

Health Information Standards in BC

W.L. Clifford, OBC, MD, FCFP

September 25th, 2017



Ministry of
Health



Governance Structure

Leadership Council

Standing Committee of
Interdisciplinary Co-Chairs

Information Management Information
Technology Standing Committee

Health Information Standards
Standing Committee

Health Information Privacy &
Security Standing Committee

BC Health Technology
Strategy Standing Committee

What's in a Name? - IMITSC History

CIO Council

• (2002 – October 2013)

CIO/CMIO Council

• (November 2013 – May 2014)

IMITEC

• (June 2014 – March 2015)

SCIMIT

• (April 2015 – July 2016)

IMITSC

• (July 2016 -)

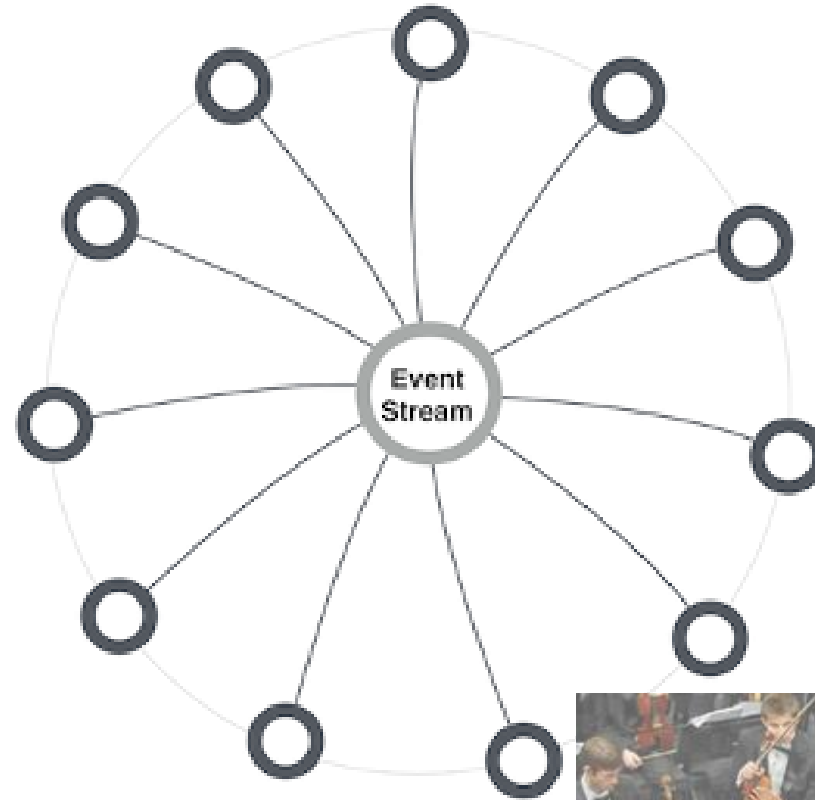
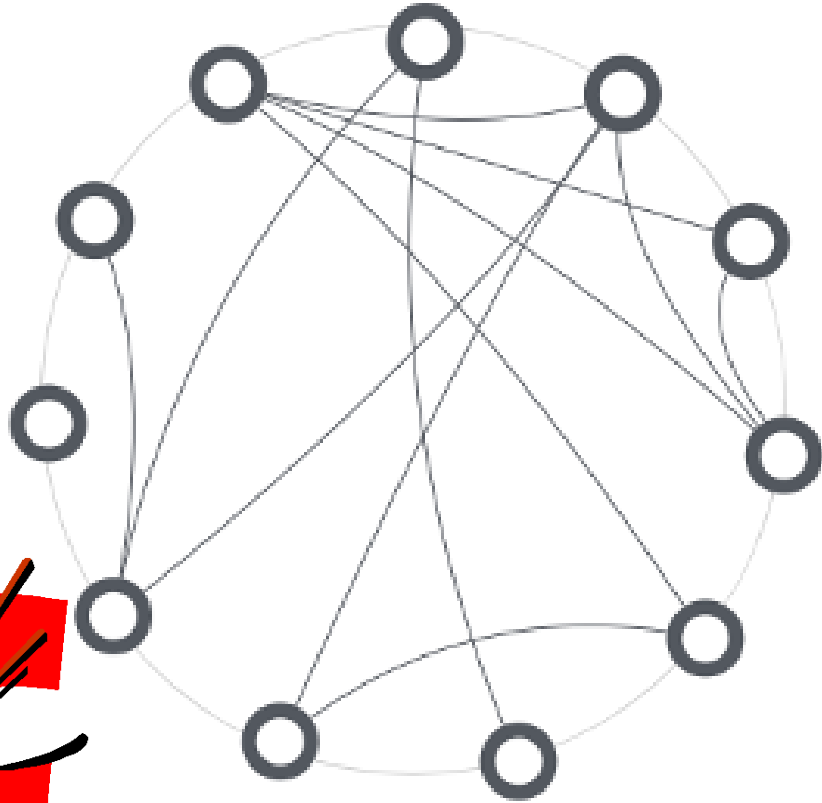
“Faithful record of what clinicians have heard, seen, thought and done”

