



**Canada Health Infoway**

# **Shared Pan-Canadian Interoperability Roadmap**

Meeting Date: April 18, 2023

Presenter: Abhi Kalra, VP, Digital Health Interoperability Program

# Context: Working together to improve health care for Canadians

---

**On February 7th, the Government of Canada announced an investment of \$198.6B over 10 years**, including \$46.2B in new funding, for provinces and territories to improve health care services for Canadians. Commitment includes:

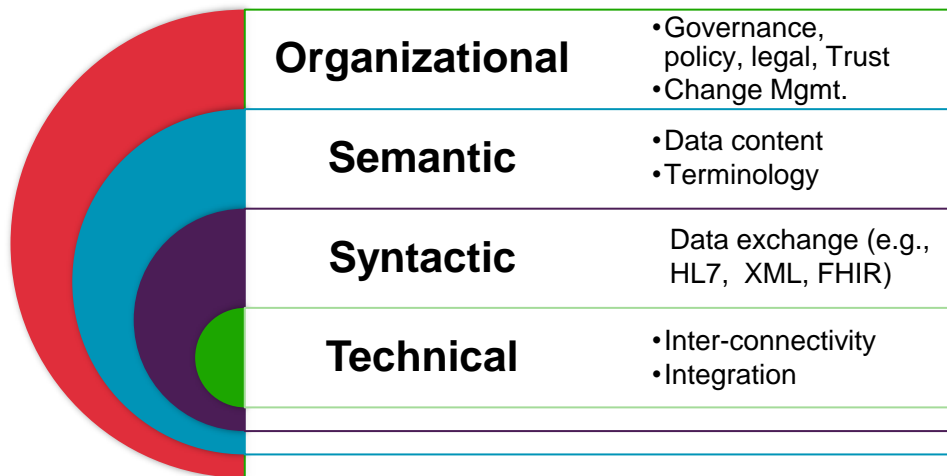
- \$25 billion over 10 years through tailor-made bilateral agreements to advance shared priorities, including **modernizing the health system through standardized health data and digital tools**.
- \$505M over 5 years will also be provided to the Canadian Institute for Health Information (CIHI), Canada Health Infoway (Infoway), and federal data partners, to work with provinces and territories on:
  - developing new health data indicators
  - supporting the creation of a Centre of Excellence on health worker data and planning
  - advancing digital health tools and **an interoperability roadmap**
  - underpinning efforts to use data to improve safety and quality of care

**To leverage this investment toward building a world class health data system, provinces and territories are asked to:**

- **Commit to improving how health information is collected, shared, used, and reported to Canadians** to promote greater transparency on results and to help manage public health emergencies.
- Agree to **adopt common standards and policies related to data** so Canadians can access their own health information and benefit from it being shared between health workers, across health settings, and across jurisdictions.



# Defining Interoperability



*It's the flow of seamless information between different disciplines, authorities, institutions.*

PHARMACIST

*More seamless - easy to access information through a direct link/button. Not jumping through hoops.*

NURSE

*I think it would be a seamless system that allows physicians to interact with each other. Sending info back and forth both ways. It should be Province Wide - not just regions*

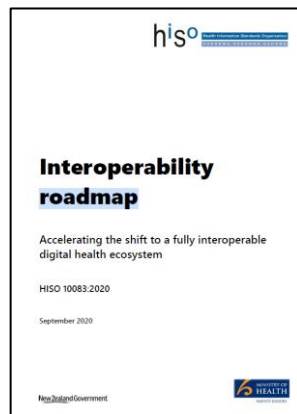
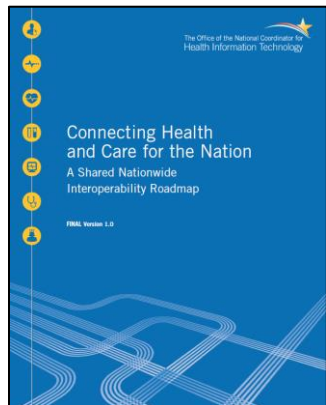
SPECIALIST

