional data

Definition: A request for a health care–related service.

Note 1: A service may include a good (e.g., referral request, laboratory request, diagnostic imaging request).

Subtype of Health Service Event

Core attribute	Definition	Value domain
Service Request Type Code	A code that represents a type of Service Request.	Service Request Type

Relationships:

Each SERVICE REQUEST

Must be for 1 and only 1 CLIENT

Must be initiated by 1 and only 1 PROVIDER

May result in 1 or more ENCOUNTERS

May result in 1 or more INTERVENTIONS

May be associated with 1 or more MATERIALS

May result in 1 or more SERVICE REQUESTS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, CIHI sources

Specimen

Master data

Definition: A sample of tissue, body fluid, food or other substance that is collected or acquired to support the assessment, diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms.

Subtype of Material

Core attribute	Definition	Value domain
Specimen Type Code	A code identifying a type of specimen.	Specimen Type

Relationships:

Each SPECIMEN

May be collected as part of 1 and only 1 INTERVENTION

May be related to 1 or more ORGANS

May be the reason for 1 and only 1 SERVICE REQUEST

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, LOINC/pCLOCD, United States Public Health Service, CIHI sources

Standard Assessment

Transactional data

Definition: An authorized tool used to collect a set of constituent observations and interventions (e.g., interRAI Home Care, FIM® instrument).

Subtype of Health Service Event

Core attribute	Definition	Value domain
Assessment Type Code	TBD	TBD
Assessment Instrument Type Code	A code that identifies an authorized tool used to collect a set of constituent observations and interventions.	Assessment Instrument Type

Relationships:

Each STANDARD ASSESSMENT

Must be for 1 and only 1 CLIENT

May be completed by 1 and only 1 CLIENT

May be completed by 1 or more PROVIDERS

May be completed during 1 and only 1 ENCOUNTER

May be composed of 1 or more INTERVENTIONS

May be composed of 1 or more MEDICATION INCIDENTS

May be composed of 1 or more OBSERVATIONS

Source standards:

Pan-Canadian EHR standards, HL7 RIM, SNOMED CT, ISO, *NHS Data Dictionary*, CHDM, interRAI instruments, CIHI sources

Value domains

A value domain consists of a definition, the value codes, value labels and, if applicable, value meanings for a domain. It may also contain additional metadata. At CIHI, a value domain is also known as a value set, permissible values, code set or domain.

Value domains are not data elements. The value domain is the list of permissible values for a data element.

This section contains the details and set of attributes for each value domain.

Address data elements

Unstructured address data elements

Details

Definition	A set of attributes used to identify a physical location for the purpose of receiving postal mail deliveries. Note 1: Where applicable, refer to the CRDM DD value domain standards for permissible value codes. Note 2: Not all attributes are mandatory.
Source standards	HL7, Canada Post, NCI, CRDM DD

Set of attributes

Attributes	Value meaning
Address Line 1	Delivery information that can be composed of unit number, civic number, civic number suffix, street name, street type, street direction, rural route identifier, station information and general delivery indicator.
Address Line 2	Delivery information that can be composed of unit number, civic number, civic number suffix, street name, street type, street direction, rural route identifier, station information and general delivery indicator.
Municipality	The name of the city, town, village or other community or delivery centre.
Canadian Province/Territory	The name of a principal geographic boundary of Canada.
Postal Code	A postal code designating a region defined by the postal service.
Country	The name of a geographical and/or political region of the world.

Structured address data elements

Details

Definition	<p>A set of attributes used to identify a physical location for the purpose of geospatial analysis.</p> <p>Note 1: Where applicable, refer to the CRDM DD value domain standards for permissible value codes.</p> <p>Note 2: Not all attributes are mandatory.</p>
Source standards	HL7, Canada Post, NCI, CRDM DD

Set of attributes

Attributes	Value meaning
Additional Locator	This can be a unit designator, such as an apartment number, suite number or floor. There may be several unit designators in an address (e.g., “third floor, Apt. 342”). This can also be a designator pointing away from the location, rather than specifying a smaller location within some larger one (e.g., the Dutch “t.o.” means “opposite to” for house boats located across the street and facing houses).
Delivery Address Line	A delivery address line is frequently used instead of breaking out delivery mode, delivery installation, etc. An address generally has only a delivery address line or a street address line, but not both.
Street Address Line	A street address line is frequently used instead of breaking out building number, street name, street type, etc. An address generally has only a delivery address line or a street address line, but not both.
Building Number Numeric	The numeric portion of a building number.
Building Number	The number of a building, house or lot alongside the street. Also known as “primary street number.” This does not number the street but rather the building.
Building Number Suffix	Any alphabetic character, fraction or other text that may appear after the numeric portion of a building number.
Care of	The name of the party who will take receipt at the specified address and who will take responsibility for ensuring delivery to the target recipient.
Census Tract	A geographic subunit delineated for demographic purposes.
Country	The name of a geographical and/or political region of the world.
County or Parish	A subunit of a state or province. (49 American states use the term “county”; Louisiana uses the term “parish.”)
Municipality	The name of the city, town, village or other community or delivery centre.
Delimiter	Delimiters are printed without framing white space. If no value component is provided, the delimiter appears as a line break.
Delivery Installation Type	Indicates the type of delivery installation (the facility to which the mail will be delivered prior to final shipping via the delivery mode). Examples include post office, letter carrier depot, community mail centre and station.
Delivery Installation Area	The location of the delivery installation, usually a town or city; it is required only if the area is different from the municipality. The area to which mail delivery service is provided from any postal facility or service, such as an individual letter carrier, rural route or postal route.

Attributes	Value meaning
Delivery Installation Qualifier	A number, letter or name identifying a delivery installation (e.g., for Station A, the delivery installation qualifier would be "A").
Street Direction	The directional reference used to qualify the street name (e.g., East, North).
Delivery Mode	Indicates the type of service offered and/or method of delivery (e.g., post office box, rural route, general delivery).
Delivery Mode Identifier	Represents the routing information, such as a letter carrier route number. It is the identifying number of the designator (the box number or rural route number).
Intersection	An intersection denotes that the actual address is located at or close to the intersection of 2 or more streets.
Post Box	A numbered box located in a post station.
Precinct	A subsection of a municipality.
U.S. State	The name of a principal administrative subdivision of the United States.
Canadian Province/Territory	The name of a principal geographic boundary of Canada.
Street Name Base	The base name of a roadway or artery recognized by a municipality (excluding street type and direction).
Street Name	The official name recognized by each municipality; it should not be translated (e.g., "Main" cannot be translated to "Principale").
Street Type	The type of public thoroughfare (e.g., street, avenue).
Unit Identifier	The number or name of a specific unit contained within a building or complex, as assigned by that building or complex.
Unit Designator	Indicates the type of specific unit contained within a building or complex (e.g., apartment, floor).
Postal Code	A postal code designating a region defined by the postal service.

