



Canada Health Infoway

# Pan-Canadian LOINC Document Ontology

Working Group

November 3, 2025

# Agenda

- 1) Welcome, Territorial Acknowledgement, Purpose - 5 mins
- 2) Introductions - 5 mins
- 4) Terms of Reference, Decision Making – 5 mins
- 6) Summary to date – 1 min
- 7) Decisions for today – 25 mins
  - Pulmonology
  - Blood Bank and Transfusion Medicine
  - Capitalization
  - Unspecified parts
- 8) Future meetings – 5 min

# Territorial Acknowledgement

We respectfully acknowledge that the land on which we are hosting this meeting – the land that sustains us – includes the ancestral territories of many First Peoples. We recognize the colonial injustices experienced by Indigenous Peoples, many of which continue today and continue to affect their health and well-being. I invite all attendees to reflect on the privilege they have of living, working and playing in the territory from which you are joining this call, and invite you to commit yourself with me to forging culturally safe spaces for and relationships with Indigenous Peoples in Canadian healthcare.

# Problems to Solve

1. **Acute Care** document classification of distributed documents
2. **Community Care** document classification of distributed documents
3. **FHIR** solutions for DocumentReference.type
4. **Artificial intelligence** training and reporting
5. **Implementation** inertia in health systems for document classification

# Pan-Canadian LOINC Document Ontology Working Group

- The Pan-Canadian LOINC Document Ontology Working Group **brings together stakeholders** from across jurisdictions [to build a shared foundation for standardized document titles and categories](#) to support the exchange of health information in Canada.
- **Purpose:**  
Enable document interoperability and increase efficiency for community physicians through the use of **LOINC-based document standards**. By developing and aligning on consistent approaches to document titling and categorization, we aim to **streamline clinical workflows and enhance the exchange of information across systems**.
- **Goals:**
  - **Reduce the administrative burden** associated with non-standardized document titles within the health system.
  - **Enable interoperable document exchange** between systems and endpoints across Canada.
  - **Support flexible implementation** by Provinces, Health Authorities, and EMR Vendors through a document categorization model that accommodates both user preference for title length and varying levels of concept specificity.
- The group is committed to fostering collaboration across jurisdictions and stakeholders to ensure the resulting standards are **practical, scalable**, and support pan-Canadian health data interoperability

# Workgroup *Outputs*

- **Guiding Principles Document**
  - Principles adopted
  - Architectural choices
  - Procedures
- **Editorial Guidelines** for our list of LOINC codes and attributes
  - Application of principles and architecture
- **Recommended changes** of pCLOCD .Doc class
- **Implementation Guide** for health systems to start using Canadian document classifications.

# What perspectives ensure best results for this Pan-Canadian working group?

- Balance of
  - Implementors and clinicians (practical)
  - Inventors and regulators (standards coherence)
- Vendors?
- Other provinces?
- Patients?

# Terms of Reference

- Terms of Reference ( in development)

## Roles

- **Lead:** Dr. Ian Bekker, facilitate discussions, maintain focus on objectives, and ensure consensus is achieved
  - **Members:** Participate actively, provide expertise, review drafts, and support decision-making.
  - **Secretariat:** Linda Monico, Manage logistics, circulate materials, record decisions, and track milestones.
  - **Quorum:** Minimum [e.g., 50%+1 members] required to conduct formal discussions with decisions.
- **Decision making approach:**
    - **Consensus-Based:** Decisions are made when all members can accept and support the outcome.
    - **Fallback Mechanism:** If consensus cannot be reached after discussion, dissenting opinions will be documented, and unresolved items escalated to Infoway Standards team.

# Achieving Quorum

<b>Voting Members</b>
<u>Physicians</u> – 1 vote (Ian Bekker, Teyana Maniuk)
CIHI – 1 vote (Uyen Do, Jennifer Lawson, Shangjucta DasPooja, Marie-Chantal Ehtier, Marie Tran, Teyana Maniuk)
Infoway – 1 vote (Anil Patel, Tarek Kadoura, Linda Monico)
eCHN – 1 vote (Salve Achacoso)
ON Health – 1 vote (Maria Fodor, Hanna Pingal, Roberta Cardiff)
AB Health – 1 vote (Debbis Onos)
BC MOH – 1 vote (Mukesh Kashyap, Daniel Simic, Dennis Cable)
Informatics PhD – 1 vote (Dennis Lee)
BC Hospitals – 1 vote (Natalie Schweizer, Maximilian Besworth)
Ontario Hospitals – 1 vote (Heather Whitfield)
Ontario MD – 1 vote (Matthew Leduc)

