HL7-GS1 Round Table

GS1 Healthcare Conference
Toronto, Ontario, Canada

Overview

- ***Context:*** A bit of background about *Infoway*'s mission, programs and approach.

- ***An example of "GTIN" Enabled Messaging:*** HL7 V3 messaging to support the Immunization Management portion of our Public Health Surveillance program.

- ***Some Discussion Points!***

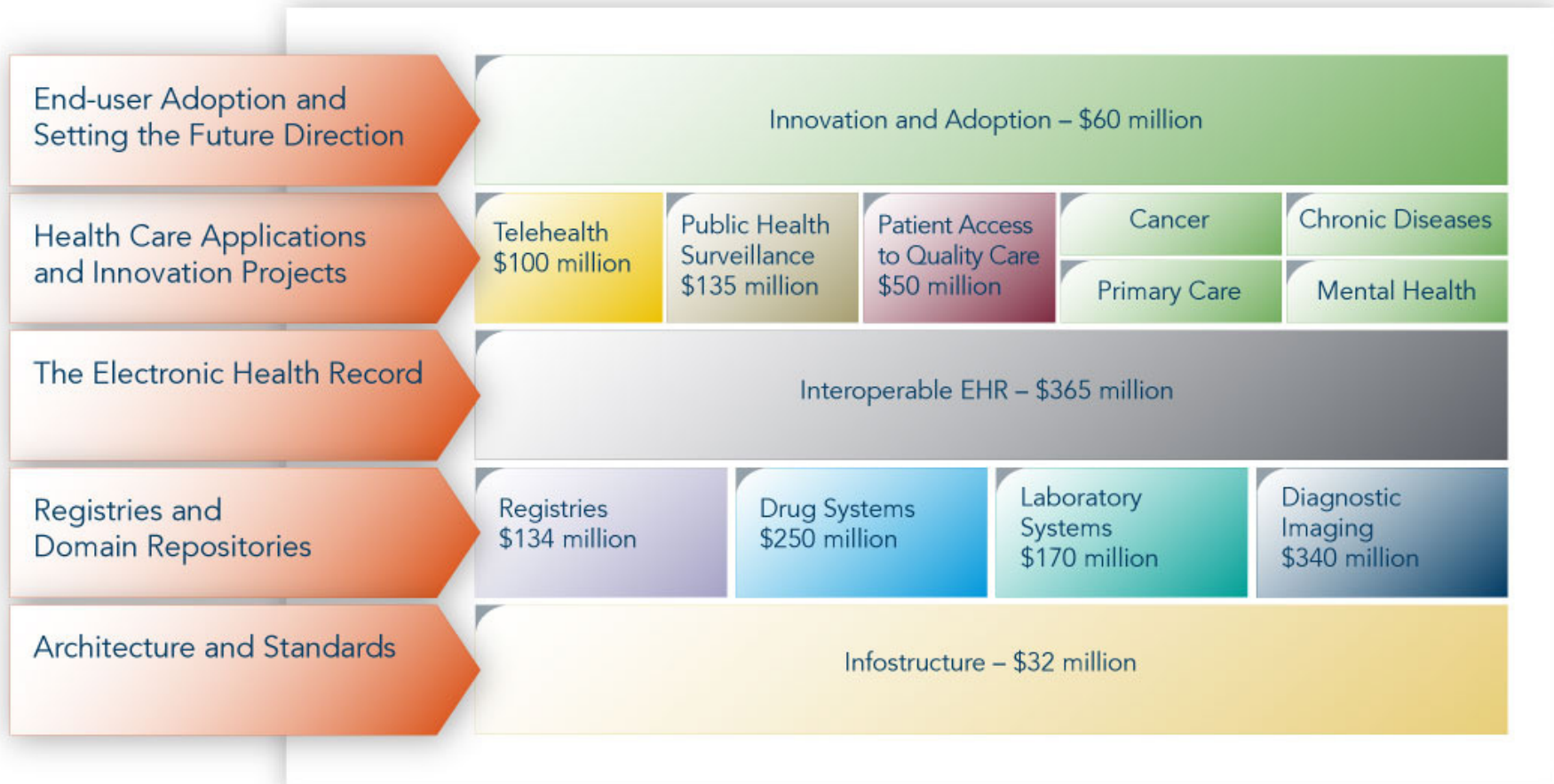A bit of background about *Infoway*'s mission, programs and approach.