*Interoperability means to be able to be accessible to everyone who needs. I wish they were connected to a National program.*

ADMINISTRATOR

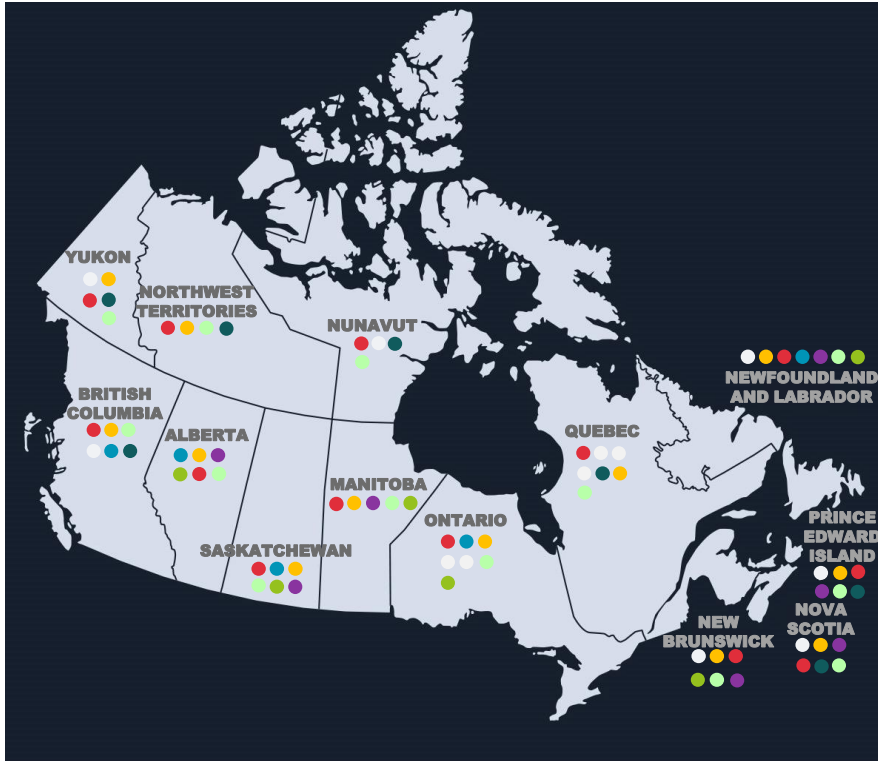
EXCHANGE OF DATA BETWEEN SYSTEMS + ABILITY TO USE THAT DATA = INTEROPERABILITY

# What is an Interoperability Roadmap?



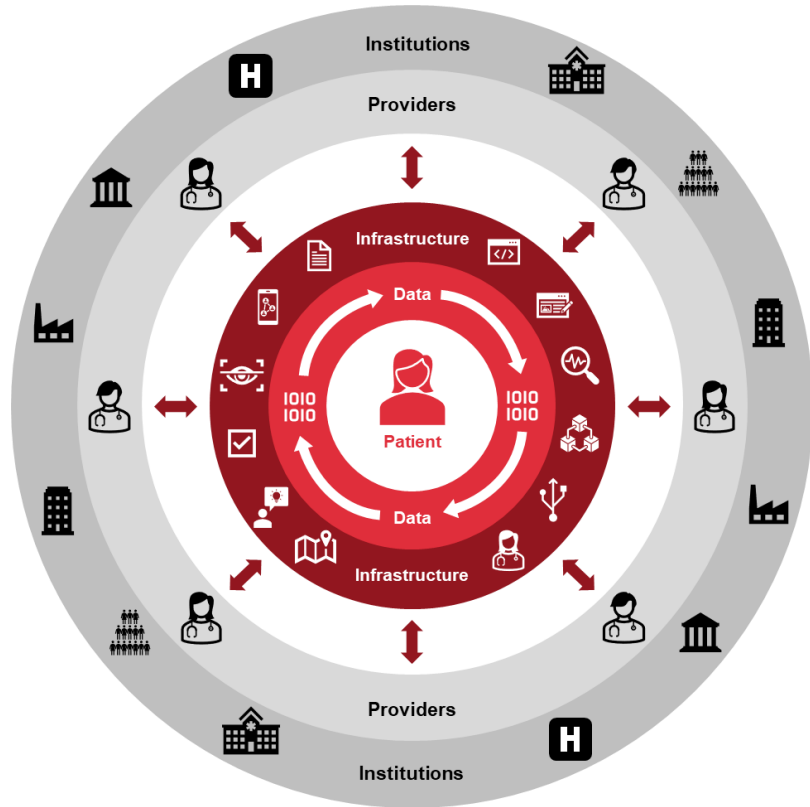
- Many countries have been publishing national digital health interoperability roadmaps as a means to **signal to the market the strategic direction towards which their digital health ecosystems are evolving**
- **Roadmap usually have a timeframe of 5-10 years with a long term vision with focus on near-term wins; they defines stages** as digital transformation is not a big-bang process, public and private sector players can only move in a multistage fashion to achieve progressive levels of maturity.
- These roadmaps include:
  - **core interoperability building blocks that are necessary to advance interoperability** (e.g. reference architectures, data standards, trusted exchange frameworks, digital identity, patient/provider access), and;
  - **common targeted initiatives** that help to advance health system interoperability and achieve outcomes.
  - the **health system, business and clinical benefits and outcomes** that will be derived