Address Type

This value domain is out of scope for the CRDM DD because it is being used only by Scott's Medical Database (SMDB). As a result, the value domain has been archived. The CRDM DD recommends that business areas adopt the HL7 (PostalAddressUse) value codes. Should more data holdings collect data pertaining to Address Type in the future, the value domain will be included in the CRDM DD. For more information on Address Type, please contact the SMDB team.

Assessment Instrument Type

Value domain details

Definition	A code that identifies an authorized tool used to collect a set of constituent observations and interventions.
Representation class	Code
Maximum length	12
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Assessment Instrument Type	AIMFS	ASIA Impairment (Modified Frankel) Scale	n/a
	AIS	Abbreviated Injury Scale	n/a
	AlphaFIM	Alpha Functional Independence Measure	n/a
	CCA	CIHI's Cognitive Assessment	n/a
	CCNURS	Cardiac Care Network Urgency Rating Score	n/a
	CPES-IC	Canadian Patient Experiences Survey — Inpatient Care	n/a
	CTAS	Canadian Triage Acuity Scale	n/a
	FIM	Functional Independence Measure instrument	n/a
	GCS	Glasgow Coma Scale	n/a
	GOS	Glasgow Outcome Scale	n/a
	HRQOL SF-36	Self-reported health-related quality of life	n/a
	IADLA	CIHI's Instrumental Activities of Daily Living Assessment	n/a
	interRAI CMH	interRAI Community Mental Health	n/a
	interRAI CA	interRAI Contact Assessment	n/a
	ISS	Injury Severity Score	n/a
	MAIS	Maximum Abbreviated Injury Scale	n/a
	PTS	Pediatric Trauma Score	n/a
	RAI-HC	Resident Assessment Instrument–Home Care	n/a
	RAI-MH	Resident Assessment Instrument–Mental Health	n/a
	RAI-MDS 2.0	Resident Assessment Instrument–Minimum Data Set 2.0	n/a
	RANCHOS	Rancho Los Amigos Scale	n/a
	RTS	Revised Trauma Score	n/a
	TRISS	Trauma Injury Severity Score	n/a
	VAA	Visual Acuity Assessment	n/a
	VAS	Visual Analog Scale	n/a
	WCWLT	Western Canada Waiting List priority-setting scoring tool	n/a
WOMAC	Western Ontario and McMaster Universities Osteoarthritis Index	n/a	

Authority Issuing Client Identifier

Value domain details

Definition	A code representing the legal entity/organization responsible for assigning the Client Identifier.
Representation class	Code
Maximum length	2
Minimum length	2
Value domain type	Enumerated
Source standards	SNOMED CT, PHC Reference Set

Permissible values

Name	Value code	Value label	Value meaning
Authority Issuing Client identifier	AB	Alberta Health	n/a
	PE	Prince Edward Island Department of Health and Wellness	n/a
	MB	Manitoba Health, Seniors and Active Living	n/a
	QC	Ministère de la Santé et des Services sociaux du Québec	n/a
	ON	Ontario Ministry of Health and Long-Term Care	n/a
	BC	BC Ministry of Health	n/a
	SK	Saskatchewan Health	n/a
	NB	New Brunswick Department of Health	n/a
	NL	Newfoundland Department of Health and Community Services	n/a
	NT	Northwest Territories Department of Health and Social Services	n/a
	NS	Nova Scotia Department of Health and Wellness	n/a
	NU	Nunavut Department of Health and Social Services	n/a
	YT	Yukon Department of Health and Social Services	n/a
	CF	Canadian Armed Forces	n/a
	CI	Immigration, Refugees and Citizenship Canada	n/a
	CS	Correctional Service Canada	n/a
	AA	Indigenous and Northern Affairs Canada	n/a
	RC	Royal Canadian Mounted Police	n/a
	VA	Veterans Affairs Canada	n/a
WC	Workers' Compensation Board	n/a	

Canadian Province/Territory

Value domain details

Definition	A code that refers to the name of a principal geographic boundary of Canada.
Representation class	Code
Maximum length	2
Minimum length	2
Value domain type	Enumerated
Source standards	CIHI sources, Canada Post, ISO 3166, Natural Resources Canada

Permissible values

Name	Value code	Value label	Value meaning
Canadian Province/Territory	AB	Alberta	n/a
	BC	British Columbia	n/a
	MB	Manitoba	n/a
	NB	New Brunswick	n/a
	NL	Newfoundland and Labrador	n/a
	NS	Nova Scotia	n/a
	NT	Northwest Territories	n/a
	NU	Nunavut	n/a
	ON	Ontario	n/a
	PE	Prince Edward Island	n/a
	QC	Quebec	n/a
	SK	Saskatchewan	n/a
YT	Yukon	n/a	

Claim Identifier

Value domain details

Definition	Unique number or code issued for the purpose of identifying a claim.
Representation class	Identifier
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	n/a

Permissible values

Name	Value code	Value label	Value meaning
Claim Identifier	n/a Unique claim identifier submitted by the jurisdictions.	n/a	n/a

Claim Authority Issuing Identifier

Value domain details

Definition	A code representing the jurisdiction responsible for submitting the Claim Identifier.
Representation class	Code
Maximum length	5
Minimum length	2
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Claim Authority Issuing Identifier	HC	Health Canada	n/a
	BC	BC Ministry of Health	n/a
	AB	Alberta Health	n/a
	SK	Saskatchewan Health	n/a
	MB	Manitoba Health, Seniors and Active Living	n/a
	ON	Ontario Ministry of Health and Long-Term Care	n/a
	QC	Ministère de la Santé et des Services sociaux du Québec	n/a
	NB	New Brunswick Department of Health	n/a
	NS	Nova Scotia Department of Health and Wellness	n/a
	PE	Prince Edward Island Department of Health and Wellness	n/a
	NL	Newfoundland Department of Health and Community Services	n/a
	YT	Yukon Department of Health and Social Services	n/a
	NT	Northwest Territories Department of Health and Social Services	n/a
	NU	Nunavut Department of Health and Social Services	n/a
FNIHB	First Nations and Inuit Health Branch	n/a	

Client Identifier

Value domain details

Definition	Unique number or code issued for the purpose of identifying a subject of (health) care.
Representation class	Identifier
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	CIHI sources, ISO

Permissible values

Name	Value code	Value label	Value meaning
Client Identifier	n/a Format: Alphanumeric	n/a	n/a

Client Identifier Type

Value domain details

Definition	A code that represents the type of identification used to uniquely differentiate clients. Note 1: This code can be based on geographical or administrative systems of identification. This attribute should enable a common scheme of identification between a variety of systems.		
Representation class	Code		
Maximum length	2		
Minimum length	2		
Value domain type	Enumerated		
Source standards	METeOR, UN Applied Technologies Group, PHC Reference Set		

Permissible values

Name	Value code	Value label	Value meaning
Client Identifier Type	JH	Jurisdictional health number	n/a

Country

Value domain details

Definition	A code representing a geographical and/or political region of the world.
Representation class	Code
Maximum length	3
Minimum length	3
Value domain type	Enumerated
Source standards	ISO 3166, SNOMED CT

Permissible values

Name	Value code	Value label	Value meaning
Country	AFG	Afghanistan	n/a
	ALA	Aland Islands	n/a
	ALB	Albania	n/a
	DZA	Algeria	n/a
	—	—	—

Note

— Only a partial list of value codes is shown. Contact the CRDM team (crdm@cihi.ca) for the full list.

