



Accelerating the Adoption of EMR Content Standards in Primary Health Care

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Outline

1. Background
2. Primary Health Care (PHC) Electronic Medical Record (EMR) Content Standard
3. Jurisdictional Adoption Considerations
4. Demonstration Projects
5. Summary: Accelerating the Adoption of the PHC EMR Content Standard

Canadian Institute for Health Information (CIHI)

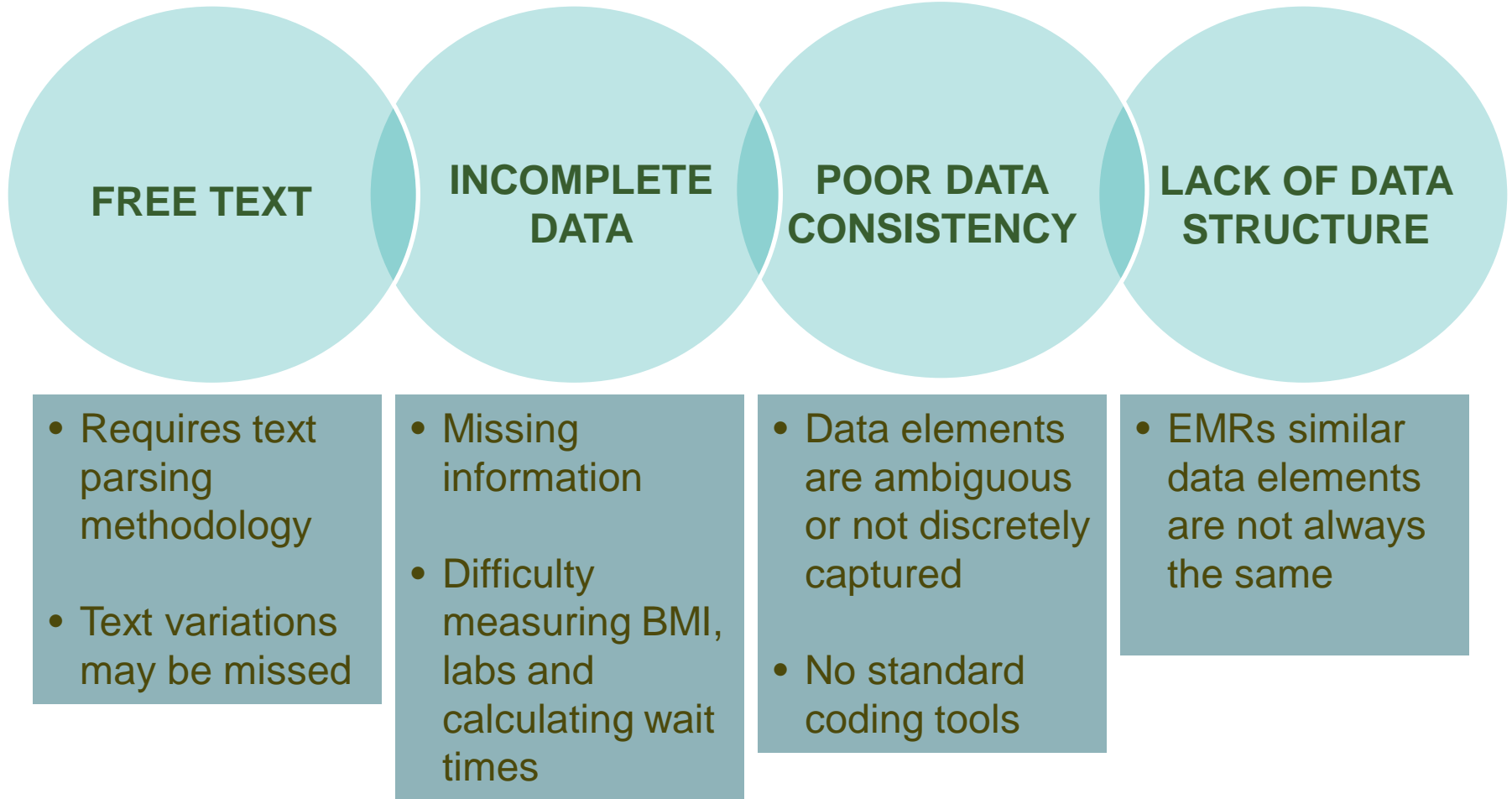
- Independent, not-for-profit corporation
- 27 data holdings
- Expertise in:
 - Data collection and analysis
 - Information standards
 - Education and outreach