# Why Does Canada Need One?



- Canada needs a shared roadmap that articulates how interoperability will be advanced over the next 5 years and onwards to advance:
  - **Patient centric model for safe, secure access to and management of their health information electronically from anywhere**
  - **Connected care to improve providers access to patient health information from various sources at the point of care to provide appropriate and safe care etc.**
- Canada, like many nations have healthcare delivery models that are decentralized, which means their digital health ecosystems are also decentralized and therefore, **a roadmap serves as a compass to guide the convergence of all jurisdictions to common standards for identified priorities**
- In Canada, each jurisdiction is currently at a different level of digital health maturity – **a roadmap will inform and guide all jurisdictions to progress towards the same standards, allowing each to do so at its own pace**, first establishing the necessary and critical capabilities
- The pan-Canadian roadmap **aligns, supports and complements PT roadmaps** by providing common, pan-Canadian data, technical and policy standards

# A Common Vision: Connected Care To Enable Healthier Canadians

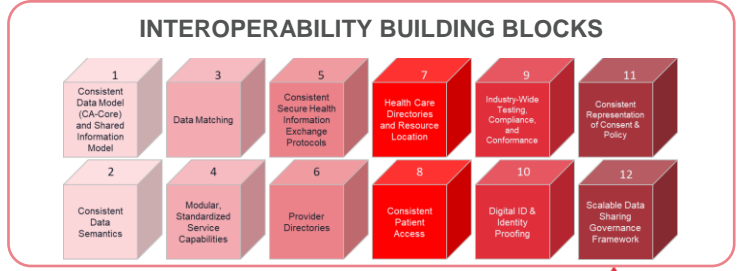
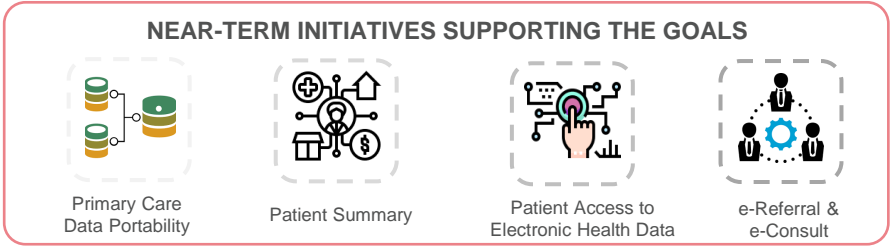
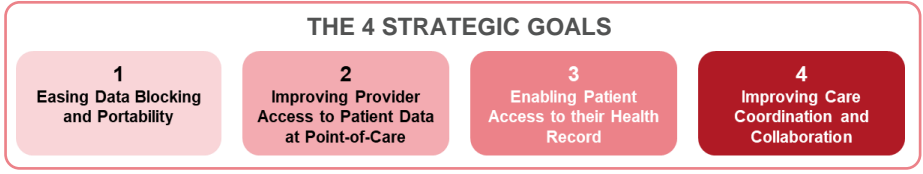
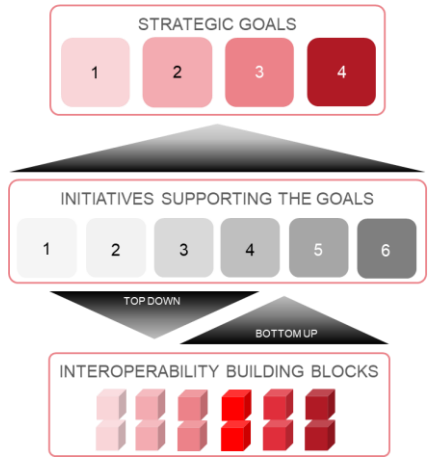