Drug Authority Issuing Identifier

Value domain details

Definition	A code that represents the administration or jurisdiction responsible for assigning the Drug Identifier.
Representation class	Code
Maximum length	5
Minimum length	2
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Drug Authority Issuing Identifier	HC	Health Canada	n/a
	BC	BC Ministry of Health	n/a
	AB	Alberta Health	n/a
	SK	Saskatchewan Health	n/a
	MB	Manitoba Health, Seniors and Active Living	n/a
	ON	Ontario Ministry of Health and Long-Term Care	n/a
	QC	Ministère de la Santé et des Services sociaux du Québec	n/a
	NB	New Brunswick Department of Health	n/a
	NS	Nova Scotia Department of Health and Wellness	n/a
	PE	Prince Edward Island Department of Health and Wellness	n/a
	NL	Newfoundland Department of Health and Community Services	n/a
	YT	Yukon Department of Health and Social Services	n/a
	NT	Northwest Territories Department of Health and Social Services	n/a
	NU	Nunavut Department of Health and Social Services	n/a
FNIHB	First Nations and Inuit Health Branch	n/a	

Drug Identifier

Value domain details

Definition	A numeric code that uniquely represents a drug.
Representation class	Identifier
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Drug Identifier	n/a	n/a	n/a

Drug Identifier Type

Value domain details

Definition	A code that categorizes the type of Drug Identifier.
Representation class	Code
Maximum length	4
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
A code that categorizes the type of Drug Identifier	DIN	Drug Identification Number	Assigned by Health Canada.
	PDIN	Pseudo Drug Identification Number	Defined by each jurisdiction.

Education Field of Study

This value domain is out of scope for the CRDM DD because it is used only by the Health Human Resources (HHR) data holdings. As a result, the value domain has been archived. The CRDM DD recommends that applicable business areas adopt aggregated primary groupings value codes from the Canadian standard for the Classification of Instructional Programs (CIP). Should more data holdings collect data pertaining to Education Field of Study in the future, the value domain will be included in the CRDM DD. For more information on Education Field of Study, please contact the HHR team.

Education Level

Value domain details

Definition	A code representing the level of schooling a person has attained or received.
Representation class	Code
Maximum length	5
Minimum length	2
Value domain type	Enumerated
Source standards	HL7, Statistics Canada, SNOMED CT, METeOR

Permissible values

Name	Value code	Value label	Value meaning
Education Level	ELEM	Elementary school	n/a
	SEC	Some secondary or high school education	n/a
	HS	High school or secondary school degree complete	n/a
	SCOL	Some college education	n/a
	CD	College or CEGEP diploma complete	n/a
	SBAC	Some baccalaureate education	n/a
	BD	Baccalaureate degree complete	n/a
	SPB	Some post-baccalaureate education	n/a
	GD	Graduate degree complete	n/a
	POSTG	Doctoral or post-graduate education complete	n/a
	AD	Apprenticeship, trade or technical certificate or diploma complete	n/a
NF	No formal education	n/a	

Functional Centre

Value domain details

Definition	A code used to identify a specific functional centre.
Representation class	Code
Maximum length	9
Minimum length	9
Value domain type	Enumerated
Source standards	MIS Standards

Permissible values

Name	Value code	Value label	Value meaning
Functional Centre	Value codes obtained from the MIS Standards	Value labels from the MIS Standards	n/a

Gender

Value domain details

Definition	A code that refers to the socially constructed roles, behaviours, identities and expressions of girls, women, boys, men and gender diverse people by a given society. Note: CIHI data holdings may decide to capture a more specific construct of gender based on their business requirement as identified below in Gender Identity or Lived Gender.
Representation class	Code
Maximum length	3
Minimum length	1
Value domain type	Enumerated
Source standards	Statistics Canada, HL7, Canadian Institutes of Health Research, Ontario Human Rights Commission

Attributes based on Gender

Name	Definition
Gender Identity	Each person's internal and individual experience of gender. It is their sense of being a woman, a man, both, neither or anywhere along the gender spectrum. A person's gender identity may be the same as or different from their birth-assigned sex.
Lived Gender	Refers to how a person publicly presents their gender. This can include behaviour and outward appearances, person's chosen name and pronoun.

Permissible values

Name	Value code	Value label	Value meaning
Gender	F	Female	n/a
	M	Male	n/a
	D	Gender Diverse	Includes persons who reported their gender as being other than male or female. It includes persons who reported being unsure of their gender, being both male and female, or neither male nor female.
	UNK	Unknown	Includes not stated, not recorded, a value is applicable but not known.
	NA	Not Applicable	Includes if question is not appropriate to ask (e.g., inappropriate to ask children).

Health Device Type

Value domain details

Definition	A code identifying the type of health device.
Representation class	Code
Maximum length	9
Minimum length	7
Value domain type	Enumerated
Source standards	CIHI sources, SNOMED CT

Permissible values

Name	Value code	Value label	Value meaning	Parent value code
Health Device Type	717327006	Angiography device	n/a	n/a
	304184000	Ankle joint implant	n/a	40388003
	468315000	Adult limb restraint	n/a	n/a
	717327006	Arteriography device	n/a	n/a
	705431005	Assistive scooter	n/a	n/a
	303500007	Auditory implant	n/a	40388003
	37953008	Bedside rails	n/a	n/a
	385593000	Bladder retractor	n/a	n/a
	445255007	Bladder vibration stimulation device	n/a	n/a
	337414009	Blood glucose meters	n/a	n/a
	706312006	Bone absorptiometric system	n/a	n/a
	360316004	Brace	n/a	n/a
	230066007	Briefs	n/a	n/a
	87405001	Cane	n/a	n/a