CONTEXT

Infoway mission

To foster and accelerate the development and adoption of electronic health information systems with compatible standards and communications technologies on a pan-Canadian basis, with tangible benefits to Canadians.
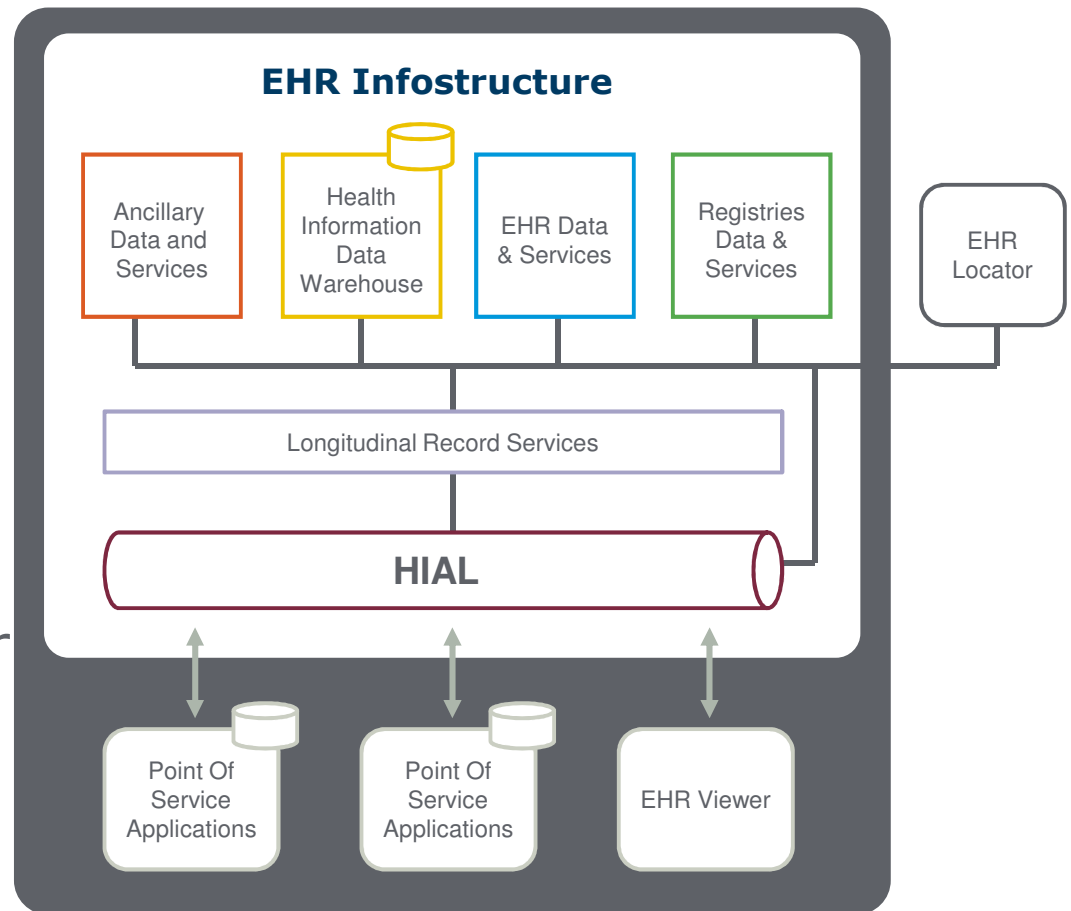
Infoway programs

Ten investment programs totalling $1.6 billion

Program Area	Investment Programs
End-user Adoption and Setting the Future Direction	Innovation and Adoption – $60 million
Health Care Applications and Innovation Projects	Telehealth $100 million · Public Health Surveillance $135 million · Patient Access to Quality Care $50 million · Cancer · Chronic Diseases · Primary Care · Mental Health
The Electronic Health Record	Interoperable EHR – $365 million
Registries and Domain Repositories	Registries $134 million · Drug Systems $250 million · Laboratory Systems $170 million · Diagnostic Imaging $340 million
Architecture and Standards	Infostructure – $32 million