Rector, Nolan & Kay, 1991
Foundations for an electronic medical record

Including what they plan to do



Choreography versus Orchestration (Jazz versus Symphony)



Standards Value Drivers and “Pain Chain”

- * Safety
- * Intrinsic functionality (esp information model)
- * Quality Improvement
- * Interoperability

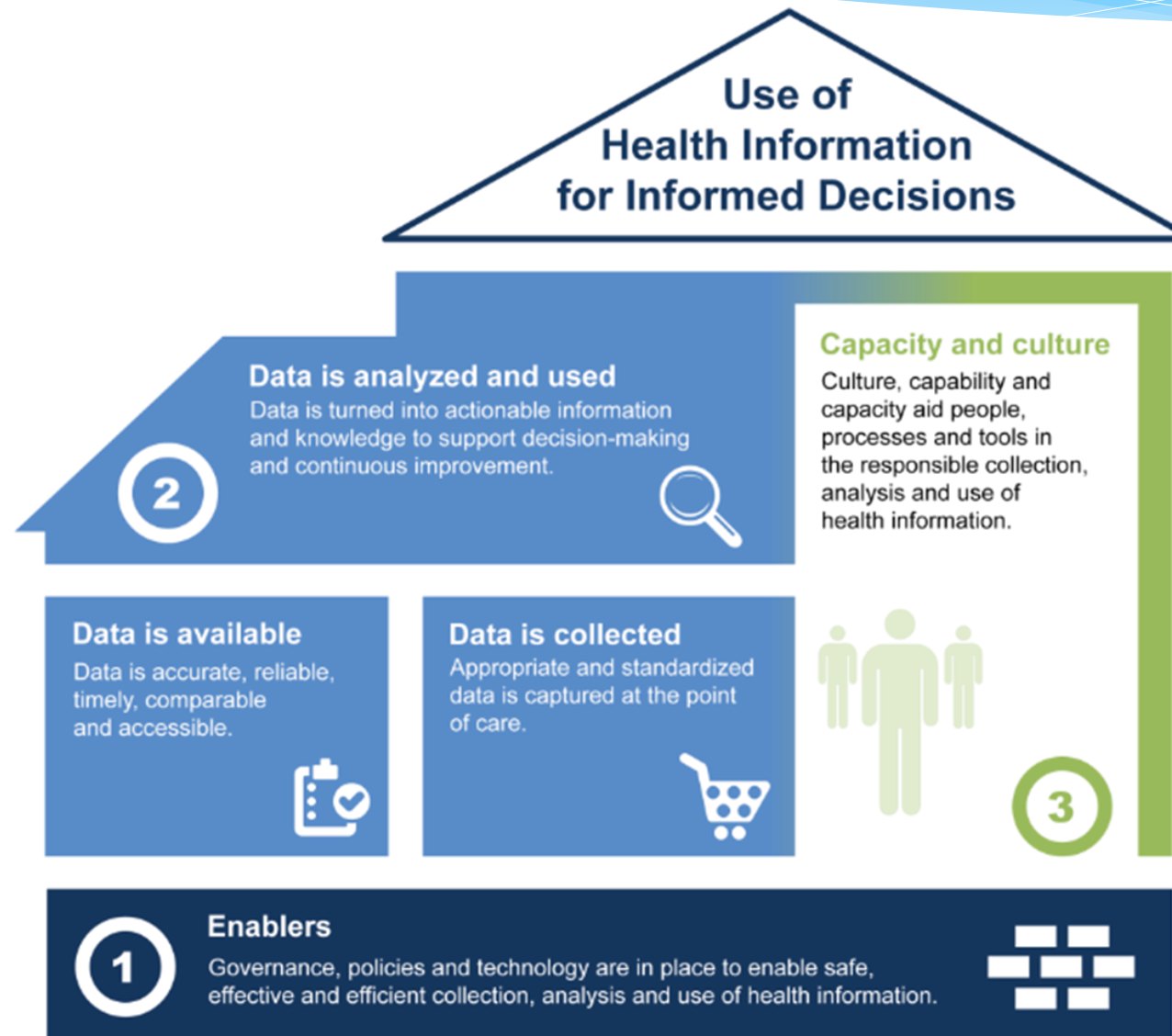
Interoperability – IEEE Definition

“the ability of two or more systems or components to **exchange** information **and** to **use** the information that has been exchanged.”

Standards System Drivers

- * BC Healthcare and Healthcare IM/IT strategies
- * Implementation of IMITSC EMR Interoperability Strategy recommendations
- * Shifting standards priorities identified by some of the EMR Vendors and health authorities (e.g. use of FHIR)
- * Increased focus on transport and architecture
- * IHA's EMR Innovation Lab & IHA/NHA CDX system
- * PMA midterm negotiations / Auditor General report

Supporting a Learning Health System



From “Better Information for Improved Health: A Vision for Health System Use of Data in Canada”. CIHI, 2013

2

Data is analyzed and used

Data is turned into actionable information and knowledge to support decision-making and continuous improvement.



Data is available

Data is accurate, reliable, timely, comparable and accessible.



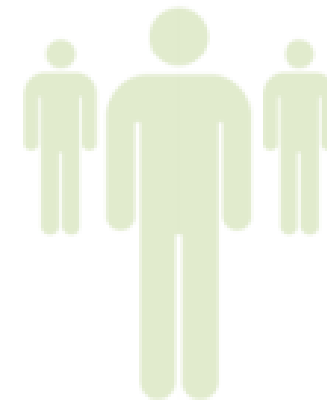
Data is collected

Appropriate and standardized data is captured at the point of care.



Capacity and culture

Culture, capability and capacity aid people, processes and tools in the responsible collection, analysis and use of health information.



3

Goal

Interoperable records that support accurate and efficient workflow while empowering providers and citizens to achieve better health, and health care experience.