Name	Value code	Value label	Value meaning	Parent value code
Health Device Type (continued)	467735004	Cardiac catheterization monitoring system	n/a	n/a
	19923001	Catheter	n/a	n/a
	706088007	Cerebrospinal fluid drainage kit	n/a	n/a
	258593008	Cerebrospinal fluid shunt	n/a	40388003
	360008003	Commode	n/a	n/a
	224900001	Communication aid	n/a	n/a
	717314007	Communication board	n/a	n/a
	360277001	Communicator device	n/a	n/a
	54953005	Computerized axial tomography scanner	n/a	n/a
	57368009	Contact lenses	n/a	n/a
	348649005	Contraceptive device	n/a	n/a
	74566002	Crutch	n/a	n/a
	27606000	Dental prosthesis	n/a	n/a
	705383004	Eating/drinking assistive device	n/a	n/a
	76428000	Elbow prosthesis	n/a	40388003
	468299009	Electroconvulsive therapy system	n/a	n/a
	50121007	Eyeglasses	n/a	n/a
	261802008	Gamma camera	n/a	n/a
	6012004	Hearing aid	n/a	n/a
	303533002	Hip joint implant	n/a	40388003
	40388003	Implant	n/a	n/a
	705889006	Implantable knee prosthesis	n/a	n/a
	23973005	Indwelling urinary catheter	n/a	19923001
	6972009	Lithotripter	n/a	n/a
	90003000	Magnetic resonance imaging unit	n/a	n/a
	264865009	Magnifier	n/a	n/a
	35398009	Ostomy appliance	n/a	n/a
	59181002	Oxygen analyzer	n/a	n/a
	426160001	Oxygen ventilator	n/a	n/a
	462601004	Patient lifting system bath chair	n/a	n/a
	717326002	PET/CT system	n/a	n/a
	57395004	Physical restraint equipment	n/a	n/a
	39821008	Positron emission tomography unit	n/a	n/a
	360302009	Pressure relief equipment	n/a	n/a

Name	Value code	Value label	Value meaning	Parent value code
Health Device Type (continued)	225743009	Seclusion room	n/a	n/a
	304124003	Shoulder joint implant	n/a	40388003
	717313001	SPECT system	n/a	n/a
	39690000	Sphygmomanometer	n/a	n/a
	16650009	Splint	n/a	n/a
	717243002	Trunk restraint	n/a	n/a
	439579002	Urine collection pad	n/a	n/a
	272189001	Ventilator equipment	n/a	n/a
	705406009	Walker	n/a	n/a
	58938008	Wheelchair	n/a	n/a

Health Service Event DateTime

Value domain details

Definition	The date and time of the Health Service Event.
Representation class	DateTime
Maximum length	14
Minimum length	14
Value domain type	Non-enumerated
Source standards	HL7

Permissible values

Name	Format
Health Service Event DateTime	YYYY[MM[DD[HH[MM[SS]

Intervention

Value domain details

Definition	A code that represents a health intervention.
Representation class	Code
Maximum length	18
Minimum length	6
Value domain type	Enumerated
Source standards	CCI, CCP, SNOMED CT

Permissible values

Name	Value code	Value label	Value meaning
Intervention	Codes obtained from CCI	Labels for CCI codes	n/a
	Codes obtained from CCP	Labels for CCP codes	n/a
	Codes obtained from SNOMED CT	Labels for SNOMED CT codes	n/a

Intervention System

Value domain details

Definition	A code representing the code system containing health intervention values.
Representation class	Code
Maximum length	9
Minimum length	3
Value domain type	Enumerated
Source standards	CCI, CCP, SNOMED CT

Permissible values

Name	Value code	Value label	Value meaning
Intervention System	CCI	Canadian Classification of Health Interventions	n/a
	CCP	Canadian Classification of Procedures	n/a
	SNOMED CT	Systematized Nomenclature of Medicine — Clinical Terms	n/a

Language

Value domain details

Definition	A 3-letter code representing a systematic means of communicating ideas or feeling by the use of conventionalized signs, sounds, gestures or marks that have understood meanings. Note 1: ISO 639-3 aims to define 3-letter identifiers for all known human languages.
Representation class	Code
Maximum length	3
Minimum length	3
Value domain type	Enumerated
Source standards	ISO 639-3, Merriam-Webster Dictionary

Permissible values

Name	Value code	Value label	Value meaning
Language	eng	English	n/a
	fra	French	n/a
	afr	Afrikaans	n/a
	aka	Akan	n/a
	—	—	—

Note

— Only a partial list of value codes is shown. Contact the CRDM team (crdm@cihi.ca) for the full list.

Missing Value Reason

Value domain details: Character fields

Definition	A specific reason explaining why a meaningful value is not available. Note 1: INV is used by CIHI only and is imputed to indicate that a response did not meet CIHI's value-added process. Note 2: Full value domain is optional for implementation. Note 3: It is recommended that, at a minimum, data holdings implement UNK and NA.
Representation class	Code
Maximum length	4
Minimum length	2
Value domain type	Enumerated
Source standards	HL7, NCI, CIHI Data Warehouse

Permissible values: Character fields*

Name	Value code	Value label	Value meaning
Missing Value Reason	INV	Invalid	The value as represented in the instance is not an element in the constrained value domain of a variable. Response did not meet CIHI's value-added process. Maps to Invalid Response (-1) in CIHI Data Warehouse.
	DER	Derived	An actual value may exist, but it must be derived from the provided information. Subtype of Invalid.
	OTH	Other	The actual value is not a member of the set of permitted data values in the constrained value domain of a variable. Subtype of Invalid. Maps to Invalid Value (-8) in CIHI Data Warehouse.
	UNC	Unencoded	The actual value has not yet been encoded within the approved value set for the domain. If it is known that it is not possible to encode the concept, OTH should be used instead. Subtype of Invalid. Maps to Invalid Value (-8) in CIHI Data Warehouse.
	MSK	Masked	There is information on this item available but it has not been provided by the sender due to security, privacy or other reasons.
	NA	Not applicable	Known to have no proper value. Maps to Not Applicable (-7) in CIHI Data Warehouse.
	UNK	Unknown	A proper value is applicable but not known. Maps to Not Required (-3) in CIHI Data Warehouse.
	ASKU	Asked, but unknown	Information was sought but not found. Subtype of Unknown.
	NAV	Temporarily unavailable	Information is not available at this time, but it is expected that it will be available later. Subtype of Asked, but unknown. Maps to Not Yet Available (-4) in CIHI Data Warehouse.
	NASK	Not asked	This information has not been sought. Subtype of Unknown. Maps to Not Required (-3) in CIHI Data Warehouse.
	QS	Sufficient quantity	The specific quantity is not known, but it is known to be non-0 and is not specified because it makes up the bulk of the material. Subtype of Unknown.
	TRC	Trace	The content is greater than 0 but too small to be quantified. Subtype of Unknown.
	NINF	Negative infinity	Negative infinity of numbers.
	PINF	Positive infinity	Positive infinity of numbers.
NLC	No longer collected	Used in the CIHI Data Warehouse for a data element that is no longer being collected.	
NPC	Not previously collected	Used in the CIHI Data Warehouse for a data element that was not collected in previous years.	

