

Vendor Conformance Guide

Introduction

The [Shared Pan-Canadian Interoperability Roadmap](#) identifies twelve **Building Blocks** to address interoperability challenges. Building Block #9 is an Industry-Wide Testing, Compliance and Conformance Infrastructure. Interoperability hinges on vendors' ability to design systems that are compatible with one another. Typically, this compatibility is assessed through testing, compliance and conformance programs.

In the current state, some jurisdictions and professional organizations have certain compliance services in place. That said, the challenge is in the lack of a pan-Canadian framework where solutions can be easily assessed to ensure they can then move across jurisdictional boundaries. This current state prevents the scaling up of solution portability and potentially creates competing conformance programs at the pan-Canadian level. Contributing factors to the current state include the following:

- Lack of coordination to ensure jurisdictions are collaborating and are aligned on testing, compliance and conformance expectations
- Limited opportunity for vendors to test and prove core capabilities (e.g., generation of a compliant Patient Summary document) required for a jurisdictional integration
- Variation in jurisdictional requirements that lead to multiple unscalable solution designs across jurisdictions

To address the current state challenges, the Roadmap focuses on the establishment of a first-class conformity assessment program. Conforming a number of core services at the pan-Canadian level will result in the opportunity for predictable growth, while allowing for different deployment architectures across jurisdictions.

Key components of include:

- Development of a pan-Canadian Conformity Assessment program tied to the Reference Architecture (Building Block #4) that enables vendor solution capability assessment against core ecosystem expectations
- Deployment of a first-class conformity assessment platform (e.g., Gazelle) that provides the infrastructure for jurisdictions and vendors to leverage core testing capabilities for the standardized components referenced above

The Path Forward

Building an Industry-Wide Testing, Compliance and Conformance Infrastructure is a journey. The first step will build on the successes of the first two pan-Canadian Projectathon events held in March 2022 and March 2023 where Infoway, in collaboration with the provinces and territories, invited vendors to participate. Projectathons are an important step and best-practice approach in testing and validation of a specification package, where implementers demonstrate live interoperability of solutions in conformance with pan-Canadian specifications. [Read more about Projectathons here.](#)

As we build the Industry-Wide Testing, Compliance and Conformance Infrastructure, **the first use case will be the pan-Canadian Patient Summary.** Additional use cases, such as eReferral and eConsult will become part of this service offering as the service continues to grow.

Focus of Testing Capabilities (2024)

As several Canadian jurisdictions prepare for Limited Production Rollouts (LPR), testing will be focused on interoperability demonstrations based on the pan-Canadian Patient Summary ([PS-CA v1.1.0 DFT](#)) and the associated pan-Canadian FHIR Exchange ([CA:FeX v1.0.0 TI](#) and/or [CA:FeX v2.0.0 DFT](#)) specifications. The PS-CA specification defines the building blocks to create and share patient summaries. The CA:FeX specification promotes FHIR RESTful exchange patterns that can be applied on top of existing non-FHIR infrastructure and FHIR servers. These two specification packages support secure exchange of a patient's health summary document, are represented using the normative release 4.0.1 of the HL7® FHIR® standard, and are closely aligned to the International Patient Summary specification (IPS).

Testing & Tools Overview

This Guide focuses on conformance self-testing, that allows vendors to access the Gazelle platform and tools, to test and self-assess their implementations against the pan-Canadian specifications.

Vendors will have an opportunity to test and demonstrate capabilities in two distinct areas of the specification:

1. **Document format and content**
2. **Secure, exchange transactions**

1. Document format and content



The PS-CA FHIR Content Data model may be tested using a combination of test data and validation tooling.

- The test cases highlight where configuration is needed and test that it is applied properly, based on claimed vendor conformance.
- Testing will offer an assessment of the FHIR document against PS-CA specifications.

2. Secure, exchange transactions

This area of testing is focused on validating the recommended secure exchange methods of the FHIR patient summary document as presented in the Reference Architecture ([RA v0.1.1 DFT](#)), linked to the PS-CA and CA:FeX specifications.

