



Canada Inforoute
Health Santé
Infoway du Canada



Infoway Standards Collaborative

**Presentation to
Committee on the Review of the Adoption and
Implementation of Health IT Standards**

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Creating Healthy Connections

Agenda

- Canada Health Infoway background
- Standards landscape in Canada before Infoway
- Current standards landscape
- Critical success factors
- Some thoughts



Canada Health 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.

A National Partnership

- Established by the First Ministers in 2001, Infoway is a not-for-profit corporation
- Funded by the Government of Canada, funding was allocated to Infoway in 2001 (\$500m), 2003 (\$600m), 2004 (\$100m) and 2007 (\$400m)
- Infoway's members are Canada's 14 federal, provincial and territorial Deputy Ministers of Health

Goal

- By 2010, some elements of the basic EHR will be in place for all Canadians, while a complete basic EHR will be in place for 50% of Canadians. All Canadians will benefit from better healthcare access, quality and productivity.

EHR Definition

The **Electronic Health Record (EHR)** provides each individual in Canada with a secure and private lifetime record of their key health history and care within the health system. The record is available electronically to authorized health providers and the individual anywhere, anytime in support of high quality care. This record is designed to facilitate the sharing of data – across the continuum of care, across healthcare delivery organizations and across geographies.



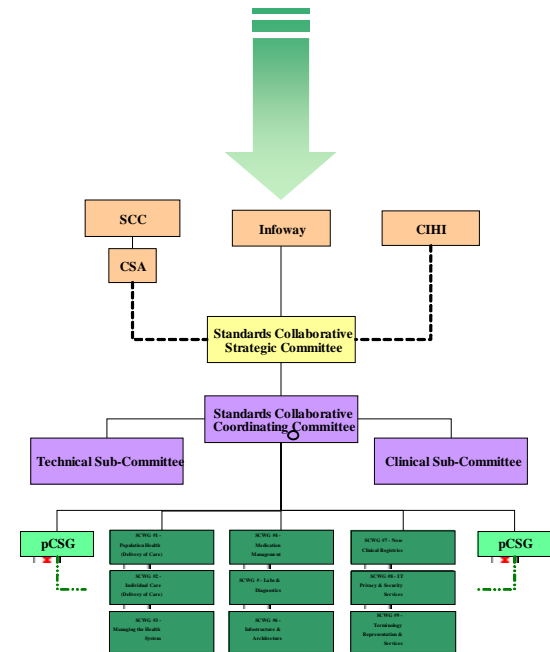
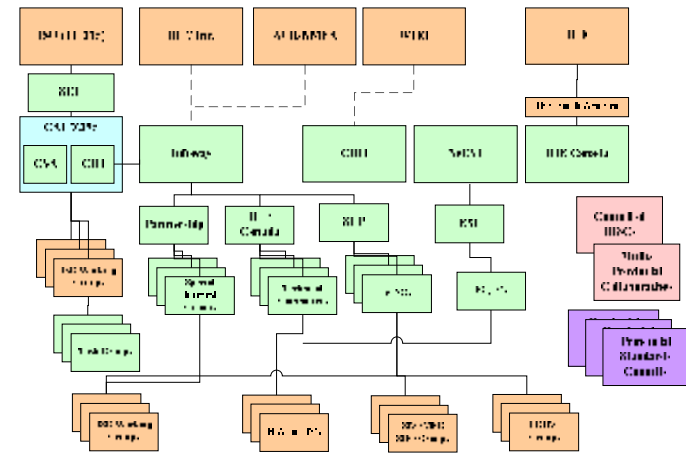
Not so long ago....

- No standards strategy setting body
- No common business and technical architecture on which to base standards work
- Standards affiliations with SDOs were not centralized nor very well coordinated
- Each project, health region, province/territory developed their own standards
 - No broad based concept of national health IT standards
 - No funding to develop national standards
 - No standards collaboration process to develop national standards
- No long term sustainability of developed standards
 - No organization with the mandate
 - Ancillary services (e.g. training/education, maintenance) did not exist
 - No predictable funding
- No conformance testing service
- Few initiatives to market, promote and incent adoption

Connecting Standards in Canada

Over the last 2 years, Canada has completed a major governance transformation initiative, bringing together a complex health information standards community into a single cohesive, coordinated collaborative.

This new governance model integrates committees (~50% reduction), organizations, process and services across numerous standards SDOs and domains to provide a single point of contact for coordination of Pan-Canadian standards throughout the standards life cycle.