Note

* Missing Value Reason codes for non-character fields are available upon request from the CRDM DD team (datadictionary@cihi.ca).

Municipality

Value domain details

Definition	The name of the city, town, village or other community or delivery centre.
Representation class	Text
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	HL7, NCI, Canada Post

Permissible values

Name	Value code	Value label	Value meaning
Municipality	n/a	n/a	n/a

Observation Coded Value System

Value domain details

Definition	A code representing the code system containing observation values. Examples: LOINC is the code system for value code 45715-0 (Headache). pCLOCD is the code system for value code 57900-3 (Specimen Age).
Representation class	Code
Maximum length	6
Minimum length	5
Value domain type	Enumerated
Source standards	Pan-Canadian standards

Permissible values

Name	Value code	Value label	Value meaning
Observation Coded Value System	LOINC	Logical Observation Identifier Names and Codes	n/a
	pCLOCD	Pan-Canadian Laboratory Observation Code Database	n/a

Observation Type

Value domain details

Definition	A code representing the type of Observation. Examples: Value code: 45715-0 (LOINC) Value label: Headache Value code: 57900-3 (pCLOCD) Value label: Specimen Age
Representation class	Code
Maximum length	10
Minimum length	3
Value domain type	Enumerated
Source standards	LOINC, pCLOCD

Permissible values

Name	Value code	Value label	Value meaning
Observation Type	Codes obtained from LOINC/pCLOCD.	Labels for LOINC/pCLOCD codes	n/a

Observation Value

Value domain details

Definition	The information determined as a result of making the observation. Note: Possible data types include date, time, text, code and numeric.
Representation class	Date, time, text, code, numeric
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	HL7 FHIR

Permissible values

Name	Value code	Value label	Value meaning
Observation Value	n/a	n/a	n/a

Organ Type

Value domain details

Definition	A code identifying a structure that contains at least 2 different types of tissue functioning together for a common purpose.
Representation class	Code
Maximum length	3
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning	Parent value code
Organ Type	KDD	Kidneys/dialysis (includes en bloc transplants)	n/a	n/a
	KDL	Kidney — Left	n/a	KDD
	KDR	Kidney — Right	n/a	KDD
	KDO	Kidney — One (from conversion)	n/a	KDD
	KDT	Kidney — Two (from conversion)	n/a	KDD
	LVR	Liver	n/a	n/a
	LLL	Liver — Left lobe	n/a	LVR
	LRL	Liver — Right lobe	n/a	LVR
	LLS	Liver — Lateral segment	n/a	LVR
	LVT	Liver — Two (from conversion)	n/a	LVR
	HRT	Heart	n/a	n/a
	LUB	Lungs (bilateral)	n/a	n/a
	LUL	Lung — Left	n/a	LUB
	LUR	Lung — Right	n/a	LUB
	HLC	Heart–lung combination	n/a	n/a
	LUO	Lung — One (from conversion)	n/a	n/a
	LUT	Lung — Two (from conversion)	n/a	n/a
	PAN	Pancreas (whole)	n/a	n/a
	PAS	Pancreas — Segment	n/a	PAN
	PAI	Pancreas — Islet cells	n/a	PAN
	PAE	Pancreas — Exocrine drainage	n/a	PAN
	PAD	Pancreas — Exocrine drainage (urinary)	n/a	PAN
	PAW	Pancreas — Wirsung obstruction with polymer	n/a	PAN
BOW	Bowel	n/a	n/a	
CLU	Cluster (liver, small bowel, pancreas, stomach)	n/a	n/a	
OMO	Other multi-organ en bloc retrieval	n/a	n/a	

Organization Category

Value domain details

Definition	A code that identifies the type of organization in terms of its relevance to the health system.
Representation class	Code
Maximum length	4
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources, HL7

Permissible values

Name	Value code	Value label	Value meaning
Organization Category	FED	Federal government	n/a
	RGB	Regulatory board	n/a
	MOH	Ministry of health	n/a
	RHA	Regional health authority	n/a
	HOS	Hospital	n/a
	RCF	Residential care facility	n/a
	CHS	Community health service organization	n/a
	PHO	Public health organization	n/a
	SSP	Social services program organization	n/a
	VND	Vendor	A business organization, such as a commercial software development company or non-commercial health care organization, that produces data and/or provides data submission service(s). This business might submit data for 1 or more organizations to CIHI.
VRTL	Virtual organization	Organizations that were created for internal purposes (e.g., "Canada" organization for data aggregation).	

Organization Category Type

Value domain details

Definition	A code that identifies groups of like Organization Categories.
Representation class	Code
Maximum length	5
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Organization Category Type	CONV	Converted organization category type	Organization category has changed.
	LAYER	Health system layer	Groups categories of organizations that are involved in the delivery of health care.
	OOC	Out of commission	Organization record has been closed.
	HPEER	Acute hospital peer group	Groups categories of hospitals based on shared or common characteristics.
	NONH	Non–health care entities	Groups categories of organizations that are not involved in delivering health care (e.g., vendors).
	PSEUD	Pseudo organizations	Groups categories of organizations that were created for internal purposes (e.g., “Canada” organization for data aggregation).

Organization Identifier

Value domain details

Definition	A unique identifier for an organization.
Representation class	Identifier
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Organization Identifier	n/a Format: Alphanumeric	n/a	n/a

Organization Name

Value domain details

Definition	A non-unique textual identifier or moniker that constitutes a label by which the organization is known and that is used in communication.
Representation class	Text
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Organization Name	n/a Format: Varchar	n/a	n/a

Organization Name Type

Value domain details

Definition	A code that designates the type or purpose of the organization name. Note 1: Multiple organization names may be collected, each with an attribute for the Organization Name Type. Note 2: Every organization name can have only 1 Name Type, which indicates the type of name being identified.
Representation class	Code
Maximum length	5
Minimum length	1
Value domain type	Enumerated
Source standards	CIHI sources, HISCA, HL7, ISO

Permissible values

Name	Value code	Value label	Value meaning
Organization Name Type	TEMP	Temporary	n/a
	LEGAL	Legal name	n/a
	TRADE	Trade name	n/a
	L	CIHI reporting name — Large (65 characters)	n/a
	M	CIHI reporting name — Medium (35 characters)	n/a
	S	CIHI reporting name — Small (15 characters)	n/a
	PLM	CIHI reporting prepended name — Large–Medium	n/a
	PML	CIHI reporting prepended name — Medium–Large	n/a
	PMM	CIHI reporting prepended name — Medium–Medium	n/a
	PMS	CIHI reporting prepended name — Medium–Small	n/a
	PSM	CIHI reporting prepended name — Small–Medium	n/a

Organization Relationship Type

Value domain details

Definition	A code that identifies the type of association that could exist between 2 or more organizations.
Representation class	Code
Maximum length	5
Minimum length	3
Value domain type	Enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Organization Relationship Type	ORU	CIHI organization roll-up	The default upward relationship of organizations for reporting needs. All organizations eventually roll up to a regional health authority, either directly or through 1 or more intermediate organization layers.
	OWN	Is owned by	Reflects legal ownership. Organizations may be owned by holding companies, financial services companies or other non-health-care-related organizations.
	MNGE	Is managed by	Reflects the organization that provides day-to-day management/operation of an organization. Organizations are typically managed by health care-specific organizations (e.g., not financial services companies, holding companies).
	CHNGE	Changed into	Applies to an organization that undergoes a significant change and as a result is considered a different organization (i.e., merges, splits, reorganizes).