Over the next five years, Infoway will be committed to driving value for all Canadians through:

1. Access to health information for all Canadians
2. A modernized health system built on connected care
3. Digital health innovation by and for all Canadians.

# A Comprehensive Approach To Advance Pan-Canadian Interoperability

## Top-Down, Bottom-Up Approach



See Appendix for Draft 5-Year Roadmap of Initiatives

# Pan-Canadian Interoperability Strategic Goals



1

## Reducing Data Blocking and Easing Portability

### Objectives:

1. Advocate for legislative and/or policy changes to support the elimination of data blocking in Canada.
2. Establish a standardized Pan-Canadian healthcare data set and new specifications to enable data portability.

2

## Improving Provider Access to Patient Data at Point-of-Care

### Objectives:

1. Enable providers, via their point of care solutions, to access relevant patient data
2. Allow point of care solutions to contribute relevant data about a patient into clinical repositories.

3

## Enabling Patient Access to their Health Record

### Objectives:

1. Enable patients to access their longitudinal health record in a seamless manner.
2. Empower patients with the literacy to be able to understand and interpret their health information through better data standardization.

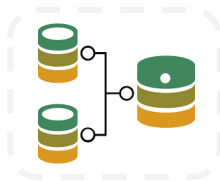
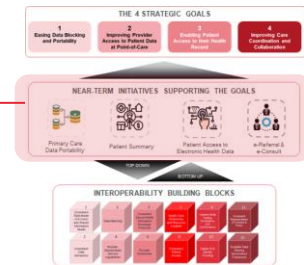
4

## Improving Care Coordination and Collaboration

### Objectives:

1. Foster efficient and secure exchange of health information across the entire care continuum.
2. Facilitate ubiquitous inter-professional collaboration through secure electronic communications across vendor solutions.

# Initial Set of Initiatives Supporting the Strategic Goals



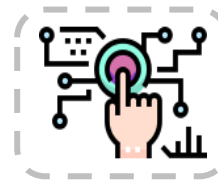
## 1. Primary Care Data Portability

Initiative will initially focus on developing a primary care data set (part of the broader pan-Canadian healthcare data set (CA-Core)) that represents the standardized set of health data classes and constituent data elements for interoperable health information exchange



## 2. Patient Summary

Pan-Canadian Patient Summary (PS-CA) will allow care solutions to contribute pertinent health information into clinical repositories (e.g., provincial/regional EHR, CDR, PHR, etc.) to improve health outcomes and reduce administrative burden for clinicians



## 3. Patient Access to Electronic Health Data

Many Jurisdictions are already enabling patient access to their patient record, mostly through provincial, hospital and private care portals.  
Through this Patient Access initiative, we will work towards enriching the information available to patients, aspiring to enable access to full longitudinal health record



## 4. e-Referral & e-Consult

Establishing pan-Canadian specification will streamline referrals (patients being referred to specialists) and consults (physicians consulting specialists for their expertise) between interoperable systems

