



EMR Adoption and Interoperability

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Session Objectives

- ② To provide an overview of EMR Adoption in relation to
 - *Manitoba eHealth PCIS Office*
 - *Manitoba's EMR Adoption Program*
 - *Manitoba Peer to Peer Network*

- ② To provide an overview of EMR interoperability in Manitoba
 - *Infoway EMR upgrade initiative*
 - *Manitoba's approach to EMR interoperability*
 - *Tentative interoperability release schedule*

Origins of Primary Care Information Systems (PCIS) Office

- ② Physician Integrated Network (PIN) was a key driver



PIN is a Manitoba Health and Healthy Living primary care renewal initiative that focuses on fee-for-service (FFS) physician groups.

Its goal is to facilitate systemic improvements in the delivery of primary care.

<http://www.gov.mb.ca/health/phc/pin/index.html>

- PIN depends on EMRs to enable demonstration of quality – difficulty for physicians to qualify systems was cited as a barrier
- PIN consultations indicated Manitoba needed to show leadership in qualification of EMRs

Origins of Primary Care Information Systems (PCIS) Office

Additional Drivers...

- ➊ Advent of the Electronic Health Record was a key driver
 - Physicians felt there was a risk of picking products that would not connect to provincial systems
 - Need to be proactive in enabling connectivity of EMRs to other electronic systems to avoid creating more “electronic islands in a sea of paper”

- ➋ Consistent with similar activities in other jurisdictions
 - POSP (AB), PITO (BC), OntarioMD, etc.

Primary Care Information Systems Office

Purpose of the PCIS Office:

- ④ Provide a centralized resource to support standardized approaches to EMR Requirements;
- ④ Management of EMR vendors with whom Manitoba has signed a Master Standing Agreement;
- ④ Promote the establishment of good information management practices;
- ④ Encourage EMR adoption by administering the Manitoba EMR Adoption Program and the Peer-to-Peer project.

Receives strategic direction, recommendation and advice through a stakeholder advisory committee Representatives include clinics, RHAs, Manitoba Health and eHealth.

Manitoba's EMR Adoption Program



Program Goals

- ④ Manitoba and Canada Health Infoway are co-funding a program to encourage EMR adoption by community-based clinics through partial reimbursement of expenses:
 - To improve efficiency and quality of care within clinics
 - To improve interactions with other providers and institutions through integrated IT systems
 - To improve the health system through better planning and analysis based on improved information
- ④ Enrollment in this program is open until October 2012 or until available funding is fully allocated
 - Target is 1000 physicians/nurse practitioners

Current Situation in Manitoba

- ② 1400 physicians and nurse practitioners are eligible to participate in the program
- ② Roughly 30-40% have acquired an EMR
 - Extent of use is not clear
 - Many are using EMRs not on the provincial list
 - Interoperability with other systems is limited

Constraints of Infoway Program

🕒 Eligible Clinicians

- Physicians operating practices in the community (not in hospital)
 - Salaried, contract or fee-for-service
- Nurse practitioners

🕒 Eligible Expenses

- Must be incurred after April 1, 2009
- One-time, including hardware, software, implementation services
- Two years of operating costs

🕒 Enrolment Slots

- Infoway will open up a fixed number of enrollment slots each year

Constraints of Infoway Program (cont'd)

- ② Infoway will be investing with the EMR vendors in improved interoperability and will work with each province to define interoperability specifications meeting the province's needs
- ② Manitoba has agreed to implement the following capabilities by October 2013
 - EMRs connected to at least two provincial data sources:
 - Lab results
 - Diagnostic imaging (DI) results
 - Clinical Reports – for example,
 - Emergency visit summaries made electronically available to family physician EMRs
 - CancerCare clinical reports made electronically available to family physician EMRs.
 - A button within the EMR allowing user to launch eChart Manitoba
 - Ability to generate data extract for health system management (planning, forecasting, quality improvement, population health assessment, and chronic disease management)

Clinical Value Level 1: Infoway Requirements

Each clinician is required to meet 6 of the following 12 criteria:

- ④ Enter encounter notes
- ④ Enter problem lists
- ④ Enter allergies
- ④ Enter immunizations
- ④ Enter vital signs
- ④ Enter new or renewal prescriptions and print the prescription
- ④ Generate automated alerts from within the EMR
- ④ Generate automated reminders from within the EMR
- ④ Receive laboratory results into the EMR
- ④ Receive diagnostic imaging (DI) results into the EMR
- ④ Access hospital clinical reports and encounter summaries from the EMR
- ④ Create referral letters or consultation reports