Purpose

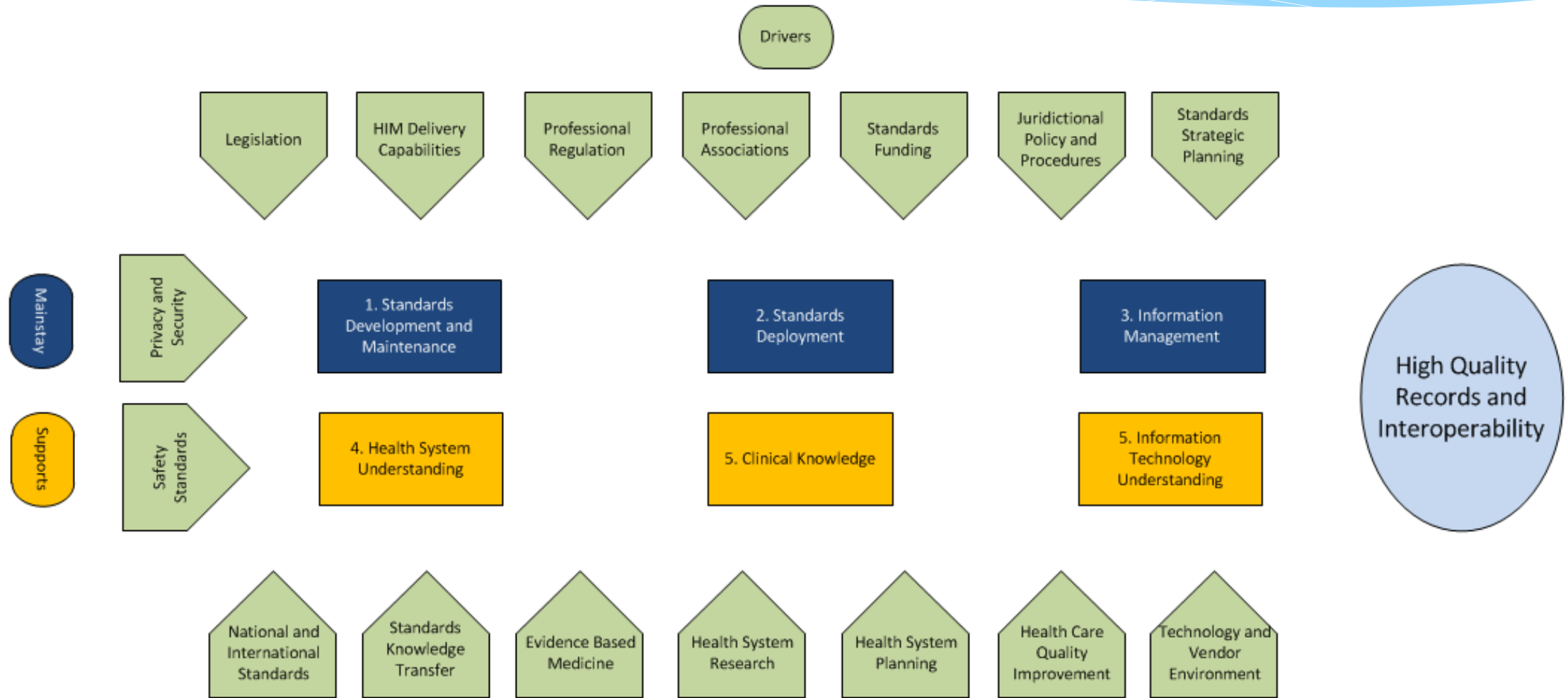
Develop and support a single, transparent source of sustainable health information standards with a governance framework that is founded on local, national and international experience. Health information standards will enable *interoperable* electronic health records and their derivatives to deliver better health, health care experience and a high performance *continuously learning* health care system.

