



**Canada Health Infoway**

# **IHE Canada Community Update**

Date: February 9, 2024

Attila Farkas  
Sr. Director, Interoperability Product Portfolio  
IHE Canada, Chair

# Agenda

- Overview of the Year in Progress
- Benefactor Program
- North American Connectathon
- Ongoing Roadmap Development
- Patient Summary Activity
- Profile Authoring: Lunch and Learn Sessions
- IHE Canada Status

# IHE International Board Meeting



April  
2023

IHE Canada representative position transitions from Derek Ritz to Attila Farkas during the April IHE International Board meeting at HIMSS 2023 in Chicago.



Following, IHE Canada had active participation in all Board Meetings, including face to face in:

- Rennes, IHE EU Connectathon 2023
- Chicago, RSNA 2023

Think Global, Act Local  
Explore HIMSS23  
International Programmes

17-21 April | Chicago



We all want  
**#BetterGlobalHealth**.  
Let's take the  
journey together.

# Building blocks of Interoperability

**MAY 2023**



4

**MODULAR, STANDARDIZED  
SERVICE CAPABILITIES**



9

**INDUSTRY-WIDE TESTING,  
COMPLIANCE, AND CONFORMANCE**

September  
2023

- In May 2023 Canada Health Infoway, in collaboration with jurisdictional partners published the Shared Pan-Canadian Interoperability Roadmap (scan to download)
- The pan-Canadian roadmap **aligns, supports and complements PT roadmaps** by providing common, pan-Canadian data, technical and policy standards





# FHIR<sup>®</sup> North

## FHIR in the Shared pan-Canadian Interoperability Roadmap



October  
2023

Attila Farkas

Sr. Director, Interoperability Product Portfolio Lead  
Canada Health Infoway, Digital Health Interoperability

October 19, 2023

# IHE Benefactor Role

"We are excited to welcome Canada Health Infoway as benefactors of Integrating the Healthcare Enterprise International," says David S. Mendelson, MD, FACR, co-chair of the IHE International Board. "Their recognition of the important work IHE has accomplished to date and their willingness to support and influence the evolving standards work as HIT evolves is greatly appreciated!"

"I am excited to announce Canada Health Infoway's Benefactor membership in IHE International," says Attila Farkas, Senior Director of Interoperability at Canada Health Infoway. "In an era where seamless information exchange is paramount, joining forces with this global consortium reaffirms Canada's commitment to advancing interoperability and acts as an important step toward advancing an interconnected, seamless, and patient-centric healthcare system."

"The Benefactor Program represents a pivotal step in realizing our vision for a brighter and sustainable future," says Michael J. McCoy, MD, FACR, co-chair of the IHE International Board. "We are confident that the support garnered through this initiative will significantly amplify our ability to create positive change."



# IHE Connectathon



## IHE North America (NA) Connectathon 2024

Are you working to fine-tune product interoperability? Complete months of development in minutes at the IHE Connectathon testing event and collaborate with your industry colleagues at one of the largest health IT testing events in the world. Join us in **Oak Brook, Illinois, February 19-23, 2024, at the RSNA Headquarters.**

IHE profiles are use-case based implementation guides built on established standards, including HL7® FHIR®, DICOM®, W3C and others. They are implemented in care settings and health information exchanges around the world.

Testing will be overseen by IHE Catalyst, the non-profit testing services wing of IHE. IHE Catalyst helps oversee IHE testing events in Europe, Asia, North America and recently South America, making Connectathons a truly global activity. In addition, Catalyst provides services for testing programs for national and regional eHealth initiatives around the world.

Testing will make use of the IHE Gazelle testing platform, a comprehensive testing tools portfolio and testing management platform developed by IHE-Europe, IHE USA and IHE Catalyst along with testing and validation tools developed by the US National Institute of Standards and Technology, MITRE, and other international collaborators. IHE Gazelle has been used to support quality testing in IHE Connectathons for more than 15 years worldwide.

The results of testing performed at IHE Connectathons are recorded in the IHE Connectathon Results Database, which can be used to attest to a vendor's interoperability capabilities in tenders and as a pathway toward certification and regulatory filings. It is also used to qualify vendors for participation in public demonstrations, including those at the HIMSS Interoperability Showcase™ and the RSNA Imaging AI in Practice Demonstrations.