Primary Health Care Information at CIHI

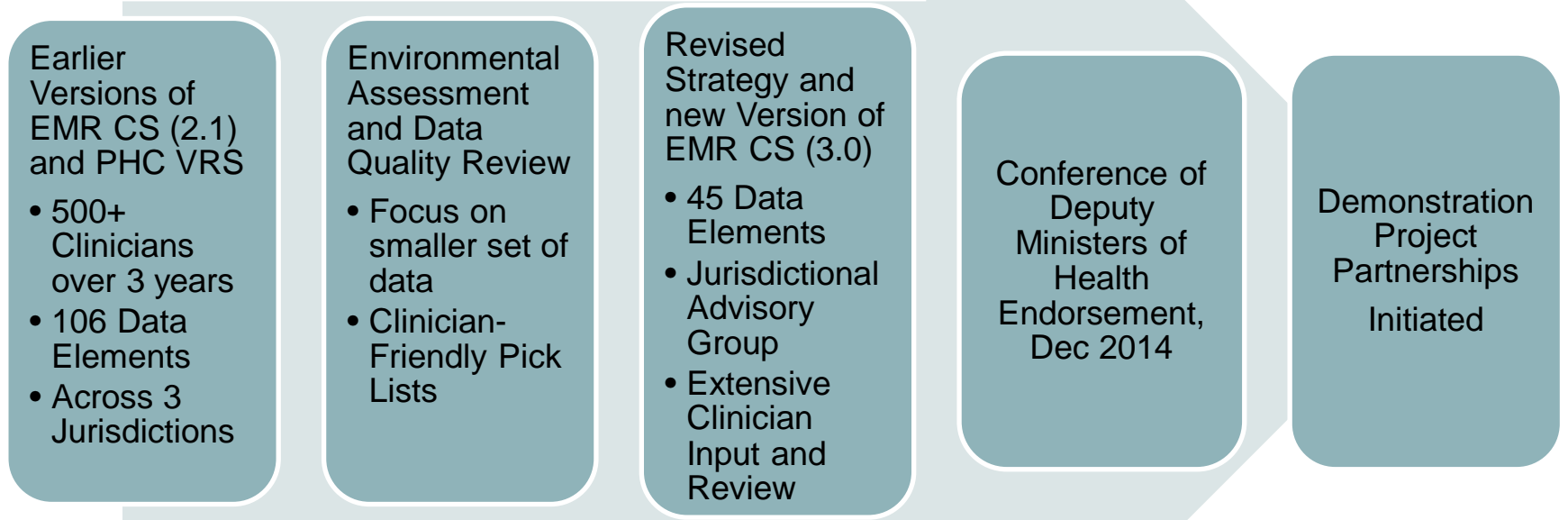
- Primary Health Care Information was established as a dedicated CIHI program in 2008
- Some key initiatives:
 - Established a set of pan-Canadian PHC indicators
 - Created an EMR repository prototype (pilot) called the Voluntary Reporting System and gathered EMR data from clinicians for a 3 year period
 - Developed EMR Content Standards
 - Conducted Analytics and Reporting

Background - EMR Data Current State



Limits Availability of Cost-Effective & Comparable EMR Data and Its Use for PHC or Health System Management

EMR Content Standard - How Did We Get Here?



Primary Health Care Electronic Medical Record Content Standard (PHC EMR CS) - Evolution

- PHC EMR CS 2.0 consists of a large set (106) of EMR data (2011)
- CIHI initiated the update of the PHC EMR CS in 2013
 - In response to the environmental scan
 - To accelerate implementation
 - Aligned to jurisdictional priorities
- PHC EMR CS 3.0 released (2014)
 - It is a priority subset (45 EMR data elements) of the CS 2.0/2.1
 - Pick-Lists have been developed for 8 of the 45 priority data elements

Primary Health Care Electronic Medical Record Content Standard (PHC EMR CS) v3.0



- **Focused on a smaller, critical set of data – as directed by our customers and confirmed by clinicians from across Canada**

- **Priority Subset:** 45 priority data elements* that are commonly captured in EMRs and critical to point of care and health system use.
- **CFPLs:** 8 constrained lists of clinician-friendly terms mapped to an appropriate code system
- **20 PHC Reference Sets** (from Infoway)

Clinician-Friendly Pick-Lists (CFPL)

- *Health Concern*
- *Clinician Assessment*
- *Reason for Visit*
- *Intervention*
- *Social Behaviour*
- *Diagnostic Imaging Test Ordered*
- *Referral*
- *Vaccine Administered*

* Refer to the Appendix for details

PHC EMR CS: Jurisdictional Adoption Considerations

General Enablers

- Jurisdictional Leadership
- Clear Data Governance
- Collaborative Partnerships
- Change Management
- Capacity Building
- Engagement and Clinician Receptivity