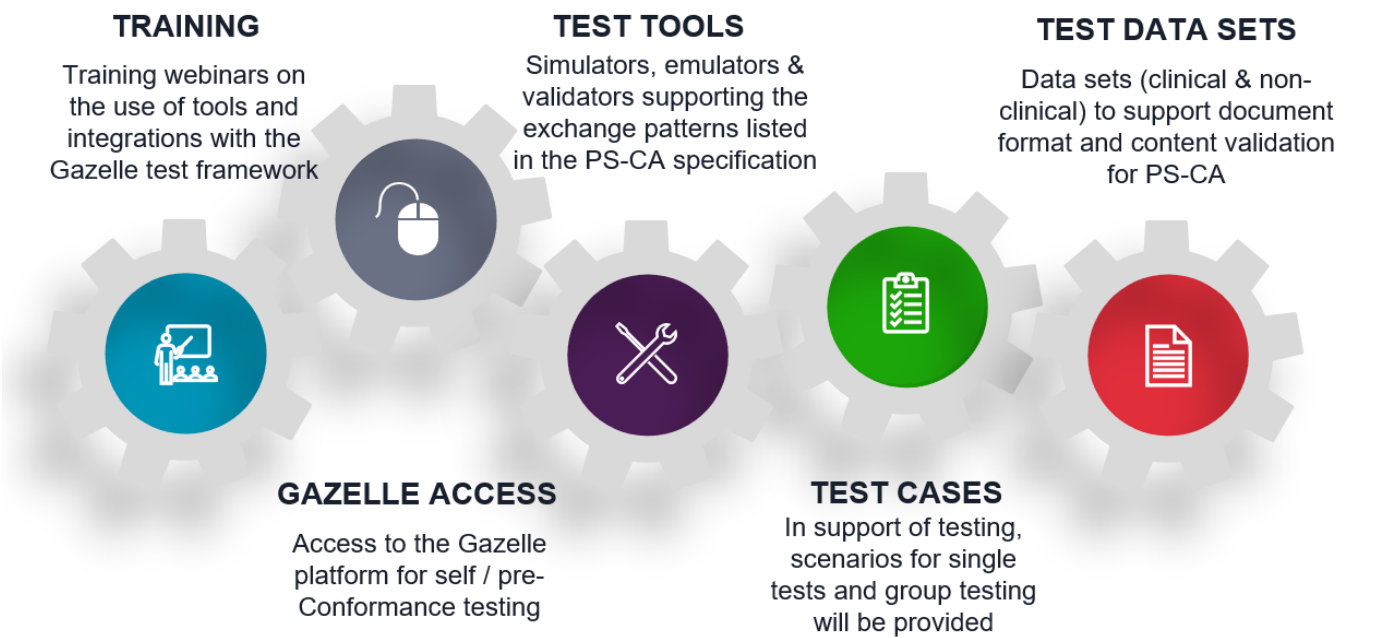
Implementation patterns may differ from jurisdiction to jurisdiction and information exchange channels may vary in terms of their security footprint. Therefore, the Projectathon test cases have been organized into two categories:

 <div>Category 1 Test cases that test individual actor capabilities in isolation</div>	Category 1: Test cases that test individual actor capabilities in isolation E.g., how a system can handle encrypted transactions, how a system can handle a CA:FeX transaction, how a system can handle an OAuth 2 token exchange, etc.
 <div>Category 2 Complex test cases that group individual actor capabilities to simulate real world scenarios</div>	Category 2: Complex test cases that group individual actor capabilities with other relevant actor capabilities to simulate real world scenarios. E.g., how a patient summary creator system can submit the document to a repository by using an OAuth 2 integration, etc.

Training, Tools & Support

Infoway has created training videos to support the use of the tools and integrations with the Gazelle test framework. Once registered, vendors may access the Gazelle platform for self / pre-Conformance testing. In addition to Gazelle, Infoway provides a number of testing tools, including Simulators and Validators to support the exchange patterns listed in the PS-CA specification. Test cases, including scenarios for single tests and group testing are available, along with data set to support document format and content validation for the PS-CA.

Training, Tools & Support



For more details about each of these topics, please refer to the following:

- **Training & Test Tools:** Training videos & testing tools were prepared for the 2023 Projectathon and remain relevant for 2024 Conformance testing. Please visit the [Training & Test Tools](#) page for details.
- **Testing:** The testing approach for the 2024 Conformance testing will follow a similar approach as the 2023 Projectathon, except that testing will be offered on a self-serve and self-testing basis with a focus on the [PS-CA v1.1.0 DFT](#) and the associated pan-Canadian FHIR Exchange [CA: FeX v1.0.0 TI](#) and/or [CA:FeX v2.0.0 DFT](#). Step by step instructions for self-testing are available on the [PS-CA Self-Testing Conformance Steps - 2024](#) page. For additional information about the test cases, including definitions of the profiles, navigate to the [Test Cases](#) page and/or refer to the appropriate specifications. This page will provide details about the two key areas that will be tested:

1. PS-CA Document Format and Content - ensuring that the Patient Summary document is structured in the expected format and that it contains the required information using the correct data types and valuesets, where specific valuesets are defined as required in the PS-CA.
 2. PS-CA Secure, Exchange Transactions - ensuring that at least one core integration profile (CA:FeX or MHD) can be successfully tested.
- **Test Data Sets:** Test data sets may be used in support of the test cases focused on ensuring that the Patient Summary document is structured in the expected format and that it contains the required information using the correct data types and valuesets, where specific valuesets are defined as required in the national (PS-CA). Sample test data is available on the [PS-CA Self-Testing Conformance Steps - 2024](#) page.

Testing Results

Testing results will be reviewed, based on the individual and group actor transactions that vendor systems have proven capabilities in supporting.

- This feature capability assessment will **support jurisdictional integration efforts** in assessing vendors conformance to their respective deployment models.
- Results can be analyzed from the relevant actor/transactions that **align to local architectures**.
- Infoway will verify successful completion of testing and issue a conformance test report for your system listing all tested profiles and the results. The report will be emailed to the email account you identified as your contact, which you may present to your jurisdictional team.

Support

Support Type	Contact Information
Questions, Issues, Comments related to the Conformance Testing	Contact interoperability@infoway-inforoute.ca
Gazelle Platform Self-Testing User Guide	Gazelle Platform Self-Testing User Guide Updated on: Feb 12, 2024
Training Materials	Tools and Training
Patient Summary Working Group	InfoCentral Collaboration Group for Patient Summaries