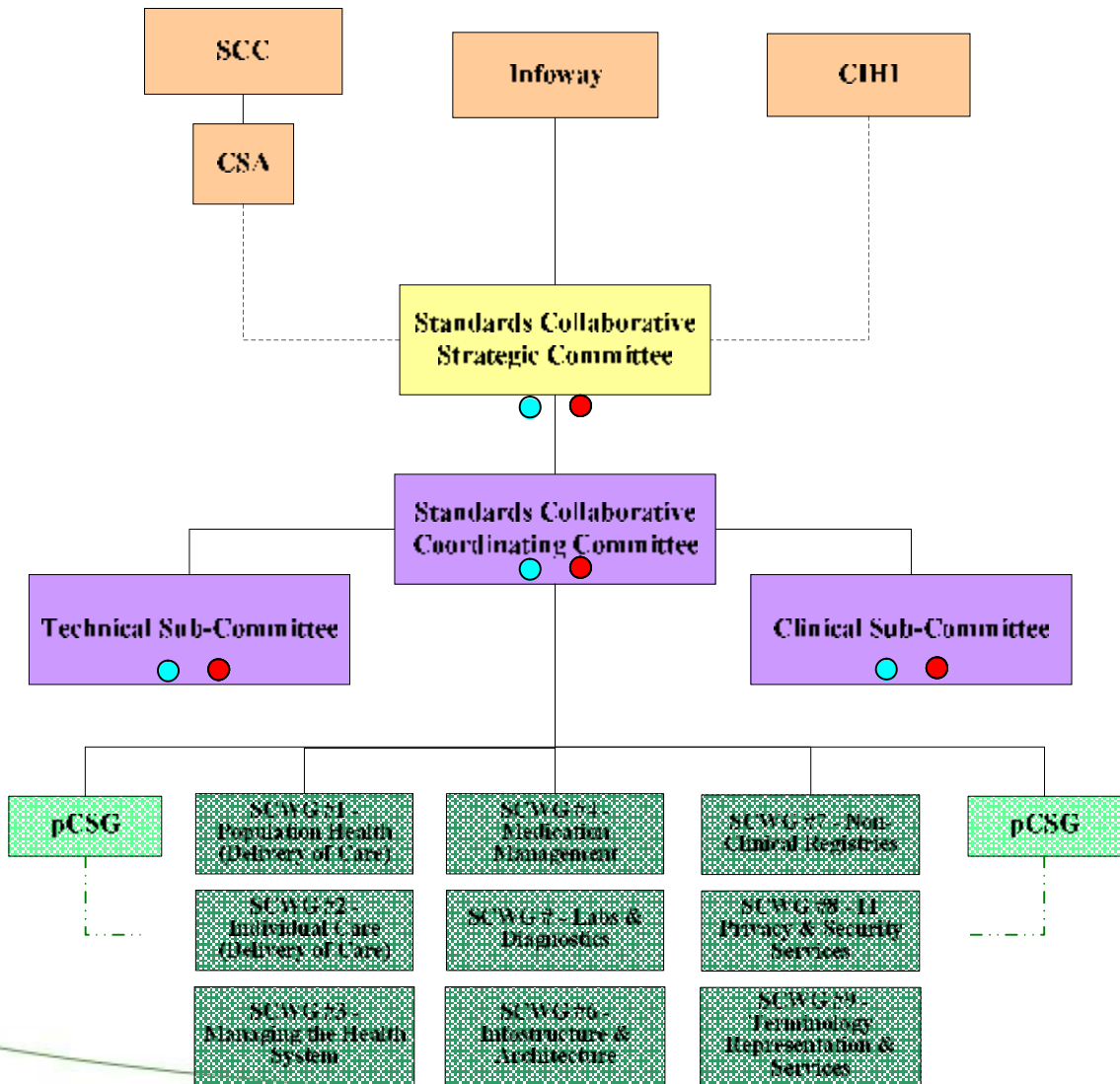
Standards Collaborative Scope

- Coordination of Pan-Canadian standards throughout the standards life cycle: development, implementation support, education, maintenance and conformance
- Support for EHR pan-Canadian messaging, terminology and interoperability profile standards
- Domestic secretariat services to support:
 - HL7 Canada
 - SNOMED CT® National Product Centre
 - Canada's ISO committees (CAC/Z295) with CSA
 - LOINC ®
 - The Partnership for Health Information Standards
- Liaison roles to the following Standards Development Organizations:
 - IHTSDO®
 - HL7 Inc
 - DICOM
 - LOINC®
 - ISO/TC215
 - IHE and IHE Canada

