B.C. EMR Interoperability Strategy: An Overview

March 2, 2018

Agenda

#	Topic	Duration
1	Strategy background and scope	15 mins
2	Strategy recommendations	15 mins
3	Questions and discussion	10-20 mins

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EMR Interoperability Strategy Overview

- Interoperability between EMRs and other clinical systems is a key IM/IT enabler for the clinical transformation that is underway across the health system.

- Despite the wide-spread adoption of EMRs and advancements in technology, there are still significant barriers to health information interoperability in B.C.

- In response, IMITSC[1] formed an EMR Strategy Working Group (2015) and tasked them with developing an EMR Interoperability Strategy.

1 – Information Management and Information Technology Standing Committee

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Background: What is interoperability?

- Patient clinical data can be sent from one health information system to another and the recipient system and user can "understand" what has been sent.

  - Sending a discharge summary from a hospital based systems to a physician EMR system.

  - Referring a patient into specialized services in health authorities or the community.

  - Enabling a patient to share and access their health information in partnership with their care providers.

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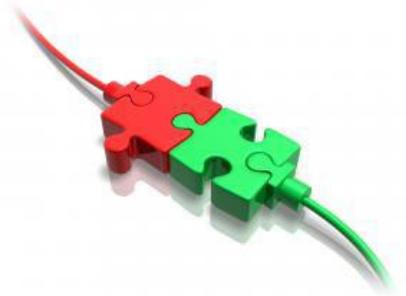
Background: Interoperability Conundrum
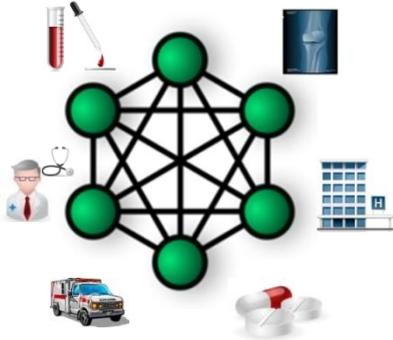
- **Healthcare data is largely held in silo systems that do not easily share data:**
  - Individual physician EMRs, lab systems, hospital information systems, etc.

- **Sharing health information is inherently complex:**
  - Data is generally in a non-standard format (ex. free text SOAP note)
  - Privacy and security of personal health information is paramount (i.e. can't use unsecure commercial solutions like email)
  - Healthcare data is distributed between a number of propriety vendors and software solutions

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Background: How do we get to an interoperable health care record?

1. The implementation of **health information exchange (HIE) technology**

2. The development, deployment and adoption of **health information standards**

Background: First piece of the solution - HIE Infrastructure

- Used to securely transmit information between clinicians and across organizations.

- There are a variety of health information exchange systems in operation in BC:
  - CDX, Excelleris, HIAL, HNI, Health Registries Broker, and more.

- Organizations are trying to distribute a wider range of clinical documentation to community physicians through this infrastructure.

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Background: Second piece of the solution – Standards

- Ensure the information sent between clinicians and across organizations is consistent, reliable and usable.

- Many standards currently exist - provincial, national and international. Examples:
    - LOINC for lab results
    - SNOMED codes for problem/conditions/diagnosis

Current Priority: Developing and implementing a set of health information standards to support the sharing of high priority patient information

EMR Vendor Engagement

- Broad engagement during the EMR vendor partnership meetings in April and October 2016

- Had 1:1 follow-up discussions with all vendors who were willing to meet

- General topics of discussion:
  - Their primary development focus for their product(s)
  - Their strategic roadmaps
  - Issues adopting BC health information standards
  - Ongoing vendor engagement in our governance structure
  - Funding considerations and constraints

Clinician and Business Engagement

- Targeted engagement in 2016/17 through several teleconferences and in-person presentations

- Groups that we met with included:
    - Doctors of BC IM/IT Clinical Advisory Working Group and DoBC's Practice Support Program (PSP)
    - Vancouver Island Primary Care Informatics (PCI) group
    - Clinical HISSC members
    - Ministry of Health Primary Care Group

- General topics of discussion surrounded:
    - Feedback on HISSC's standards priorities
    - How clinicians should be engaged when implementing standards initiatives
    - Feedback on EMR vendor training preferences and use of standards in their products
    - Practice change management considerations

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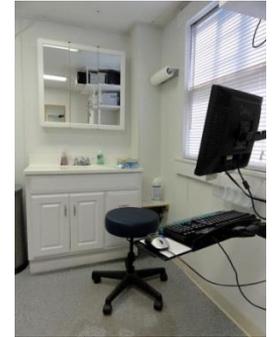
EMR Interoperability Strategy Scope

- Enabling the adoption and use health information standards across the sector is seen as the most effective option to address the current challenges with achieving interoperability.

- As a result, the **scope** of the strategy includes **tools and tactics** to increase the adoption of health information standards for:
  - **Users**: who need to adapt to changes with how they send, receive, view, and enter standardized health information
  - **EMR vendors**: who are required to make changes to their products
  - **Standards developers**: who develop, publish and maintain standards

- IMITSC has endorsed the EMR Interoperability Strategy (June 2017)

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Strategy Recommendations

The strategy outlines 7 recommendations related to EMR interoperability:

1. Strengthen governance around provincial health information standards and integration

2. Create a standards support organization

3. Prioritize standardization and health information exchange initiatives

4. The DoBC, in partnership with EMR vendors, to develop a practice change management program focused on interoperability

5. Establish a vendor and physician funding incentive model

6. Provide EMR vendor training

7. Improve communications with stakeholders

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Recommendation 1: Strengthen HIS Governance

- **Context:** Standards are not easy to establish and involve significant consultation, technical development, communication, and adoption.