Manitoba Program – New Purchasers*

| | Milestone | Payment |
|---|---|---|
| 1 | Clinic signs contract with EMR vendor and funding agreement with Manitoba eHealth | \$3K advance |
| 2 | Implementation and Privacy Impact Assessment completed | 70% of eligible expenses** to a maximum of \$10K cumulative |
| 3 | Level 1 Clinical Use (after minimum 3 months use) | 70% of eligible expenses** to a maximum of \$15K cumulative |
| 4 | Final Reconciliation (after 12 months of use) | 70% of eligible expenses** to a maximum of \$20K cumulative |

*Clinic that purchased an approved EMR on or after April 1, 2009

** Expenses incurred on or after April 1, 2009

Manitoba Program – Early Adopters*

| | Milestone | Payment |
|---|--|--|
| 1 | Clinic signs funding agreement with Manitoba eHealth, demonstrates Level 1 Clinical Use, and completes PIA | 70% of eligible expenses** to a maximum of \$5K per eligible clinician |
| 2 | Final Reconciliation after incurring final expenses | 70% of eligible expenses** to a maximum of \$10K cumulative per eligible clinician If number of eligible clinicians increased after April 1, 2009 the maximum for net new clinicians is \$20K |

*Clinic that purchased an approved EMR prior to April 1, 2009

** Expenses incurred on or after April 1, 2009

Clinic Service Representatives

- ④ A clinic service representative (CSR) will be assigned to each clinic to
 - Guide the clinic through the enrollment and reimbursement process
 - Provide advice and assistance as needed throughout the implementation life cycle

Clinic/Clinician Obligations

- Implement the EMR within 9 months of enrollment.
- **Achieve Level 1 Clinical Use 1 within 12 months of enrollment.**
- Demonstrate compliance with existing PHIA obligations through completion of a Privacy Impact Assessment
 - Designate a privacy officer
 - Implement appropriate measures to safeguard privacy and confidentiality.
- Take steps to maximize system continuity; e.g.
 - Use an approved vendor hosting service, or implement appropriate measures within the clinic such as
 - purchase a server with redundant components
 - take daily backups and store offsite weekly
 - store server in a clean, air-conditioned secure location
 - develop a down time plan.

Timelines

- Enrollment applications may be submitted now
- First enrollments will be completed in January 2011
- Clinical Value Level 1 must be achieved within 12 month of enrollment
- Last enrollment must be completed by October 31, 2012
- Clinical Value Level 1 must be achieved by all participants by October 31, 2013

EMR Adoption Program Update

- Infoway Agreement was signed on December 24
- Funding letter was received from Manitoba Health on January 17
- Private clinic agreement template has just been finalized
- Guidelines (details to supplement agreement) nearing completion; agreement and guidelines will be posted on web
- Project team fully assembled
- Have begun visiting the sites to do orientation sessions.
- Established a target with Infoway of 650 enrolments in the first year but expect to be granted additional enrolments as/when needed up to 1000

EMR Adoption Program

Applications to Date – *Jan 2011*

| | New Purchasers | Early Adopters | Total |
|---|-----------------------|-----------------------|--------------|
| Private practice physician applicants to Jan 21 | 315 | 128 | 443 |
| Private practice expression of intent to apply (inquiries made) | 30 | | 30 |
| RHA first year expected enrollment (at least 70 more expected in second year) | 267 | 37 | 268 |
| Total | 612 | 165 | 777 |
| Already have approved EMR, have not yet inquired or applied | 5 | 35 | 40 |
| Minimum expected enrollment | 617 | 200 | 817 |

Several large clinics are not included above

Applications to Date by RHA – *Jan. 2011*

| | RHA New Purchasers | RHA Early Adopters | Private New Purchasers | Private Early Adopters |
|---------------|-----------------------|-----------------------|---------------------------|---------------------------|
| Assiniboine | 32 | 29 | | |
| Brandon | 0 | 0 | 14 | 1 |
| Burntwood | 38 | 0 | | |
| Central | 14 | 3 | 51 | 35 |
| Churchill | 5 | 0 | | |
| Interlake | | | 2 | 0 |
| Norman | 6 | 0 | | |
| North Eastman | 22 | 0 | | |
| South Eastman | 5 | 5 | | 27 |
| Parkland | | | 25 | 0 |
| WRHA | 157 | | 231 | 65 |
| Total | 279 | 37 | 323 | 128 |



Connections in health care

- About Us
- Projects
- Community Physicians**
- News
- Careers
- Vendor Information
- Computer Training
- Links
- Search

Welcome to Manitoba eHealth

Using technology to meet
Manitoba's health care needs.