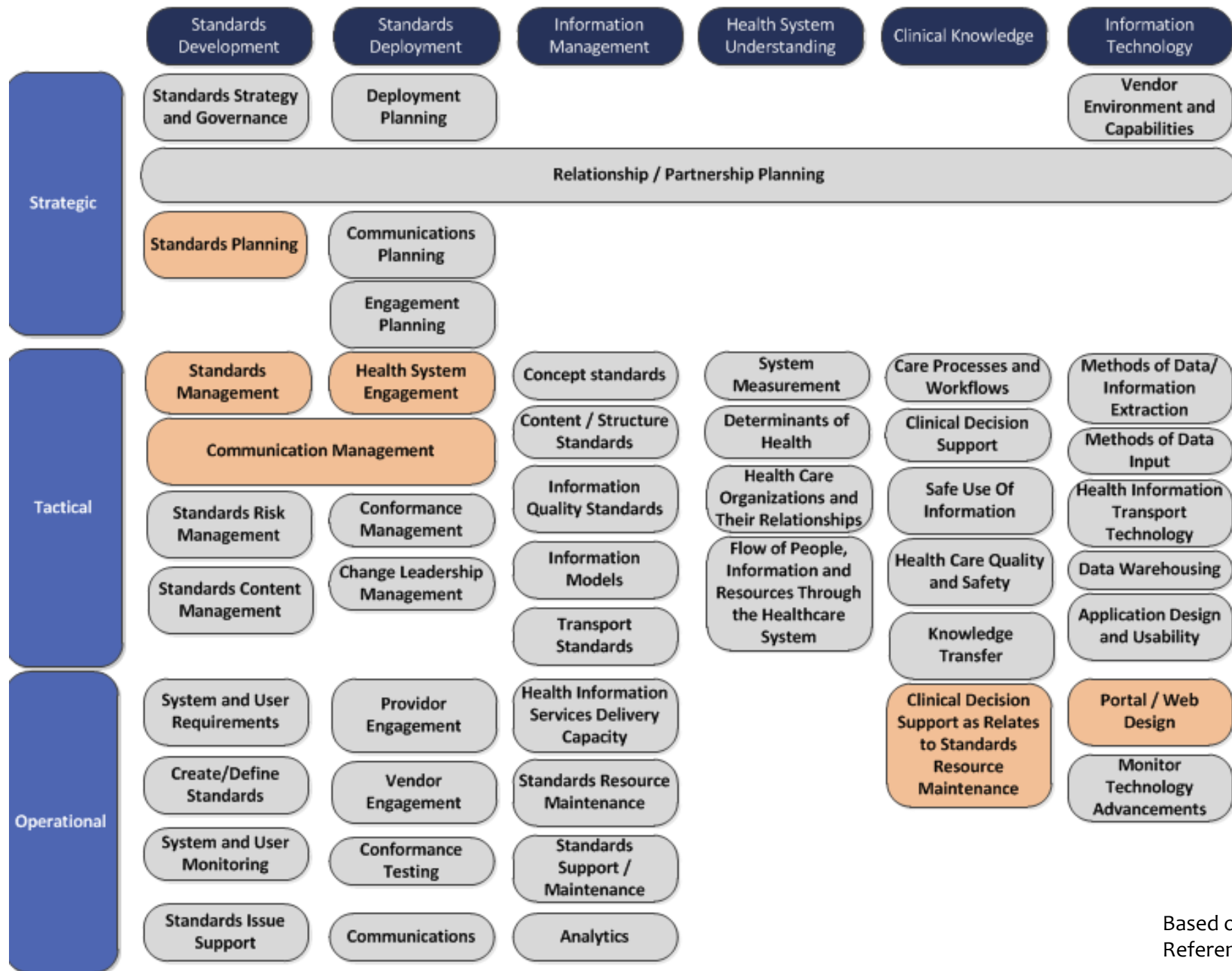
Principles

- Write once, use many – support the integration of data collection into the workflow and maintain context
- Build upon existing standards and health IT infrastructure
- Enable the provincial health care and health care IT strategy
- Make the complex simple
- Respect the usability needs of providers and citizens
- Ensure needs for health system use can be met

- Focus on value
- Direct patient care, practice management and population health need to complement each other
- Be mindful of limitations in the current environment
- Provide a single source of truth for interoperable, foundational elements
- Celebrate diversity and innovation where it is needed
- Work collaboratively and engage partners early

HISSC Business Model





Based on LEADing Practice Reference Content

	STANDARDS MANAGEMENT & DEVELOPMENT	STANDARDS DEPLOYMENT	INFORMATION MANAGEMENT	HEALTH SYSTEM UNDERSTANDING	CLINICAL KNOWLEDGE	INFORMATION TECHNOLOGY
STRATEGIC	Standards strategy & governance	Deployment planning				
	Standards planning	Communication planning				
	Relationship and Partnership planning	Engagement planning				
TACTICAL	Standards management	Health system engagement management	Concept standards	System measurement	Care processes & workflows	Methods of data extraction
	2 Communication management	1 Provider engagement management	Content / structure standards	Determinants of health	Clinical decision support	Methods of data input
	Understand vendor capability management	Standards conformance management	Information quality standards	Healthcare organizations & relationships	Safe use of information	Health information transport technology
			Information models	Flow of people, information & esources thru healthcare	Health care quality & safety	Data warehousing
			Transport standards	Team based care	Knowledge transfer	Application design & usability
				Primary care homes	Clinical decision support as relates to standards resource maintenance	
OPERATIONAL	Identify system & User requirements	Portal / web maintenance	Health information services delivery			Portal / web design
	Build standards	Change management	Standards resource maintenance			Monitor technology advancements