# Gradient of Agreement Scale

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5 – Fully support

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4 – Support with some reservations

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3 – Neutral / can live with it

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2 – Needs more discussion before I can agree


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1 – Cannot support as propose

# Actions


#	Action Items	Assigned to	Timelines
1	Prepare a decision matrix to better capture and compare the different options discussed	Linda	Before next meeting
2	Terms of Reference	Linda	For next meeting
3	Identify Voting vs. Non-voting to confirm Quorum. Please send preference of role for voting to Linda at <a href="mailto:Imonico@infoway-inforoute.ca">Imonico@infoway-inforoute.ca</a>	Working group/ Linda	
4	<b>SMD alignment research:</b> Compare <b>Royal College specialties</b> vs <b>CIHI</b> lists (naming, coverage; incl. nursing/allied health considerations). Confirm where terms diverge (e.g., Respiriology vs Pulmonology).	CIHI	For next meeting

# Summary To Date



Ontario and BC  
have Ontologies  
that are working  
for them

- Both have some 'clean-up to do'
- Both have made localizations from LOINC standard (editorial guidelines)



Pan-Canadian  
Ontology needs to  
reconcile their  
editorial  
guidelines for  
national  
perspective.

# Decisions For Today

- Pulmonology
- Blood Bank and Transfusion Medicine
- Capitalization
- Unspecified part numbers

# Decision - Pulmonary

## Problem

- LOINC International has a SMD of *Pulmonary*, a synonym to *Respirology* in Canada

## Example

34103-2	Pulmonary Consult note	Consultation note	Find	Pt	{Setting}
83787-2	Pulmonary Attending Note	Note	Find	Pt	{Setting}
83638-7	Pulmonary Nurse Note	Note	Find	Pt	{Setting}

# Decision – Blood Bank and Transfusion Medicine

## Problem

- LOINC International has a SMD of *Blood banking and transfusion medicine* but Canada has Transfusion Medicine

## Example

89795-9	Blood banking and transfusion medicine Progress note	Progress note	Find	Pt	{Setting}	Doc	Blood banking and transfusion medicine
100553-7	Blood banking and transfusion medicine Hospital Progress note	Progress note	Find	Pt	Hospital	Doc	Blood banking and transfusion medicine
100444-9	Blood banking and transfusion medicine Outpatient Progress note	Progress note	Find	Pt	Outpatient	Doc	Blood banking and transfusion medicine



**THE VOICE FOR TRANSFUSION  
 IN CANADA**

- [CSTM Annual Conference](#)
- [2025 CSTM Conference - St. John's >](#)
- [2024 CSTM Conference - Saskatoon](#)
- [Event Calendar](#)
- [Photo Gallery](#)

*The Canadian Society for Transfusion Medicine is a multidisciplinary society which promotes and supports best practice in transfusion medicine in Canada through education, communication and partnerships.*

[Ask the Transfusion Medicine Community](#)

[Ask the Standards Committee](#)

[Become a CSTM Member](#)

[View Industry Careers](#)

[Hemovigilance](#)

# Decision - Capitalization

## Problem

- LOINC International is inconsistent in their use of capitals in Display Names

## Example

Status	LOINC	Long Common Name	Component	Prop
▼	▼	▼	▼	▼
	68577-6	Orthopaedic surgery Diagnostic study note	Diagnostic study note	Find

# Authoritative Reference

According to the Chicago Manual of Style, you should capitalize the first and last words of a title and all major words (nouns, pronouns, verbs, adjectives, adverbs). Lowercase articles (a, an, the), common coordinating conjunctions (and, but, for, or, nor), and prepositions, with exceptions for prepositions that are used adverbially/adjectivally or are the first/last word of the title. The word "to" should always be lowercased unless it is the first or last word of the title.

The title 'The Chicago Manual of Style' is displayed in a large, bold, black serif font against a solid yellow rectangular background. The text is arranged in four lines: 'The', 'Chicago', 'Manual', and 'of Style'.