Organization Role Type

Value domain details

Definition	A code that identifies the function, responsibility or competency that an organization may play, perform or be assigned.
Representation class	Code
Maximum length	3
Minimum length	3
Value domain type	Enumerated
Source standards	n/a

Permissible values

Name	Value code	Value label	Value meaning
Organization Role Type	SRC	Source	An organization rendering the health care services (e.g., hospital).
	SUB	Submitting	The organization responsible for submitting data to CIHI. For example, a vendor can act as a submitting organization.
	AUT	Authority	An administrative body with responsibility to govern health care delivery by a set of organizations. The set of organizations may be defined based on <ul style="list-style-type: none"> • Geographic boundaries (e.g., Ontario's local health integration networks); or • Legislation or other legal agreement (e.g., B.C.'s Provincial Health Services Authority).

Postal Code

Value domain details

Definition	A 6-character alphanumeric code that designates a region defined by the postal service. It is in the form of ANA NAN, in which “A” represents a letter of the alphabet and “N” represents a number.
Representation class	Code
Maximum length	6
Minimum length	6
Value domain type	Non-enumerated
Source standards	Canada Post

Permissible values

Name	Value code	Value label	Value meaning
Postal Code	n/a	n/a	n/a

Post-Secondary Canadian Educational Institution

This value domain is out of scope for the CRDM DD because it is used only by the HHR, National Physician Database (NPDB) and SMDB data holdings. As a result, the value domain has been archived. Should more data holdings collect data pertaining to Post-Secondary Canadian Educational Institution in the future, the value domain will be included in the CRDM DD. For more information on Post-Secondary Canadian Educational Institution, please contact the HHR team.

Provider Identifier

Value domain details

Definition	Unique number or code issued for the purpose of identifying an individual health care provider.
Representation class	Identifier
Maximum length	26
Minimum length	5
Value domain type	Non-enumerated
Source standards	CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Provider Identifier	n/a A maximum number of 26 alphanumeric characters.	n/a	n/a

Provider Identifier Type

Value domain details

Definition	A code that categorizes the type of Provider Identifier.
Representation class	Code
Maximum length	2
Minimum length	2
Value domain type	Enumerated
Source standards	PHC Reference Set

Permissible values

Name	Value code	Value label	Value meaning
Provider Identifier Type	PB	Provider billing number	TBD
	PN	Provider number issued by third party	TBD
	PR	Provider registration number	TBD

Provider Role

Value domain details

Definition	A code that represents a role type that is used to categorize a provider.
Representation class	Code
Maximum length	9
Minimum length	2
Value domain type	Enumerated
Source standards	Pan-Canadian standards, CIHI sources

Permissible values

Name	Value code	Value label	Value meaning
Provider Role	ACP	Advanced care paramedic	n/a
	RAP	Acupuncturist	n/a
	AH	Alternative healer	n/a
	AUD	Audiologist	n/a
	AUDASSIST	Audiology assistant	n/a
	CGN	Certified graduate nurse	n/a
	CHIRO	Chiropractor	n/a
	CC	Clinical counsellor	n/a
	CLXT	Combined lab and X-ray technologist	n/a
	CDCI	Communicable disease case investigator	n/a
	COUN	Counsellor	n/a
	CCP	Critical care paramedic	n/a
	DENA	Dental assistant	n/a
	DH	Dental hygienist	n/a
	DT	Dental technician	n/a
	DEN	Dentist	n/a
	DENT	Denturist	n/a
	EMR	Emergency medical responder	n/a
	EPHP	Environmental public health professional	n/a
	HIM	Health information management professional	n/a
	HSE	Health service executive	n/a
	HM	Homeopath	n/a
	HSW	Home support worker	n/a
	GENCOUN	Genetic counsellor	n/a
	KN	Kinesiologist	n/a
	LT	Lab technician	n/a
LPN	Licensed practical nurse	n/a	

Name	Value code	Value label	Value meaning
Provider Role (continued)	MFT	Marriage and family therapist	n/a
	MA	Medical assistant	n/a
	MD	Medical doctor	n/a
	MLT	Medical laboratory technologist	n/a
	MOH	Medical officer of health	n/a
	MP	Medical physicist	n/a
	MRT	Medical radiation technologist	n/a
	MDR	Medical resident	n/a
	ND	Naturopath	n/a
	RTNM	Nuclear medicine technologist	n/a
	NAHCA	Nurse aide/health care aide	n/a
	OT	Occupational therapist	n/a
	OTA	Occupational therapist assistant	n/a
	OPTH	Ophthalmic technician	n/a
	RO	Optician	n/a
	OPT	Optometrist	n/a
	ORTHOP	Orthoptist	n/a
	ORTH	Orthotist	n/a
	PP	Paramedic practitioner	n/a
	PHARM	Pharmacist	n/a
	PTECH	Pharmacy technician	n/a
	PA	Physician assistant	n/a
	PHYSIO	Physiotherapist	n/a
	PTA	Physiotherapist assistant	n/a
	PO	Podiatrist	n/a
	PCP	Primary care paramedic	n/a
	PSAP	Procedural sedation/anesthesia provider	n/a
	PROS	Prosthetist	n/a
	PSYCH	Psychologist	n/a
	PSYCHT	Psychotherapist	n/a
	PHI	Public health inspector	n/a
	RTMR	Radiation technologist in magnetic resonance	n/a
	RTR	Radiation technologist in radiation	n/a
	RTT	Radiation technologist in therapy	n/a
RECT	Recreation therapist	n/a	
RAC	Registered acupuncturist	n/a	
RCSW	Registered clinical social worker	n/a	
RD	Registered dietitian	n/a	
RMT	Registered massage therapist	n/a	

Name	Value code	Value label	Value meaning
Provider Role (continued)	RM	Registered midwife	n/a
	RN	Registered nurse	n/a
	RNP	Registered nurse practitioner	n/a
	RPN	Registered psychiatric nurse	n/a
	RC	Rehabilitation counsellor	n/a
	REHABENG	Rehabilitation engineer	n/a
	RRT	Respiratory therapist	n/a
	SW	Social worker	n/a
	SLP	Speech–language pathologist	n/a
	ST	Speech therapist	n/a
TA	Therapy assistant	n/a	