# The Building Blocks Of Interoperability

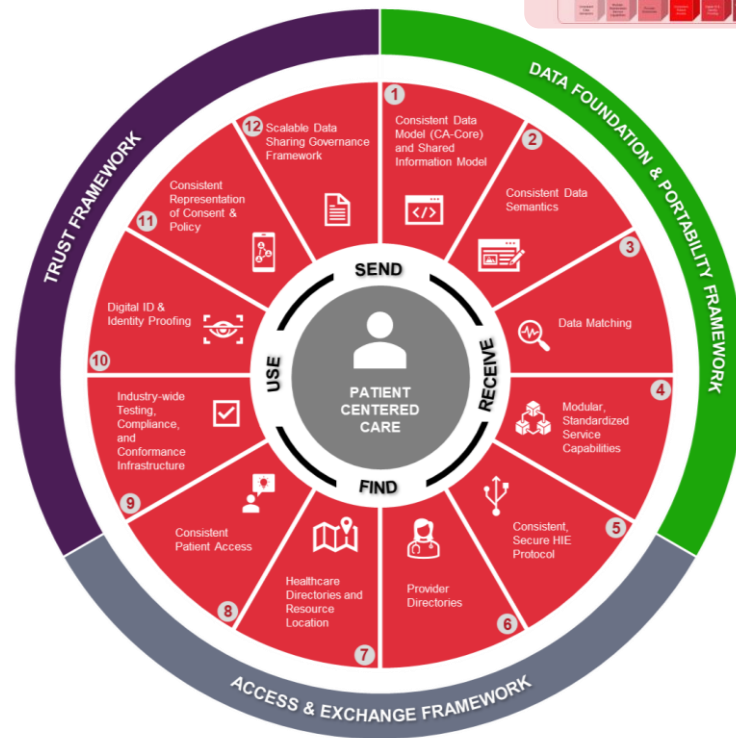


The initial set of building blocks will be continually developed over the next 5 years based on:

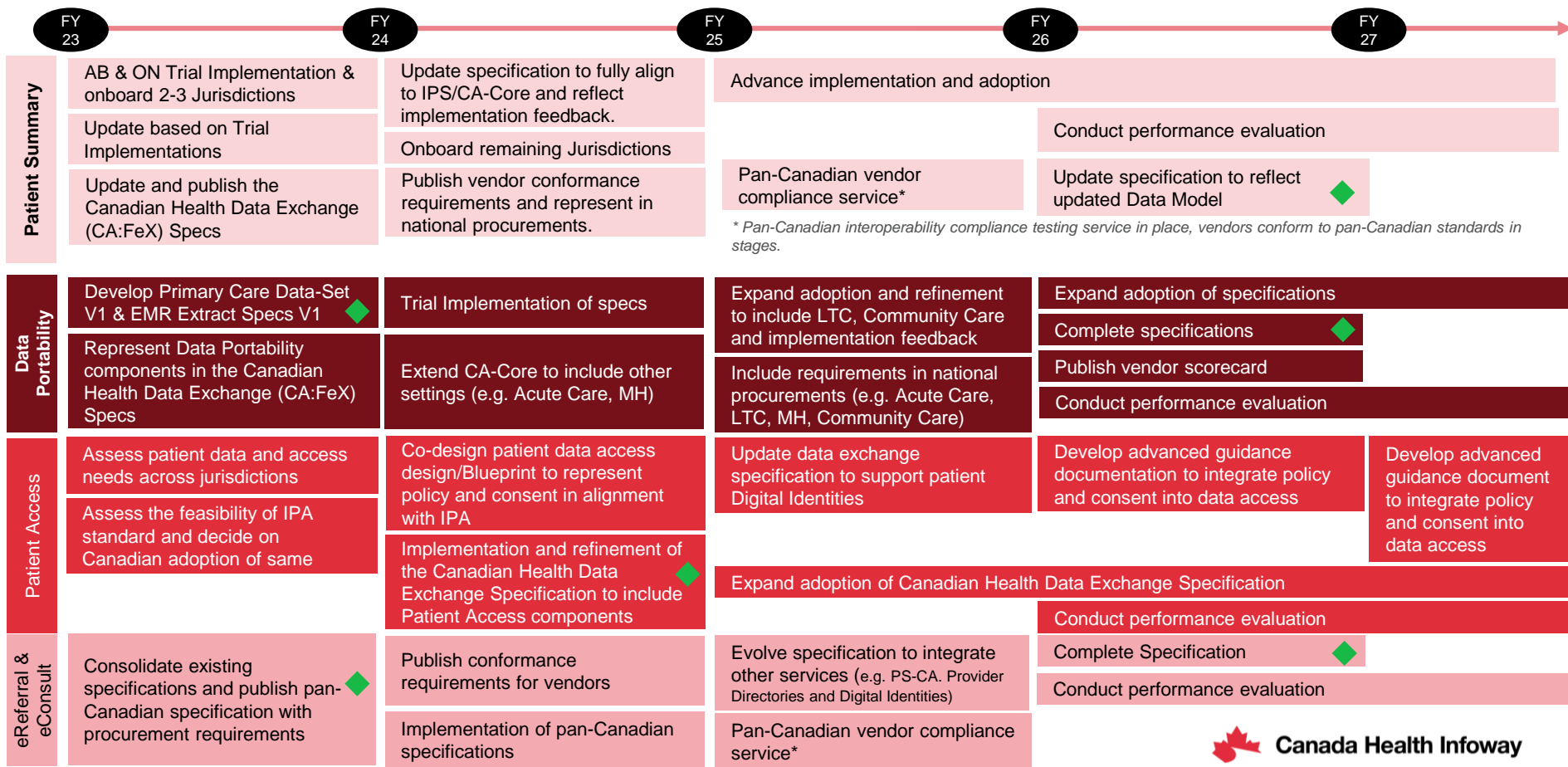
- i. A series of initiatives and programs that are meaningful and aligned to jurisdictional priorities
- ii. The foundational investments that must be made to satisfy programmatic needs and dependencies in the future