Standards Collaborative Governance Model

Legend

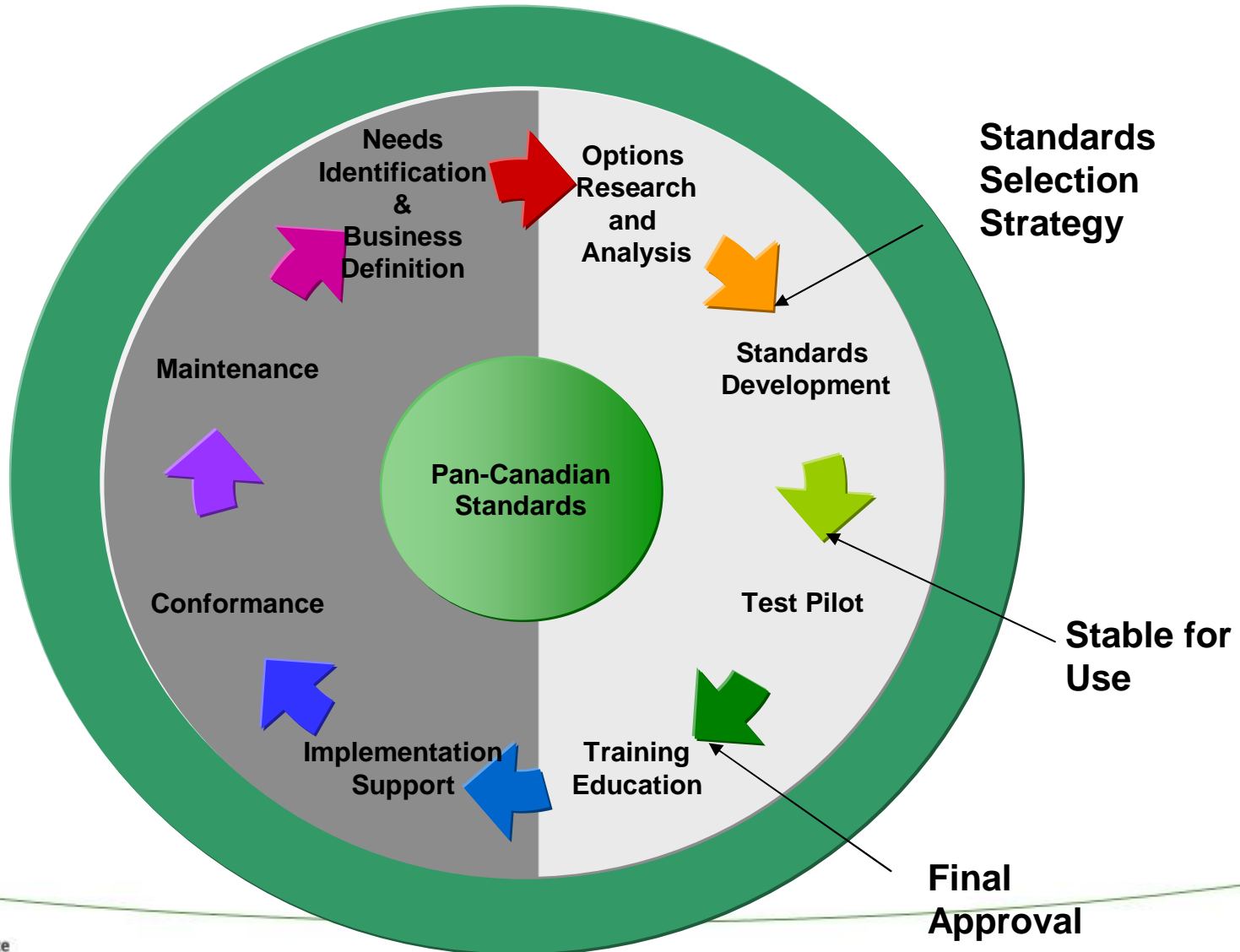
-  Standards Custodians
-  Strategic Level
-  Coordination Level
- Domain Level**
-  Pan-Canadian Standards Group
-  Standards Collaborative Working Group
- SDO Elected Positions**
-  HL7
-  ISO
-  SC Accountability
-  Indirect Accountability
-  Standards Accountability