# Decision – Unspecified Part Numbers

## Problem

- LOINC uses { *part.name* } as display name of unspecified parts

## Example

# Future Meetings

## Next meetings

- Comparison of all LOINC SMD that have a Canadian synonym and vice versa
- Canadian spelling
- Local display names
- Extension Code structure
- Next editorial guideline issue
- Review of common 691 terms
- Review Principles Document
- Review pCLOCD
- Review draft Guidelines document
- Have project teams (IPS, eReferral, HIE) present

# Dennis Lee's Suggestions for PanCan Ontology

- Display Name localization options
- Extension Code structure
- Editorial Guidelines
- Mapping between provincial choices
- Tracking changes
- Distribution Formats
- Request LOINC Codes and Parts

# LOINC Document Ontology Axes

- **Subject Matter Domain** (Method)
  - E.g., Cardiology, Pediatric Cardiology, Physical Therapy
- **Role** (Method)
  - E.g., Physician, Nurse, Case Manager, Therapist, Patient
- **Setting** (System)
  - E.g., Hospital, Outpatient, Emergency Department
- **Type of Service** (Component)
  - E.g., Consultation, History and Physical, Discharge Summary
- **Kind of Document.** (Component)
  - E.g., Note, Letter, Consent

TITLES YOU'LL  
SEE AT  
LOINC.ORG

VALUABLE LOINC ONTOLOGY DESCRIPTION:

[HTTPS://LOINC.ORG/KB/USERS-GUIDE/DOCUMENT-ONTOLOGY/](https://loinc.org/kb/users-guide/document-ontology/)

# What will be your task in this committee?

## Think

- How is our ontology going to be used?
- How to make it work well for different users?
- How to make it work well for different systems?
- Solve tough choices
  - Discussion
  - Consensus
- Read the materials
- Contribute (tasks) where you can

# Work Plan

1. Each Province cleans up their ontology
2. Creating PanCan editorial guidelines through review of ON and BC editorial guidelines
3. Recommend to include the common 623 concepts
4. Creating PanCan editorial guidelines through review the 'symmetrical difference' of BC and ON ontologies
  - How to handle semantic synonyms
  - How to handle level of granularity
5. Recommend to include the unique ON and BC concepts
6. Choose the format of extensions
7. Recommend to include extensions of ON and BC ontologies
8. Choose storage format
9. Choose distribution format

# Subject Mater Domains - LOINC

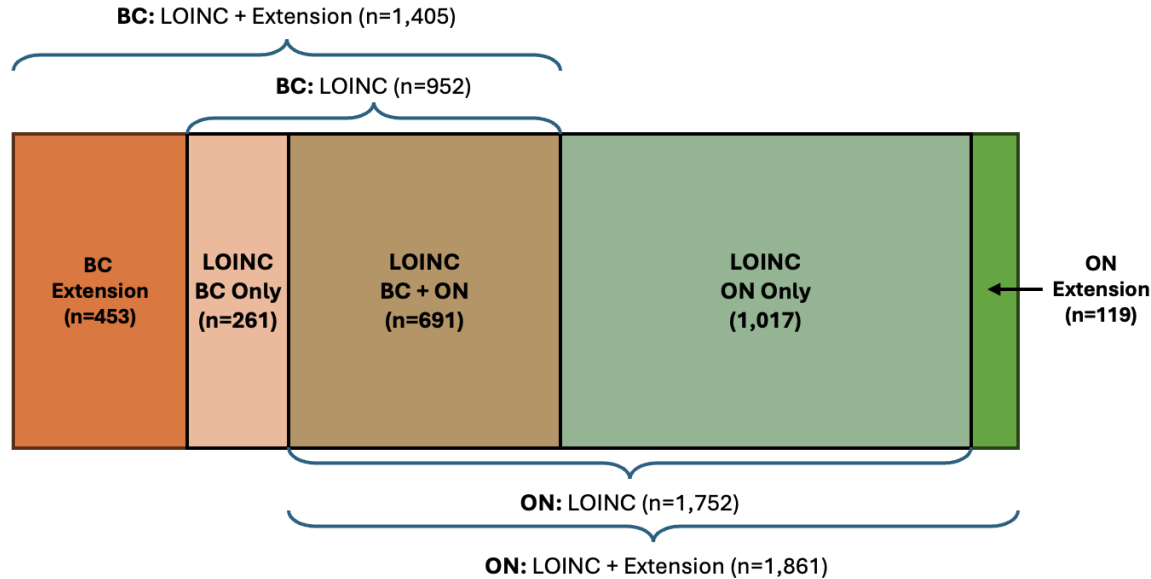
- Compare all to the Royal College of Physicians and Surgeons specialties and subspecialties to LOINC
- Will we not support any RCoPH subspecialties in Canadian Ontology (too specific)?