The building blocks were identified and grounded in 3 core frameworks that support the entire array of top-down functionalities desired:

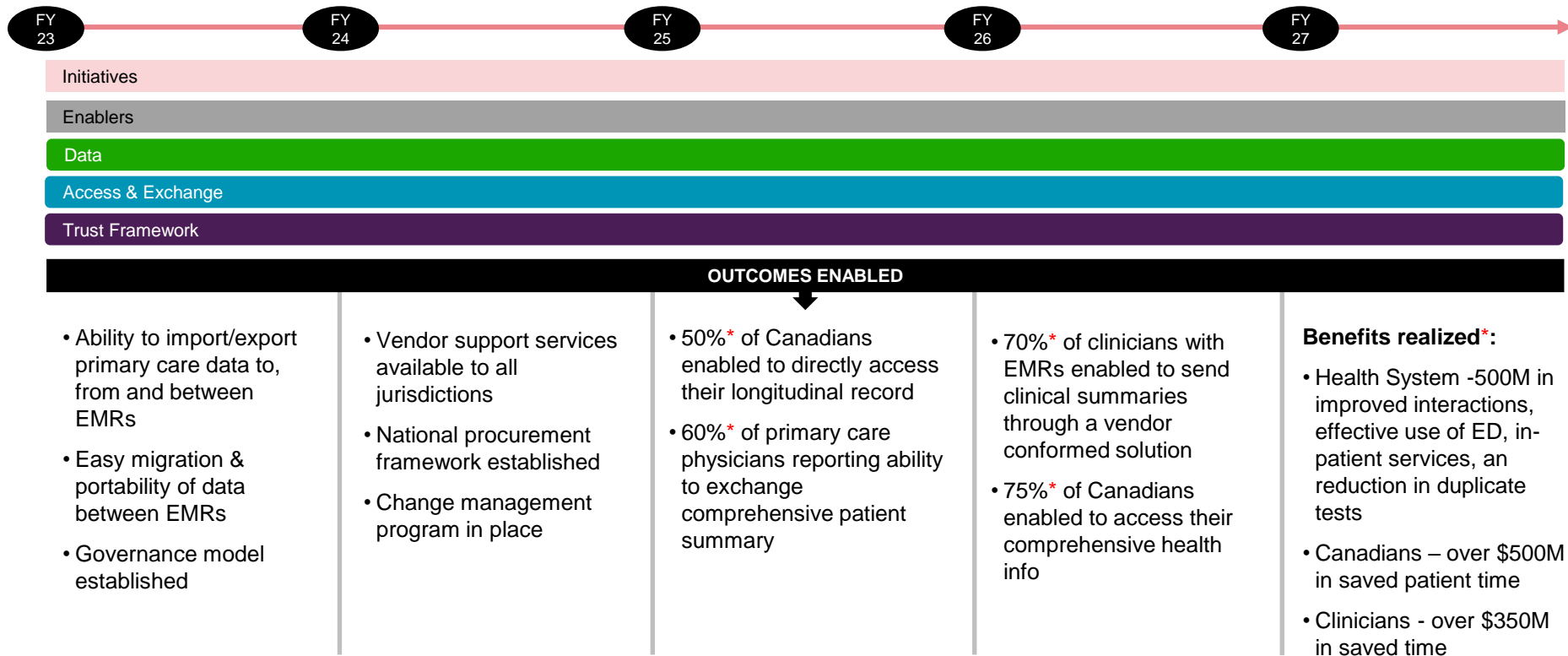
1. **Data Foundation and Portability Framework:** Will create a shared data foundation that is both patient-focused and internationally aligned, driving towards a single, extensible approach, encompassing a referenceable data model, appropriate guidance around semantic data components, minimal mandatory data assets, and the appropriate clinical guidance
2. **Access and Exchange Framework (Data and Service):** This reference architecture driven, conformance assessed, technical framework will define the standard components of the health technology ecosystem. At minimum, this framework will cover access, services, and information exchange as core functionalities
3. **Trust Framework:** Will establish and build consensus on auditable business, technical, and legal rules that create the go-to guide for what participants in shared digital health systems need for electronic health systems to be able to connect and share with each other in the way that meets the needs and expectations of Canadians