Service Request Type

Value domain details

Definition	A code that represents a type of Service Request.
Representation class	Code
Maximum length	2
Minimum length	2
Value domain type	Enumerated
Source standards	PHC Reference Set

Permissible values

Name	Value code	Value label	Value meaning
Service Request Type	RR	Referral request	A request from one Provider to another Provider or Organization to deliver 1 or more health services to a Client. The scope of referrals includes requests for clinical care or evaluation, as well as requests for community services such as home care.
	LR	Laboratory request	A request for analytical services, typically performed by medical laboratories in areas such as chemistry, serology, hematology, microbiology, histology, anatomic pathology, cytology and virology.
	IR	Diagnostic imaging request	Requests for diagnostic imaging services to be performed on a Client.
	DR	Diagnostic intervention request	n/a
	SR	Surgical request	n/a
	AS	Assessment request	n/a

Sex at Birth

Value domain details

Definition	A code that identifies the category assigned to an individual at birth that is typically based on their reproductive system and other physical characteristics.
Representation class	Code
Maximum length	3
Minimum length	1
Value domain type	Enumerated
Source standards	Statistics Canada, HL7, CRDM

Permissible values

Name	Value code	Value label	Value meaning
Sex at Birth	F	Female	n/a
	M	Male	n/a
	I	Indeterminate	Includes intersex or cannot be uniquely identified or classified as male or female at birth.
	UNK	Unknown	Includes not stated, not recorded, a value is applicable but not known.

Specimen Type

Value domain details

Definition	A code identifying a type of specimen.
Representation class	Code
Maximum length	6
Minimum length	2
Value domain type	Enumerated
Source standards	HL7, SNOMED CT

Permissible values

Name	Value code	Value label	Value meaning
Specimen Type	PUS	Pus specimen	n/a
	UR	Urine specimen	n/a
	SWT	Sweat specimen	n/a
	TEAR	Tears specimen	n/a
	HAR	Hair specimen	n/a
	SER	Serum specimen	n/a
	MLK	Milk specimen	n/a
	TISS	Tissue specimen	n/a
	WAT	Water specimen	n/a
	FOOD	Food specimen	n/a
	PLAS	Plasma specimen	n/a
	SKN	Skin specimen	n/a
	SAL	Saliva specimen	n/a
	STL	Stool specimen	n/a
	NAIL	Nail specimen	n/a
	SPT	Sputum specimen	n/a
	BIFL	Bile specimen	n/a
	TUB	Tube specimen	n/a
	VOM	Vomitus specimen	n/a
	THRB	Platelet specimen	n/a
	CNL	Cannula specimen	n/a
	COL	Colostrum specimen	n/a
	MEC	Meconium specimen	n/a
	CALC	Calculus specimen	n/a
	BON	Specimen from bone	n/a
	HRT	Specimen from heart	n/a
	KID	Specimen from kidney	n/a
	LNG	Specimen from lung	n/a
	BLDCO	Cord blood specimen	n/a
	EAR	Specimen from ear	n/a
	FLU	Body fluid specimen	n/a
	NOS	Specimen from nose	n/a
	EXG	Exhaled air specimen	n/a
	IHG	Inhaled gas specimen	n/a
CRN	Specimen from cornea	n/a	
GENV	Specimen from vagina	n/a	
EYE	Specimen from eye	n/a	
MAR	Bone marrow specimen	n/a	

Name	Value code	Value label	Value meaning
Specimen Type (continued)	BBL	Blood bag specimen	n/a
	WND	Specimen from wound	n/a
	ULC	Specimen from ulcer	n/a
	LIV	Specimen from liver	n/a
	THRT	Specimen from throat	n/a
	PANC	Specimen from pancreas	n/a
	URNS	Urine sediment specimen	n/a
	GAST	Gastric contents specimen	n/a
	CVM	Cervical mucus specimen	n/a
	DUFL	Duodenal fluid specimen	n/a
	BLDV	Venous blood specimen	n/a
	BLDC	Capillary blood specimen	n/a
	BLDA	Arterial blood specimen	n/a
	GENL	Genital lochia specimen	n/a
	PLR	Pleural fluid specimen	n/a
	SNV	Synovial fluid specimen	n/a
	GAS	Gaseous material specimen	n/a
	PLC	Specimen from placenta	n/a
	CNJT	Specimen from conjunctiva	n/a
	DRN	Drain device specimen	n/a
	CTP	Catheter tip specimen	n/a
	SMN	Seminal fluid specimen	n/a
	ENDM	Specimen from endometrium	n/a
	URTH	Specimen from urethra	n/a
	DIAF	Dialysis fluid specimen	n/a
	FIST	Specimen from fistula	n/a
	ABS	Specimen from abscess	n/a
	AMN	Amniotic fluid specimen	n/a
	CSF	Cerebrospinal fluid specimen	n/a
	TLNG	Tissue specimen from lung	n/a
	BRN	Specimen from burn injury	n/a
	GENF	Female genital fluid specimen	n/a
	USUB	Specimen of unknown material	n/a
	PRP	Platelet-rich plasma specimen	n/a
PPP	Platelet-poor plasma specimen	n/a	
CVX	Specimen from uterine cervix	n/a	
GEN	Specimen from genital system	n/a	
TLGI	Tissue specimen from large intestine	n/a	
TSMI	Tissue specimen from small intestine	n/a	

Start End Date

Value domain details

Definition	The definitions for each attribute using start/end dates can be found in the corresponding concept information.
Representation class	Date
Maximum length	8
Minimum length	4
Value domain type	Non-enumerated
Source standards	CIHI sources, ISO, pan-Canadian standards

Permissible values

Name	Value code	Value label	Value meaning
Start End Date	n/a	n/a	n/a
	YYYY[MM[DD]] (4–8 characters)		
	Dates (or portions) specified must be valid dates.		