Standards Collaboration Process Roles

Committee/ Working Group	High-Level Purpose
Strategic Committee	<ul style="list-style-type: none"> • To provide strategic direction to the development, maintenance, conformance and support of pan-Canadian standards and the services provided by the Standards Collaborative • To make decisions regarding recommendations on key items in the standards life cycle for pan-Canadian standards such as “Stable for Use” and “Formal Approval”
Coordinating Committee	<ul style="list-style-type: none"> • To coordinate and guide pan-Canadian health information standards throughout the Standards Lifecycle based on priorities and strategic direction set by the SC Strategic Committee. • To provide guidance on the processes and services provided by the Standards Collaborative
Clinical Sub-Committee	<ul style="list-style-type: none"> • To support clinical alignment and harmonization across pan-Canadian health information standards; • To provide cross clinical guidance on Standards Collaborative (SC) services and activities.
Technical Sub-Committee	<ul style="list-style-type: none"> • To ensure technical alignment across pan-Canadian health information standards; • To provide technical guidance on Standards Collaborative (SC) processes and activities.
Pan-Canadian Standards Groups	<ul style="list-style-type: none"> • To provide pan-Canadian review and validation to support a pan-Canadian health information standards development project.
SC Working Groups	<ul style="list-style-type: none"> • To provide recommendations on the adoption and use of standards and to review and vote on the content of health information standards, particularly those in maintenance.

Standards Life Cycle



Integrated & Coordinated pan-Canadian Standards Services

Client Services & SDO Relations

- Client Services
 - Information Desk
 - Membership Management
 - Conferences
- SDO Relations
 - Formal & Informal SDO Liaison
 - Distribution & Rights Management
 - Govern and manage SDO Affiliates

Standards Collaboration Process Services

- Overall Process Management and Improvement
- Stakeholder Collaboration & Engagement
- Knowledge Management
- Benefits Evaluation
- Standards Adoption Strategies
- Promotion & Communications
- Change Management
- Clinical Alignment & Support

Maintenance Services

- Ongoing standards sustainability and relevance
- Prioritize, fund and deliver maintenance of Infoway-developed standards

Development Support

- Development Strategy
- Development
- Alignment of Development principles, approaches and deliverables

Conformance Services

- Develop Conformance strategy & governance
- Promote adherence to Standards
- Develop & publish conformance criteria
- Liaison with eHealth Collaboratory

Implementation Services

- Implementation resource development
- Implementation acceleration & support services
- Stable For Use Standard quality validation & promotion

Education & Training

- Development of Training materials & programs
- Provision of general and specific standards education
- Outreach training services

Standards Initiatives

20 projects with an investment of \$42M

- Clinical Terminology Integration strategy (SNOMED CT)
- National e-Claims Standard
- Client Registry Standard
- Provider Registry Standard
- Diagnostic Imaging Standard
- Drug Standard
- Laboratory Messaging and Nomenclature Standards
- Public Health Surveillance Standard
- iEHR Clinical Messaging Standard
- iEHR Infostructure Standard
- iEHR Infostructure Guidelines/Specifications

12 Architecture projects with an investment of \$8.5M

Critical Success Factors

- Establish the business and technical solution architecture first – standards are an enabler
- Establish funding
- Establish a centralized coordination and collaboration function
- Clearly define the mandate, services and service levels
- Sponsor and lead the development of standards
- Clearly define what is in scope for development, support and maintenance while keeping a focus on the vision
- Adopt, Adapt, Develop
- Develop truly national standards where appropriate
 - Internationally balloted through the appropriate SDO(s)
- Devote resources towards adoption
 - Promotion, education/training, tooling, conformance, incentives
- Governance, development and collaboration model must be open, transparent, robust, efficient

Some Thoughts

- Focus your efforts on the mid- to long-term standards needs
- Dedicate efforts to the interoperability (standards) requirements of the RHIOs and NHINs
 - Messaging, terminology, interoperability profiles
- Maintain distinction of standardization requirements for two broad use cases in all priority clinical domains:
 - Data exchange (e.g. document metaphor)
 - Data sharing (e.g. shared clinical repository)
- Adopt HL7 v3 for messaging in the RHIOs and NHINs
 - Most robust standard for semantic interoperability
 - Most robust standard for large scale, distributed, loosely coupled systems interoperability
 - Uptake and transition will be challenging, but this choice is for the long term
- Work towards alignment with other country's national EHR programs
 - It's a global market and moves in the US do have an effect



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Thank you