Working with health care
professionals to build eChart
Manitoba.



Connected: Information to Action

Manitoba eHealth's 2010 conference featured diverse speakers and presenters from across Canada.

To view their presentations and read more about the conference [CLICK HERE](#).



Manitoba Peer to Peer Network

Manitoba's Peer to Peer Network

e Background

- Canada Health Infoway funded project
- Administered through the eHealth PCIS Office.
- Extends to March 31, 2012.

e Purpose

- Fits within the Canada Health Infoway (CHI) Peer-to-Peer Network.
- Provides organized system of relationships formed to support Infoway's End User Strategy.
- Intends to accelerate the adoption and integration of information technology to improve access, quality and productivity.

e Key themes include:

- Peer collaboration through practical dialogue
- Peer support
- Demonstration of value
- Education

Manitoba Peer to Peer Network

🌐 Manitoba Peer-to-Peer Network Services

➤ **Peer Consultation Program**

- Provide forum for clinics, physicians and clinicians to obtain focused answers to targeted questions from peer leaders and other clinic staff.
- Serves as a source of information in the establishment of a clinician centric EMR FAQ and knowledge base.

➤ **Peer Site Visit Program**

- Provides opportunity for physicians, clinicians and clinic staff to visit EMR enabled practices.
- Opportunity to see first hand how an optimized EMR facilitates clinical workflow, improves care and enhances practice.

Manitoba Peer to Peer Network

🌐 Manitoba Peer-to-Peer Network Services

➤ **Peer Collaboration Program**

- Facilitate opportunity for physicians and clinics to collaborate in-person and/or virtually.
- Provide opportunity for remote rural clinics to dialogue with peer leaders and experienced EMR users regardless of geographic location.
- Leverage use of technologies that promote remote collaboration, eg, provincial telehealth, teleconference and webex.

➤ **Peer Mentorship Program**

- In concert with the introduction of an EMR funded program provide opportunity for physicians and clinic staff to connect with an identified peer leader.
- Once established the relationship persists throughout the EMR adoption process.
- Peer leaders could include various disciplines including physicians, clinic managers and other office staff.

Physician Peer to Peer Network

Peer Leaders:

- 10 Physician Peer Leaders in Manitoba located in Winnipeg, Dauphin, Steinbach, Niverville, Winkler and Morden

Dr. J. Blignaut, Winkler

Dr. C. Burnett, Niverville

Dr. M. Duerksen, Steinbach

Dr. J. Francois, Winnipeg

Dr. S. Thomas, Winnipeg

Dr. M. Seshia, Winnipeg

Dr. C. Holmes, Morden

Dr. R. Smith, Winnipeg

Dr. G. Fuchs, Selkirk

Dr. S. Kish, Dauphin

- 3 Nursing Peer Leaders in Manitoba

Norm Vigier

Trish Bergal

Myrna Pachal

- *We are looking to expand and interested in hearing from physicians, clinicians interested in becoming Peer Leaders.*

Physician Peer to Peer Network

- For more information: <http://www.manitoba-ehealth.ca/dr-Network.html>

The screenshot shows a web browser window with the URL www.manitoba-ehealth.ca/dr-Network.htm. The page header includes the Manitoba eHealth logo with the tagline "Health. Connected." and a background image of a doctor's hands on a keyboard. The main heading is "Manitoba Physician Peer-to-Peer Network". Below this, there is introductory text: "The Manitoba Physician Peer-to-Peer Network is a resource for physicians looking to improve the management of patient care with an Electronic Medical Record (EMR) system. Physician Peer Leaders act as mentors and advisors. They can answer your questions about adopting an EMR system." A sidebar on the left contains a navigation menu with the following items: About Us, Projects, Community Physicians, News, Careers, Vendor Information, Computer Training, Links, and Search. A red arrow points to "Community Physicians". The main content area has a sidebar with a list of links: Electronic Medical Records (EMR), EMR Adoption Program and Services, Primary Care/Community Physician Information Systems (PCIS) Office, and eChart Manitoba. A red arrow points to "EMR Adoption Program and Services". Below this list, there are three bullet points: "Using EMRs in a practice setting", "Benefits of an EMR", and "Arranging visits to practices operating with EMR systems". The text continues: "The program is funded by Canada Health Infoway and operated by Manitoba eHealth." A section titled "Who are the Physician Peer Leaders?" follows, with a paragraph: "Peer Leaders are practicing physicians from across Manitoba with first hand experience implementing and using EMRs. Click here to learn more about their experiences." At the bottom, it says: "To arrange a consultation with a Physician Peer Leader, email PCISOffice@manitoba-ehealth.ca."