Readiness Assessment

- To assess the ability / readiness of Canadian jurisdictions to implement the EMR CS v3.0 and collect comparable data
- Parameters include:
 - Policy Framework
 - Technical and Software Capability
 - Clinician Capability and Support



PHC EMR CS Demonstration Project Objectives

To implement the PHC EMR CS 3.0 so as to:

1. Test its usefulness in generating structured EMR data for clinical and health system use
2. Provide further input and recommendations for future directions based on use by clinicians at the point of care and organizations supporting these clinicians
3. Understand changes required to improve the PHC EMR CS products, implementation and data collection before scaling up with a pan-Canadian approach.

PHC EMR CS Demo Projects: Three Types

Demo Project Type	1. Existing EMRs	2. New EMRs	3. Terminology
Project Goal	To use the PHC EMR CS in a point-of-care clinical situation to assess the viability and usability as well as inform its future development and evolution	To influence the development of an emerging EMR Program by incorporating the PHC EMR CS into the RFP specifications and encourage its use in program implementation	To focus on the terminology and mapping components of the PHC EMR CS and to expand capability and assess potential in these critical areas of PHCi



2015-2016

First Set of CS Demonstration Project(s)

- Focussed on clinician organizations and governments
- A set of clinical providers, with existing EMRs, and a sufficient volume of patients
- Single EMR Vendor / Consolidated Data Feed
- Program Alignment (Similar practice model or program)
- Implementation of some/all PHC EMR CS Priority Subset and CFPLs to enable the collection of structured data at the point of care
- Partners share data with CIHI, with a full reporting cycle
- Evaluation

Summary: Accelerating PHC EMR CS Adoption

- Focus on small set of data that is highly relevant in Primary Health Care
 - Priority Subset of 45 EMR Data Elements (PHC EMR CS 3.0)
- Provide information value at all levels - by clinician; practice, organization, locally, regionally and for the jurisdiction
 - Demonstration Projects as a starting point
- Going forward, potential to align with Provincial Quality Programs and Chronic Disease Best Practice programs, because that provides incentive for all primary health care funding models
 - Readiness Assessment
- Invest appropriately in change management programs, especially where clinician champions help spread the knowledge.
 - Acceleration Consideration

CIHI Resources

- **PHC VRS Insight Report:** http://www.cihi.ca/CIHI-external/pdf/internet/LESSONS_PHC_VRS_PROTO_EN
- **PHC EMR CS v3.0 Documents**
<https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC2576&lang=en>
 - Technical Guide
 - Conceptual Data Model
 - Logical Data Model
 - Clinician-Friendly Pick-List Guide
 - Frequently Asked Questions
 - Information Sheet
- **PHC EMR CS v3.0 – Clinician-Friendly Pick-Lists**
For information about accessing the CFPL spreadsheets (terms and associated codes), send an email to vendors@cihi.ca



Questions or
comments?

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PHC EMR Content Standard

Priority Subset and Clinician-friendly Pick-lists

DE #	Data Element Name	DE #	Data Element Name
A1	Patient Identifier	E29	Height Unit of Measure
A2	Patient Identifier Type	E30	Weight
A3	Patient Identifier Assigning Authority	E31	Weight Unit of Measure
A4	Patient Date of Birth	E34	Clinician Assessment
A5	Patient Gender	F1	Intervention (Treatment)
A9	Patient Status	F2	Intervention (Treatment) Date
A14	Patient Postal/Zip Code	G1	Lab Test Ordered
B4	Clinician Identifier	G2	Lab Test Ordered Date
B5	Clinician Identifier Type	H1	Lab Test Performed Date
B6	Clinician Identifier Assigning Authority	H2	Lab Test Name
B7	Clinician Role	H3	Lab Test Result Value
C1	Service Delivery Identifier	H4	Lab Test Result Unit of Measure
C4	Service Delivery Postal Code	I1	Diagnostic Imaging Test Ordered
D1	Appointment Creation Date	I2	Diagnostic Imaging Test Ordered Date
D2	Reason for Visit	J1	Diagnostic Imaging Test Performed Date
D3	Visit Date	K1	Referral
D4	Visit Type	K2	Referral Requested Date
E11	Health Concern	L1	Referral Occurred Date
E12	Health Concern Date of Onset	M1	Prescribed Medication
E14	Social Behaviour	M2	Prescription Date
E23	Systolic Blood Pressure	O1	Vaccination Administered
E24	Diastolic Blood Pressure	O2	Vaccination Administered Date
E28	Height		