Street Direction

Value domain details

Definition	A code that identifies the directional reference used to qualify the street name.
Representation class	Code
Maximum length	2
Minimum length	1
Value domain type	Enumerated
Source standards	Canada Post

Permissible values

Name	Value code	Value label	Value meaning
Street Direction	E	East	n/a
	N	North	n/a
	NE	Northeast	n/a
	NW	Northwest	n/a
	S	South	n/a
	SE	Southeast	n/a
	SW	Southwest	n/a
	W	West	n/a

Street Name

Value domain details

Definition	The official name recognized by each municipality. Note: The street name should not be translated (e.g., “Main” cannot be translated to “Principale”).
Representation class	Text
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	Canada Post, HL7, NCI

Permissible values

Name	Value code	Value label	Value meaning
Street Name	n/a	n/a	n/a

Street Number

Value domain details

Definition	The number of a building, house or lot alongside the street. Note: This does not number the street but rather the building.
Representation class	Number
Maximum length	n/a
Minimum length	n/a
Value domain type	Non-enumerated
Source standards	Canada Post, HL7, NCI

Permissible values

Name	Value code	Value label	Value meaning
Street Number	n/a	n/a	n/a

Street Type

Value domain details

Definition	A code that identifies the type of public thoroughfare in Canada.
Representation class	Code
Maximum length	5
Minimum length	2
Value domain type	Enumerated
Source standards	Canada Post

Permissible values

Name	Value code	Value label	Value meaning
Street Type	ABBAY	Abbey	n/a
	ACRES	Acres	n/a
	ALLÉE	Allée	n/a
	ALLEY	Alley	n/a
	AUT	Autoroute	n/a
	AVE	Avenue (English)	n/a
	AV	Avenue (French)	n/a
	BAY	Bay	n/a
	BEACH	Beach	n/a
	BEND	Bend	n/a
	BLVD	Boulevard (English)	n/a
	BOUL	Boulevard (French)	n/a
	—	—	—

Note

— Only a partial list of value codes is shown. Contact the CRDM DD team (datadictionary@cihi.ca) for the full list.

U.S. State

Value domain details

Definition	A code that represents the name of a principal administrative subdivision of the United States.
Representation class	Code
Maximum length	2
Minimum length	2
Value domain type	Enumerated
Source standards	NCI, U.S. Postal Service, ISO 3166

Permissible values

Name	Value code	Value label	Value meaning
U.S. State	AK	Alaska	n/a
	AL	Alabama	n/a
	AR	Arkansas	n/a
	AZ	Arizona	n/a
	CA	California	n/a
	CO	Colorado	n/a
	CT	Connecticut	n/a
	DC	District of Columbia	n/a
	DE	Delaware	n/a
	FL	Florida	n/a
	GA	Georgia	n/a
	HI	Hawaii	n/a
	IA	Iowa	n/a
	ID	Idaho	n/a
	IL	Illinois	n/a
	IN	Indiana	n/a
	KS	Kansas	n/a
	KY	Kentucky	n/a
	LA	Louisiana	n/a
	MA	Massachusetts	n/a
	MD	Maryland	n/a
	ME	Maine	n/a
	MI	Michigan	n/a
	MN	Minnesota	n/a
	MO	Missouri	n/a
	MS	Mississippi	n/a
MT	Montana	n/a	

Name	Value code	Value label	Value meaning
U.S. State (continued)	NC	North Carolina	n/a
	ND	North Dakota	n/a
	NE	Nebraska	n/a
	NH	New Hampshire	n/a
	NJ	New Jersey	n/a
	NM	New Mexico	n/a
	NV	Nevada	n/a
	NY	New York	n/a
	OH	Ohio	n/a
	OK	Oklahoma	n/a
	OR	Oregon	n/a
	PA	Pennsylvania	n/a
	RI	Rhode Island	n/a
	SC	South Carolina	n/a
	SD	South Dakota	n/a
	TN	Tennessee	n/a
	TX	Texas	n/a
	UT	Utah	n/a
	VA	Virginia	n/a
	VT	Vermont	n/a
	WA	Washington	n/a
	WI	Wisconsin	n/a
	WV	West Virginia	n/a
	WY	Wyoming	n/a
	AS	American Samoa	n/a
	GU	Guam	n/a
	MP	Northern Mariana Islands	n/a
	PR	Puerto Rico	n/a
	UM	United States Minor Outlying Islands	n/a
	VI	Virgin Islands, U.S.	n/a

Glossary of key terms and abbreviations

Term	Definition
attribute	1 piece of specific information about a thing.
CeRx	Canadian Clinical Drug Messaging Standard.
CIHI Reference Data Model (CRDM)	CIHI's high-level, corporate-wide reference data model.
concept	An abstract or general idea generalized from specific instances.
definition	A descriptive statement for a concept that serves to differentiate it from related concepts.
enumerated	A value domain that is specified by a list of all its permissible values.
health system use (HSU)	Health system use of data, currently in its inception and broadly synonymous with secondary use, is the use of health information for clinical program management, health system management surveillance and research, all of which lead to improved patient care and health outcomes.
HL7	Health Level Seven International (HL7) is the global authority on standards for semantic and functional interoperability of health information technology, with members in more than 55 countries.
iterative Development Lifecycle (iDLC)	The process used to engage in information technology projects. It describes which documents or artefacts may be used or are required for a project.
maximum length	The maximum number of characters used to represent permissible values.
minimum length	The minimum number of characters used to represent permissible values.
non-enumerated	A value domain that is specified by a description rather than a list of all permissible values.
permissible value	The specific value or a description of values allowed in a value domain.
relationship	A naturally occurring association among specific things.
representation class	A classification of ways to express data. Representation classes include code, text, number, date and time.
source standards	Sources consulted during the development of a standard or guideline.
value code	An expression of a value meaning allowed in a specific value domain. Sources: ISO, NCI.
value domain	A set of attributes describing representational characteristics of instance data with or without enumerated permissible values. Source: NCI.
value label	The description of the value code.
value meaning	The meaning or semantic content of a value. Sources: ISO, NCI.

Appendix: Text alternatives for images

1. Text alternative for Concept development image

The approach to concept development is initiated when concepts are selected and research is conducted to explore how the concept is used externally. Research is conducted using sources like CIHI documents, pan-Canadian standards and other international sources. The data model is created, then refined to define concept and metadata. Finally, concepts are approved.

2. Text alternative for CIHI Standards Life Cycle: Overview image

The CIHI Standards Life Cycle consists of 7 phases: Initiation; Analysis and consultation; Development; Approval; Publication and communication; Implementation; and Maintenance. During the Maintenance phase, the decision could be to retain, retire or revise the standards.

3. Text alternative for Iterative, bottom-up/top-down approach to maintaining the CRDM image

An iterative top-down approach to CRDM starts with incremental development, consulting with subject matter experts (SMEs) and then releasing the new content of CRDM. A bottom-up approach to CRDM starts when a project is aligning with the CRDM through design and development, which leads to deployment and operations.

4. Text alternative for Client view of the CRDM image

Client is one of the core concepts in CRDM. Each Client may be the recipient of 1 or more health service events. Each Client may also be the recipient of services and/or goods from 1 or more Providers.

5. Text alternative for Organization view of the CRDM image

Organization is another core concept in CRDM. Organization has a name, a role (e.g., data submitter). If an Organization submits data on behalf of another one, there is a relationship between the 2 Organizations. Organizations can have a Category Classification per their provincial/federal status.

6. Text alternative for Health Service Event view of the CRDM image

Health Service Event is a super type of Encounter, Intervention, Observation and Standard Assessment. Each encounter may result in 1 or more Interventions, Observations and/or Standard Assessments.



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