# 5-Year Shared Pan-Canadian IO Roadmap (Draft)



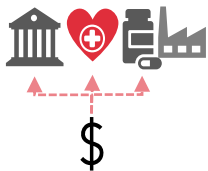
# Anticipated Benefits and Outcomes of Interoperability



1. \* **Outcomes are based on Infoway enablement, ensuring readiness and capability in the system** – i.e. pan-Canadian standards are developed, conformed and available for use by FPTs and private sector.
2. \* Full benefits realization and greater outcomes will require a PT project investments, outcome based funding (bilateral agreements), allocation of resources, full F/P/T buy-in of efforts and PT's execution of their implementation plans.

# Critical Success Factors

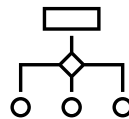
---



**1. Adequate  
Funding**



**2. Legislative  
assessment &  
change**



**3. Governance**



**4. Vendor  
Mobilization**



**5. Change  
Management**



**6. Policy, Privacy  
& Security**



**7. National  
Procurement**



**8. Standards: National  
Release Centre**

# Next Steps

---

- 1. Align roadmap with PTs local Implementation plans**
- 2. Share roadmap with private sector to guide their individual product roadmaps**
- 3. Develop market guidance**
  - In collaboration with our vendor partners/stakeholders, we will work towards generating a market guidance document that will detail the expected trends to be observed in each of the three interoperability frameworks (within the first two quarters of FY23)
  - While final and detailed conformance specifications will only be available when those priority areas are addressed, general market guidance will be given for areas of health data definition and use, information access and exchange, as well as privacy, consent and security, and others.
- 4. Publish 12-24 months milestone plan**



**Canada Health Infoway**

# Thank you!

## Contact Information

Abhi Kalra; [akalra@infoway-inforoute.ca](mailto:akalra@infoway-inforoute.ca)

**VISIT OUR WEBSITE**  
infoway-inforoute.ca

**VISIT OUR SURVEY WEBSITE**  
insights.infoway-inforoute.ca/

**LET'S CONNECT ON LINKEDIN**  
linkedin.com/company/canada-health-infoway/

**LET'S CONNECT ON TWITTER**  
@infoway