EMR Interoperability Upgrade Planning

EMR Upgrade: Background

- ④ “EMR Upgrade” is Infoway’s name for a major investment in the jurisdictions’ approved EMR products across Canadian jurisdictions.
- ④ Infoway will provide funding to enable vendors to upgrade their products to meet interoperability needs.
- ④ These needs will be agreed to between Infoway and each jurisdiction. However, Infoway is expecting pan-Canadian standards to be used wherever possible and is encouraging harmonization where jurisdictions have similar priorities.
- ④ Infoway will provide the funding and will generally sign Statements of Work directly with the vendors.
- ④ Manitoba will include the upgrade specs that it agrees upon with Infoway in a New Requirements specification issued under the Master Standing Agreement, and will conduct Conformance Testing of the resulting version.

EMR Upgrade: Constraints

- ④ Infoway included some constraints for the jurisdictions with regard to EMR Upgrade in their EMR Deploy agreement with jurisdictions:
 - Specifications for Upgrade must be agreed upon no later than September 30, 2011
 - Note that Manitoba is already working with Infoway on EMR Upgrade and hopes to reach agreement much sooner
 - Upgraded versions (following vendor development, Infoway testing and jurisdictional conformance testing) must be implemented by clinics that have received funding for adoption no later than October 31, 2013.

EMR Content Standards & Data Extract

- ④ In 2010, the Canadian Institute for Health Information, Infoway and most jurisdictions participated in the development of EMR Content Standards. These are intended to address standardization of key data elements, both for clinical care and for “health system use” (planning, quality improvement, etc.).
- ④ Implementation of the EMR Content Standards as well as a data extract format for health system use are being included as part of the Upgrade initiative.
- ④ CIHI is currently focusing on the Data Extract specification.
- ④ Infoway will include the Data Extract implementation guidelines within broader implementation documentation.
- ④ Infoway is also leading the effort to define reference sets for the data elements within the Content Standards that will have fixed value sets, including in some cases SNOMED CT subsets.

EMR Upgrade: Manitoba Approach

- ④ Manitoba is working closely with Infoway and CIHI to leverage both the EMR Content Standards and the Upgrade investment that Infoway will make on Manitoba's behalf.
- ④ This work will be the main focus for New Requirements issued to Manitoba's approved EMR vendors in 2011.
- ④ We are keen to follow actual or candidate pan-Canadian standards wherever they exist and to work with other jurisdictions and national organizations to move toward harmonization.
- ④ Which features are included in the Manitoba Upgrade requirements will be driven by:
 - Clinical, business and policy priorities
 - Readiness of "back-end" systems and infrastructure to enable interoperability (including funding for the related projects)
 - Availability of a specification or Manitoba readiness to develop one

EMR Upgrade: Manitoba Approach (cont'd)

Tentatively, three releases of specifications, with the first accompanied by an EMR interoperability roadmap for Manitoba and an architectural guide.

- ② S1 (target - early spring)
 - Basic Health Hub connectivity for EMR
 - Delivery of lab results to EMR
 - Button within EMR that launches eChart viewer and passes in-focus patient to viewer
- ② S2 (target – late spring/early summer)
 - Delivery of diagnostic imaging reports to EMR
 - Client interface between EMR and provincial systems
 - Extract of key data from EMR for coordination of care, to eChart and perhaps other systems via Health Hub
- ② S3 (target – fall)
 - Emergency visit summary to EMR
 - Discharge summary to EMR
 - Cancer Care progress notes to EMR
 - Data extract for HSU based on CIHI specification
 - Possibly, ability to send referral to, and receive appointment notice and consultation report from a specialist physician, via EMR

Note that this release strategy and timelines are hypothetical and still being validated both internally and with Infoway.



Thank you.

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