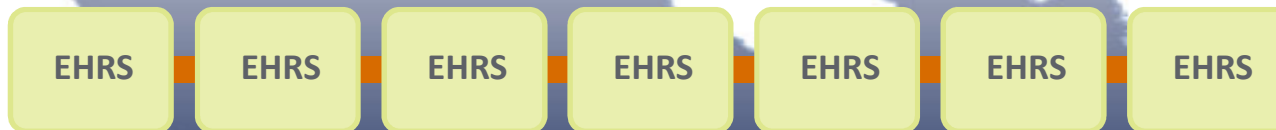# Focus on standards and interoperability

- Common architecture accepted and in use by Canada's health jurisdictions

- Updated architecture includes privacy and security requirements

- New *Infoway* Standards Collaborative

- Extensive "stakeholder driven" EHR standards development and implementation underway

EHR Solution

EHR Infostructure

Ancillary Data and Services	Health Information Data Warehouse	EHR Data & Services	Registries Data & Services	EHR Locator

Longitudinal Record Services

HIAL

Point Of Service Applications	Point Of Service Applications	EHR Viewer

Electronic health records:
Linked jurisdictional networks

Standards-based, peer-to-peer network of EHRS systems

| EHRS | EHRS | EHRS | EHRS | EHRS | EHRS | EHRS |

pan-Canadian EHR Standards leverage or enable the use of key national and international standards and/or terminology systems, including …

HL7

SNOMED CT®

LOINC®
Logical Observation Identifiers Names and Codes

DICOM
Digital Imaging and Communications in Medicine

GS1 The global language of business

HL7 V3 messaging to support the Immunization Management portion of our Public Health Surveillance program.

AN EXAMPLE OF "GTIN" ENABLED MESSAGING

Towards a Public Health Surveillance Network

Infoway's Public Health Surveillance Program

- … will implement solutions that support the <u>identification, management and control of infectious disease cases and outbreaks that pose a threat to the public's health</u>.

Three Key Strategies …

- Develop a Reference Solution ("Panorama")
- Establish Core Standards
- Invest in Jurisdictional Implementations of the Reference Solution

Vaccine inventory management and the establishment of an Immunization Registry are two of the underlying business requirements relevant to today's round table discussion!

Distributed Immunization Management

- HL7 V3 messaging standards were devised to support immunization management in a distributed environment through the following transactions:
  - Between a point of service and an Immunization Registry such as Panorama:
    - Immunization Event Record Request (P07.04)
    - Revise Immunization Event Record Request (P07.13)
    - Immunization Event Detail Query/Response (P07.01)
    - Immunization Candidate Query/Response (P07.11)
    - Patient Immunization Profile Query/Response (P07.18)
  - Between a point of service and Adverse Event Recorder:
    - Immunization Adverse Event Notification (P07.06)
  - Between a point of service and Vaccine Knowledgebase or reference provider:
    - Vaccine Detail Query/Response (P07.16)
    - Vaccine Detail Update Notification (P07.15)

Vaccine Identifiers

- These <u>messaging</u> specifications are silent on data entry mechanisms (*e.g.* bar coding) for vaccine identification since their scope and focus are limited to data exchange.
- HL7's code domains provide a mechanism to establish a degree of flexibility in the types of code systems to be used:
    - Both DIN and GTIN are enabled in the spec;
    - Together with lot number and expiry they provide the needed specificity for the immunization registry.

- ***N.B***. PHAC and others provided an update on current Canadian efforts towards standardized vaccine identification and bar-coding in other sessions!

SOME DISCUSSION POINTS …

Discussion Points …

- All those identifiers – GTIN, DIN, internally generated, etc.!
  - Messaging specifications (*i.e.* HL7) must be flexible to deal with various identifiers or respond to a clear consensus as/when it emerges.
  - At the same time all participating systems must understand the applicable identifiers for these to be meaningful – less variety is surely better!
- Vaccine knowledge bases and GS1 "catalog"?
  - Is the "content" dividing line clear and well understood?
  - How are these resources linked to the EHR or to EHR points-of-service? … Through GS1 messaging standards or HL7 V3 or both?

Thank you