### In Collaboration with:



**Attend the 2024 IHE North America Connectathon was created by [Attila Farkas](#)**

There is a historic IHE Connectathon held at the RSNA headquarters in Oak Brooks, IL in February 2024. More information is available [here](#) and [here](#).

This is a great opportunity for all Canadian vendors that attended the Canadian Projectathons of 2022 and 2023 to showcase their integration abilities and demonstrate IPS adoption in Canada. Space is limited and virtual attendance is being investigated.

IHE Canada

# Progress this year

Engagement

Alignment workshop in person with AB, BC, ON, SK and MB in support of Roadmap; Online with others

Onboarded key new members and program structure prepared

Launched working groups for the following initiatives:

- Patient Summary
- eReferral
- Reference Architecture

Engagement sessions with other stakeholders (e.g., data and standards communities, vendors)

Vendor early adopter program



Development

Developed PS-CA v1.1.0, v2.0.0 specification and draft v2.0.0 of CA:FeX integration profile

Conducting analysis & development of CA:eReC integration profile based on jurisdictional requirements

Developing FHIR profiles using known portions of the first draft of p-CHDCF

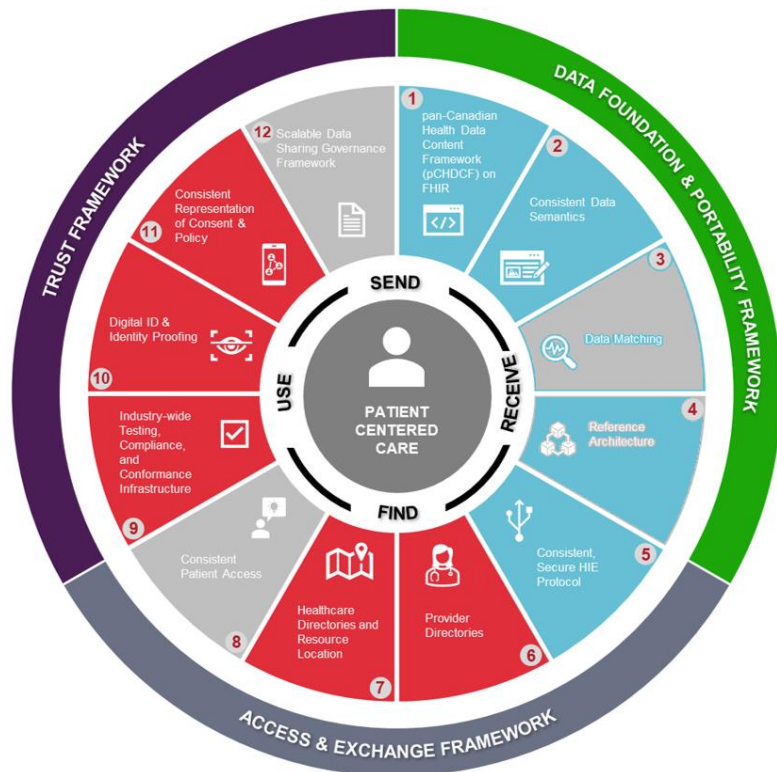
✓ *Completed*

✈ *In progress*

**MORE ON THESE IN PROFILING SUPPORT**

# Building Blocks to Enable Interoperability

Building blocks 1,2,4 and 5 are currently in progress. As DHI moves into year 2 and 3, other building blocks must become high priority to ensure current and future initiatives reach their full capability (i.e., as more building blocks are built, the more realistic secure health information exchange can occur).



## Work In progress

- **BB 1:** pan-Canadian Health Data Content Framework – completion Sept 2024
- **BB2 :** CA Core – Completion of v1.0 DFT in July
- **BB4:** Reference Architecture
- **BB5:** CA:FeX v2.0.0 DFT in July