# Anil's document

Draft 'Guidelines' document

- Canadian Context
- Criteria for LOINC Code Additions, Changes, Deprecation – and Granularity Decisions
- LOINC Document Ontology Code Request Checklist

# How the Canadian Ontology can represent what is in use today?





**Canada Health Infoway**

# Thank you!

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[infoway-inforoute.ca](http://infoway-inforoute.ca)

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# Canadian potential SMD

Special Program	Clinician Investigator Program
Special Program	Surgical Foundations

AFC-Diploma	Trauma General Surgery
AFC-Diploma	Acute Care Point of Care Ultrasonography (POCUS)
AFC-Diploma	Adolescent and Young Adult Oncology
AFC-Diploma	Adult Cardiac Electrophysiology
AFC-Diploma	Adult Congenital Heart Disease
AFC-Diploma	Adult Echocardiography
AFC-Diploma	Adult Glomerular Diseases
AFC-Diploma	Adult Hepatology
AFC-Diploma	Adult Interventional Cardiology
AFC-Diploma	Adult Thrombosis Medicine
AFC-Diploma	Advanced Heart Failure and Cardiac Transplantation
AFC-Diploma	Antimicrobial Stewardship
AFC-Diploma	Brachytherapy
AFC-Diploma	Child Maltreatment Pediatrics
AFC-Diploma	Clinical Informatics
AFC-Diploma	Clinician Educator
AFC-Diploma	Consultation-Liaison Psychiatry
AFC-Diploma	Cytopathology
AFC-Diploma	Hematopoietic Stem Cell Transplantation and Cellular Therapy
AFC-Diploma	Hyperbaric Medicine
AFC-Diploma	Molecular Diagnostics in Laboratory Medicine
AFC-Diploma	Neonatal Hemodynamics and Targeted Neonatal Echocardiography
AFC-Diploma	Neonatal Neurocritical Care
AFC-Diploma	Neuro-intervention
AFC-Diploma	Neuromuscular Medicine
AFC-Diploma	Patient Safety and Quality Improvement
AFC-Diploma	Pediatric and Perinatal Pathology
AFC-Diploma	Pediatric Anesthesiology
AFC-Diploma	Prehospital and Transport Medicine
AFC-Diploma	Retina
AFC-Diploma	Sleep Disorder Medicine
AFC-Diploma	Solid Organ Transplantation
AFC-Diploma	Spine Surgery
AFC-Diploma	Sport and Exercise Medicine
AFC-Diploma	Transfusion Medicine

Specialty	Anatomical Pathology
Specialty	Diagnostic and Clinical Pathology
Specialty	Diagnostic and Molecular Pathology
Specialty	Diagnostic Radiology
Specialty	General Pathology
Specialty	General Surgery
Specialty	Hematological Pathology
Specialty	Medical Genetics and Genomics
Specialty	Medical Microbiology
Specialty	Neuropathology
Specialty	Neurosurgery
Specialty	Orthopedic Surgery
Specialty	Otolaryngology–Head and Neck Surgery
Specialty	Public Health and Preventive Medicine

Subspecialty	Pediatric Hematology/Oncology
Subspecialty	Cardiology
Subspecialty	Clinical Immunology and Allergy
Subspecialty	Clinical Pharmacology and Toxicology
Subspecialty	Colorectal Surgery
Subspecialty	Developmental Pediatrics
Subspecialty	Endocrinology and Metabolism
Subspecialty	Forensic Pathology
Subspecialty	Forensic Psychiatry
Subspecialty	General Internal Medicine
Subspecialty	General Surgical Oncology
Subspecialty	Geriatric Psychiatry
Subspecialty	Gynecologic Reproductive Endocrinology and Infertility
Subspecialty	Infectious Diseases
Subspecialty	Maternal-Fetal Medicine
Subspecialty	Medical Biochemistry
Subspecialty	Neonatal-Perinatal Medicine
Subspecialty	Neuroradiology
Subspecialty	Palliative Medicine
Subspecialty	Pediatric Emergency Medicine
Subspecialty	Pediatric Radiology
Subspecialty	Respirology
Subspecialty	Thoracic Surgery