- **Recommendation components:** Strengthen the existing governance model by establishing:
  - New health information standards technical working groups
  - An EMR practice change working group, chaired by DoBC
  - An EMR vendor standards adoption working group
  - A plan for regularly engaging clinical stakeholders, EMR vendors and primary care support organizations

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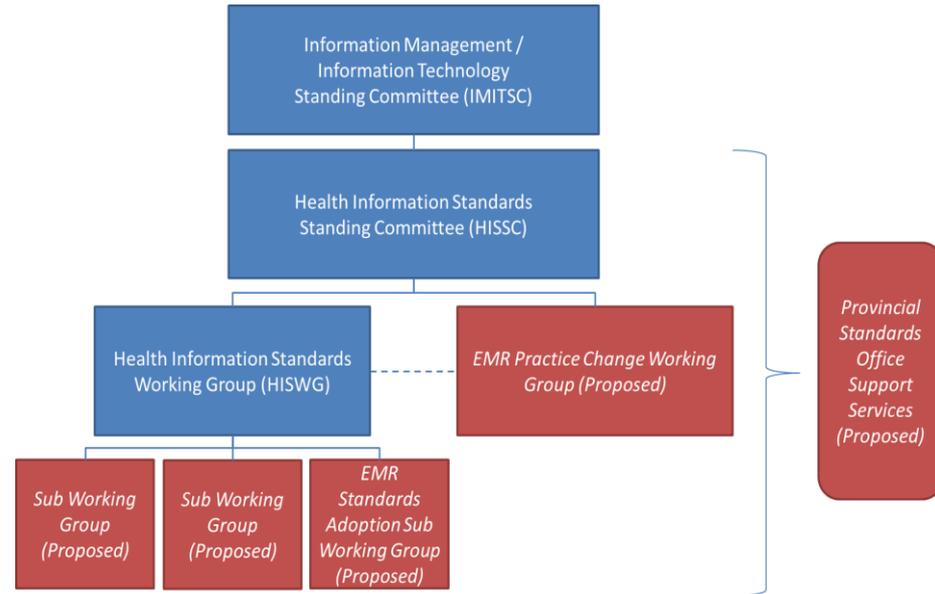
Recommendation 2: Create a Standards Support Organization

- **Context:** Stakeholders have indicated that increased coordination of standards development and implementation in B.C.'s health sector is required to deliver on HISSC's standards priorities.

- **Recommendation: Establish a Provincial Standards Office at the Ministry of Health**
  - The Provincial Standards Office will provide increased project and operational support to develop, publish and implement standards in a coordinated fashion.

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Recommendation 3: Prioritize Standardization and HIE Initiatives

- **Context:** Various organizations, vendors, committees within B.C.'s health sector are pursuing different standardization and health information exchange initiatives

- **Recommendation components:** :
  - Create an interoperability prioritization roadmap for the province in collaboration with the DoBC, MoH, Health Authorities and EMR/CIS Vendors
  - Further investigate health information transport and information delivery approaches with an emphasis on implementation-independence
  - Refresh the interoperability prioritization roadmap on an annual basis
  - Communicate the approved roadmap through the proposed Provincial Standards

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Recommendation 4: Create a Practice Change Management Program

- **Context:** Physicians and vendors identified a structured practice change management program as a major enabler to adopting new provincial health information standards

- **Recommendation: Develop a comprehensive practice change management program that addresses clinical adoption and training gaps related to interoperability**
  - Developed in partnership with provincial standards governance bodies, EMR vendors, DoBC and the proposed Provincial Standards Office
  - This includes the EMR Practice Change Working Group (see recommendation 1)

Recommendation 5: Establish a Funding Model

- **Context:** Major change will be required to implement provincial health information standards and adapt clinical workflow to support of new forms of health information exchange
  - Undertaking this change will require physicians and EMR vendors to make investments of time, money and other resources

- **Recommendation: Establish a vendor and physician funding incentive model**
  - The strategy provides an overview of several different funding models and a recommendation towards a blended approach
  - A detailed proposal still needs to be developed

Recommendation 6: Provide EMR Vendor Training

- **Context:** Some EMR vendors indicated they lack the technical expertise on some provincial health information standards, presenting a barrier to adoption

- **Recommendation components:**
  - As part of the assessment of new provincial standards, a determination will be made if technical training should be provided to vendors
  - Existing training services to vendors to support the roll-out of existing provincial health information standards should continue, such as DoBC CDA training

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Recommendation 7: Improve Communications

- **Context:** Stakeholders, in general, do not have the needed awareness of health information standard priorities nor how they support the transformation of clinical practice within the B.C. health system

- **Recommendation: HISSC, through the proposed Provincial Standards Office, should develop and implement a targeted HIS stakeholder communications plan**
  - Develop and distribute clinician-consumable materials for all health information standards through existing established communication channels
  - Distribute periodic letters to EMR vendors informing them of key initiatives and changes to the prioritization roadmap
  - Develop targeted distribution and posting of a quarterly publication of standards priorities through the Provincial Standards Office

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Next Steps

- Implementation of the recommendations:
  - Some of the governance related recommendations are already being worked on
  - Other recommendations will required funding or projects to implement
  - It is expected that implementation of the recommendations may take several years to be completed

Questions / Discussion