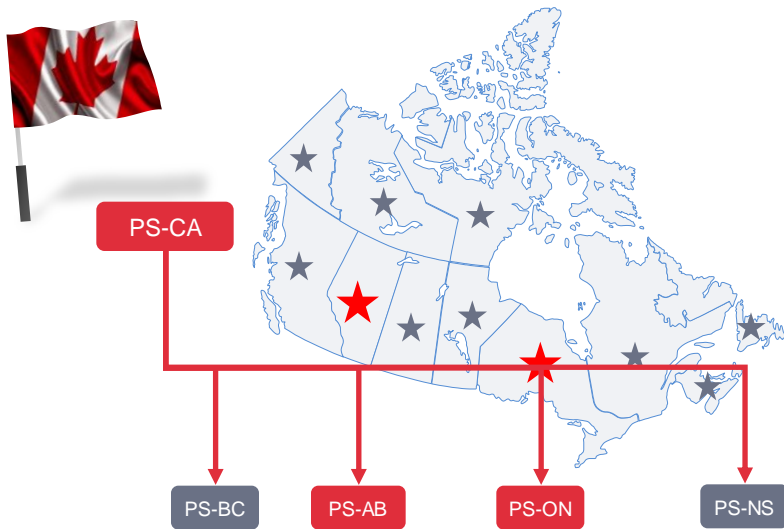
## Priority Items for Y2-3

- **BB6:** Provider Directories – Relevant to immediate eRef/eCon priorities
  - Actively being worked on by BC, SK, AB and ON.
  - We need to prioritize efforts in support this work
- **BB7:** Healthcare directories and resource location (see above interest)
- **BB9:** Infrastructure in support of National Conformance Service
- **BB 10 & 11:** Digital ID, Identity Proofing, Consent and Policy are high priority items that will impact the capabilities of all initiatives. Interoperability will not be successful without these building blocks. If we truly want to position ourselves as an ONC, we need to tackle important challenges of secure transfer of health information.

# Cross-jurisdictional PS-CA Building Blocks

Patient Summary-CA: Data Domains of Interest by Canadian Jurisdiction and Release

IPS-UV		PS-CA						AB	BC	MB	NL	ON	SK	v1.0.0 TI	v1.1.0 DFT	v2.0.0 DFT	
Header	Subject	Header	Subject													+	
	Author		Author														+
	Attester		Attester														+
	Custodian		Custodian														+
Required	Medication Summary	Recommended	Medication Summary													+	
	Allergies and Intolerances		Allergies and Intolerances														+
	Problem List		Problem List														+
Recommended	Immunizations	Recommended	Immunizations													+	
	History of Procedures		History of Procedures														+
	Medical Devices		Medical Devices														
	Diagnostic Results		Diagnostic Results														+
Optional	Vital Signs	Optional	Vital Signs													+	
	Past history of illness		Past History of illness														+
	Social History		Social History														+
	Advance Directives		Advance Directives														
	Pregnancy		Pregnancy														
	Functional Status		Functional Status														
	Plan of Care		Plan of Care														
		EXT	Extension(s)														
			Family History													+	



As the Patient Summary (and other initiatives such as eReferral) evolve and implementations expand across the country, a formal **decision-making** approach to **achieve alignment** is needed to **solve for differences** (e.g., legislation, policy, clinical workflow, terminology, technical, etc.)

Committing to a **core pan-Canadian approach** (e.g., core data model, minimum must support values, cardinality, etc.) requiring **minimal configurations** to meet **intra-jurisdictional needs** without limiting the future of **inter-jurisdictional exchange**.