Standards - Cockpits
Standards

Operating Model

- Performance Opportunity
- Standardization Opportunity

- Resource Distribution
- Maturity Level

- Integration Opportunity

Control Model

- Control Flow
- Monitoring
- Evaluation
- Audit

		Conformance standards development				
		Health system engagement				Based on LEADing Practice Reference Content

Strategic Objectives

Provide a group of terminology and concept standards

Develop information structural standards

Develop a service model for health information standards management

Engage vendors and clinical users with standards and their deployment

Build a data quality framework

Progress

➤ Objective #1: Provide a group of terminology and concept standards

Critical Success Factor	Status	% Complete
Develop a BC Document Ontology reference set	In Progress	85%
Develop a BC Health Concerns/Diagnoses Reference Set with Mapping to ICD 9 and 10	In Progress	95%
Develop a BC Procedures Reference Set	In Progress	5%
Develop a BC Adverse Reaction Reference Set	Not Started	0%
Develop a BC Medical Imaging Terminology Set	In Progress	1%
Develop an Immunization Minimum Data Set	Complete	100%
Develop clinical reporting and usability guidance	Ongoing	N/A

Progress

➤ Objective #2: Provide information structural standards

Critical Success Factor	Status	% Complete
Develop a CDA L3 Standard for Discharge Summary	Stalled	10%
Develop a CDA L3 Standard for Medical Imaging	In Progress	90%
Develop a CDA L3 Standard for Immunization Administration, history and adverse reaction risk	Not Started	0%
Develop a CDA L3 Standard for referral and consult	Not Started	0%
Develop a CDA L3 Standard for Cardiology Reports	Complete	100%
Develop a CDA Template for Lab and Pathology reports	Complete	100%

Progress

➤ Objective #3: Develop a service model for health information standards management

Critical Success Factor	Status	% Complete
Develop a standards strategy for the province – including strategic planning and governance	In Progress	70%
Define standards development activities and processes	Complete	100%
Define how standards will be deployed in BC (conformance framework)	In Progress	15%
Define standards maintenance activities (inquiry management, website hosting, communications, building technical expertise within our organizations)	In Progress	80%

Progress



- Objective #4: Engage vendors and clinical users with standards and their deployment

Critical Success Factor	Status	% Complete
Develop a vendor communication plan with key messages	In Progress	10%
Develop a physician communication plan with key messages	Not Started	0%
Engage stakeholders by initiating activities outlined in the communications plans	Not Started	0%

Progress

➤ Objective #5: Build a data quality framework

Critical Success Factor	Status	% Complete
Develop a system for monitoring data quality	Not Started	0%
Develop standards for maintaining data integrity	Not Started	0%



Accelerating Healthcare Improvement
Accélérer l'amélioration des services de santé

DATA BOOT CAMP: HOW TO GET YOUR DATA INTO SHAPE!