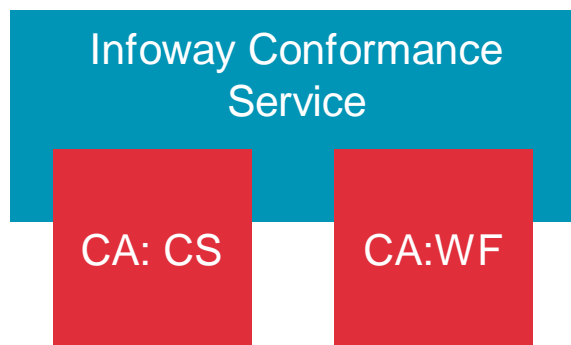
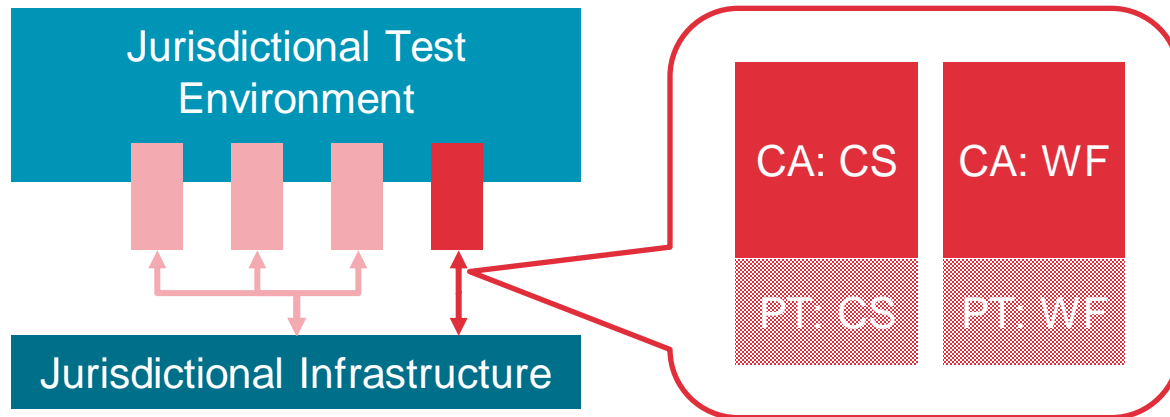


# Vendor Mobilization Strategy Framework



# End-State Vision:

## Complementary National Conformance Service



- CA: CS – pan-Canadian Conformance Scope
- CA: WF – pan-Canadian CS` Clinical Workflow
- PT: X – PT-specific localization of the above items

# CA:FeX, MHD, IUA Simulators

## Patient Summary API (CA:FeX) 0.2 OAS3

RESTful APIs used to save and retrieve Patient Summary documents.

Based on [CA:FeX profile](#)

### Note:

- Where applicable, FHIR search interactions are required to support both GET and POST methods. In the POST variant, parameters may appear in both the URL and the body. See [FHIR search](#) for more details.
- This page is intended to be used as dynamic documentation for the PS-CA CA:FeX APIs. Please do not include any PII/PHI in the documents exchanged via this page.
- The data served by this page is ephemeral and should not be considered as persistent in the long term.
- When executing transactions combined with authorization (utilizing [IHE IUA profile](#)), a valid access token is required that is provided by the authorization server. The token must include the respective scopes for each CA:FeX transaction (CAFEX-1, CAFEX-2 and CAFEX-3). Use the Authorize button to provide the access token.