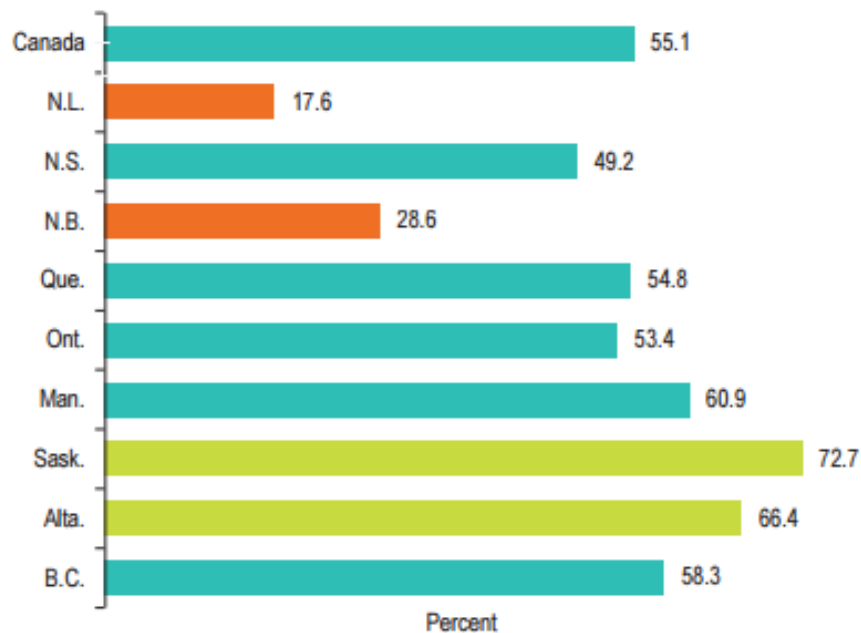
October 14, 2015
12:00-1:00pm ET

Core Data Set and Data Quality

Primary Health Care in Canada: A Chartbook of Selected Indicator Results, 2016

55% of primary care physicians can generate medication lists using technology

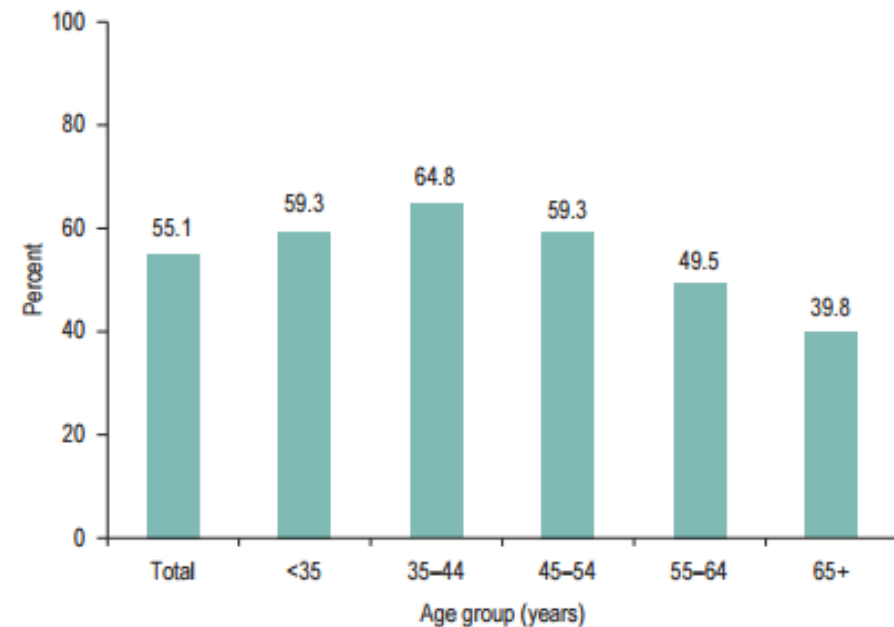
Figure 40 Percentage of primary care physicians who are able to generate a medication list for their patients using a computerized system, Canada and provinces, 2015



Results compared with the Canadian average

● Above average ● Same as average ● Below average

Figure 41 Percentage of primary care physicians who are able to generate a medication list for their patients using a computerized system, Canada, by age group, 2015



Health Data Coalition & Documentation Quality

QI Panel

- My Favorites
- Disease Management
- Disease Prevalence
- Documentation Management**
- Medication Prescribing
- Practice Support Program
- Prevention
- Screening
- My Population Pyramid



All | Coded Entry - 1 Year Look Back | Coded Entry - 3 Year Look Back | Entry Totals - 1 Year Look Back | Entry Totals - 3 Year Look Back | List Review - 3 Year Look Back

<input type="checkbox"/>		Ratio Total Adverse Reaction Risks Coded - Seen in the Last 3 Years & Active	
<input type="checkbox"/>		Ratio Total Health Conditions Coded - Seen in the Last 3 Years & Active	
<input type="checkbox"/>		Ratio Total Long Term Meds Coded - Seen in the Last 3 Years & Active	
<input type="checkbox"/>		Ratio Total Prescriptions Coded - Seen in the Last 3 Years & Active	

Learning Health System - ONC