### Servers

<https://pancanadianio.ca:10001/cafex> ▾

Authorize 

### Capability Statement FHIR Capability Statement for this service

**GET** /`metadata` Retrieves the FHIR Capability Statement for this service

### Data Recipient APIs for saving Patient Summary documents

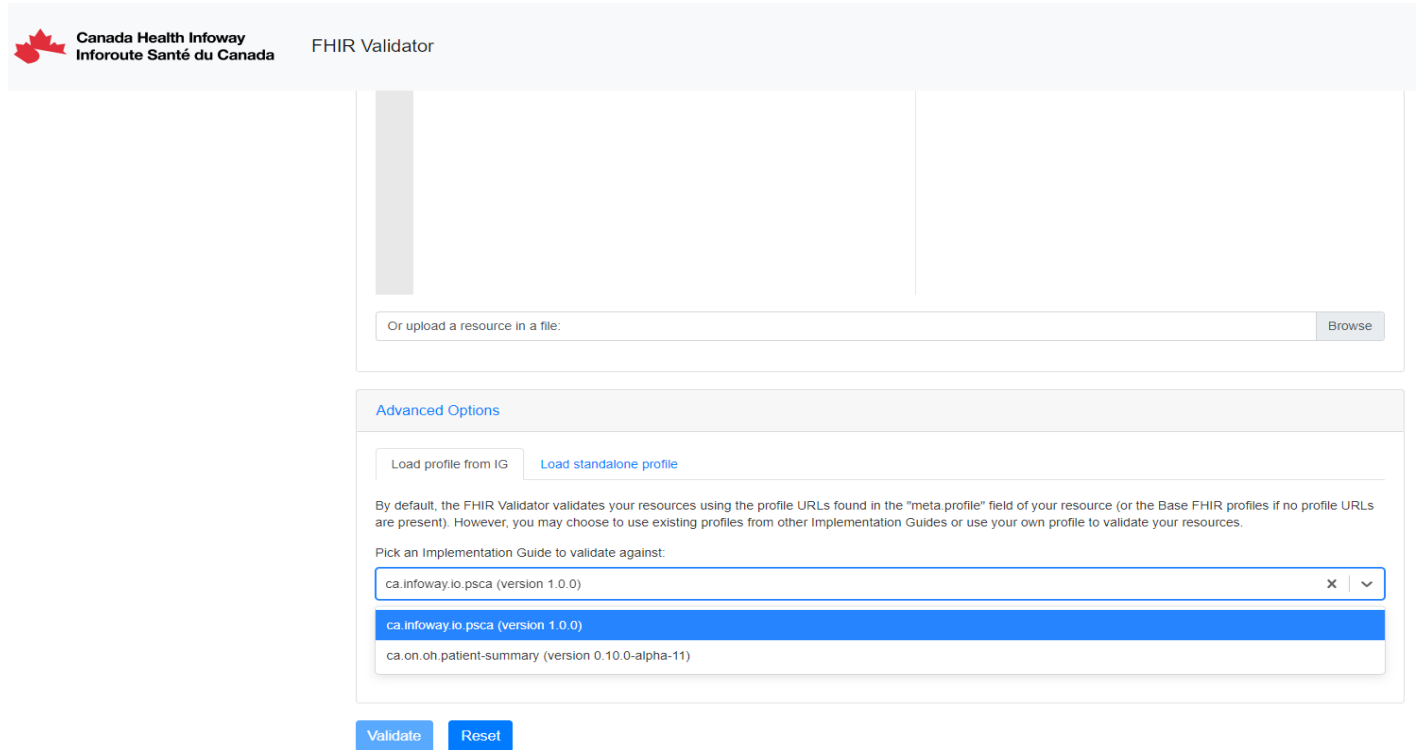
**POST** /`Bundle` Saves a new Patient Summary to the document repository [CA:FeX-1]

### Data Responder APIs for retrieving Patient Summary documents

**GET** /`Bundle` Retrieves a list of document Bundles matching the search criteria [CA:FeX-2A]

**POST** /`Bundle/_search` Retrieves a list of document Bundles matching the search criteria [CA:FeX-2A]

# Validators and Renderers



The screenshot shows the FHIR Validator interface. At the top left, it features the Canada Health Infoway logo and the text "Canada Health Infoway Inforoute Santé du Canada". The main title "FHIR Validator" is centered at the top. Below the title is a large, empty rectangular area for resource upload. Underneath this area is a text input field with the placeholder "Or upload a resource in a file:" and a "Browse" button to its right. A section titled "Advanced Options" is located below the upload area. It contains two tabs: "Load profile from IG" (selected) and "Load standalone profile". Below the tabs is a paragraph of text explaining the default validation process. Underneath the text is a label "Pick an Implementation Guide to validate against:" followed by a dropdown menu. The dropdown menu is open, showing three options: "ca.infoway.io.pzca (version 1.0.0)" (highlighted in blue), "ca.infoway.io.pzca (version 1.0.0)", and "ca.on.oh.patient-summary (version 0.10.0-alpha-11)". At the bottom of the interface are two buttons: "Validate" and "Reset".





# John Moehrke



Architect: Healthcare Informatics Standards - Interoperability, Privacy, and Security

CyberPrivacy – Enabling authorized communications while respecting Privacy

IHE Co-Chair IT Infrastructure Planning & Technical Committee

HL7 Co-Chair Security WG, FHIR Management Group, FHIR facilitator, and

FHIR Foundation founding member

Employee of ByLight Professional IT Services -- Contractor to VHA MyHealthVet

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Courtney's third law: There are no technical solutions to management problems, but there are management solutions to technical problems.

# IHE Canada – next steps

- IHE Canada (National Deployment Committee) Chair position currently held by Attila Farkas
- The National Deployment Committee Chair position automatically qualifies for a voting position at the IHE International Board
- According to the new rules, IHE International awards a non-voting Board position to one member of a sponsoring organization
- Infoway becoming a Benefactor gives us the opportunity to transition Attila Farkas to the new Board position
- Propose vacating the IHE Canada Chair position and holding new elections for this position





**Canada Health Infoway**

# Q & A



**Canada Health Infoway**

# Thank you!

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