eHealth in Manitoba

“The journey continues…”

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CIO, Manitoba eHealth Program

Update to ICTAM and ITAC
October 28, 2009
Contents

- What is eHealth? A refresher
- eHealth in Canada
- Why is eHealth important?
- Manitoba’s eHealth Strategy
- How will we get this done?
WHAT IS eHEALTH?
What is eHealth?

eHealth is about providing the right information at the right time to the right people so that:

- People and their families have access to the information they need to maintain their health and to access the services they require
- Providers are able to provide high quality services
- Health system administrators can ensure the sustainability and accountability of the System

eHealth is about Health
The Manitoba eHealth Program: A Unique Solution

Created to:

- Ensure a long-term province-wide approach to eHealth is developed, one that is consistent and sustainable
- Work with Infoway, other jurisdictions, the RHAs and all Manitoba health providers to deliver and support province-wide solutions
- Enable and lead to a better health system for all Manitobans

The Manitoba eHealth Program is accountable:

- To the Minister of Health through an Oversight Committee composed of key stakeholders
- To the Deputy Minister of MHHL though a Program Council composed of its key customers
- To the WRHA CEO, where it is administratively housed
The Manitoba eHealth Program

 Manitoba Health:
 - Provides necessary oversight, funding and support
 - Will transfer key provincial assets to the Program
 - Commits to work on eHealth through the Program

 WRHA and DSM (Diagnostic Services of Manitoba):
 - First Health Authorities to be fully integrated with the Manitoba eHealth Program
 - Have provided the scale to permit further leverage

 Other Health Authorities (RHAs and CancerCare Manitoba):
 - Will implement province-wide services over time
 - Will benefit from leverage where appropriate and as necessary
eHealth in Canada

EHealth scandal a $1B waste: auditor

Opposition demands public inquiry into $1 billion spent on eHealth.

Health-record deadline in doubt, prem.

Cancer Care Ontario defends consultant deals

Why eHealth went 'off the rails'
Consultant at the centre of storm says agency failed to set goals or hire capable team.
WHY IS eHEALTH IMPORTANT?
'Make sure it doesn't happen again': patient safety goal

Paula Beard, director of operations for Canadian Patient Safety Institute, said studies -- particularly the landmark 2004 Baker Norton study -- show Canada’s prevalence of harmed patients sits at 7.5 per cent. Other studies show Canada’s figure for deaths per hospital admissions is one to one and a half per cent, or between 9,000 and 24,000, she said.

That’s about the same, Beard said, as figures in most of the developed world. But the goal is always to reduce that. The symposium is held just days before the first anniversary of the passing of Manitoba’s apology legislation, which allows health-care workers and other professionals to apologize to a patient without it constituting an admission of legal liability.
Overloaded family doctors pick and choose patients

February 11, 2008

Aside from being overrun with older patients with complex, chronic diseases, Johnson said administrative paperwork and telephone medical advice eat up time a physician could be spending with a patient. Doctors are not reimbursed for dispensing medical advice over the phone, talking to pharmacists about prescription orders or discussing the health of a patient with hospital staff.

"You've got an aging population, people with multiple conditions, an epidemic of diabetes, the issues of patients in hospital, the fact we're so short of family doctors," Johnson said. "The heavy lifters of the health-care system are overwhelmed."
OTTAWA -- Health care in Canada will cost $172 billion this year, or nearly $5,200 for every single person in the country, according to figures released Thursday by the Canadian Institute for Health Information.

The independent statistical agency says that total health spending is forecast to increase by 3.4 per cent in 2008, up from nearly $162 billion last year. In 2006, the tab for health care ran to about $151 billion.

In all, health spending in Canada is expected to soak up 10.7 per cent of the country's gross domestic product this year, the highest proportion ever recorded by CIHI.

"Health-care spending is expected to grow faster than Canada's economy, outpacing inflation and population growth," Glenda Yeates, the group's president and CEO, said in a news release.
Health Goals

Quality and Safety
- Public Health
- Fewer errors

Access
- Wait times reduced
- Services close to home
- Primary Care
- Managing chronic illness

Efficiency and Sustainability
- Optimal cost performance
- Improved ability to manage System
- Reduced waste
- Health Human Resources
Why eHealth? It simply makes good business sense:

**Automated hospitals have lower mortality, morbidity and operating costs than hospitals that are not automated**
Study shows correlation between degree of hospital automation and clinical performance

Methodology:
Researchers conducted a cross sectional study of 41 urban Texas hospitals which examined the association between a hospital’s use of automation

- Notes and Records
- Test Results
- Order Entry
- Clinical decision support

And:
- Inpatient mortality
- Complications
- Costs
- Length of stay

Findings:
Hospitals with more automation also had fewer complications and lower costs.

## EMR Adoption Model<sup>SM</sup> Trends
### First Quarter, 2009

<table>
<thead>
<tr>
<th>Stage 7</th>
<th>Medical record fully electronic; HCO able to contribute CCD as byproduct of EMR; Data warehousing in use</th>
<th>U.S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Physician documentation (structured templates), full CDSS (variance &amp; compliance), full R-PACS</td>
<td>0.8%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Closed loop medication administration*</td>
<td>3.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Stage 4</td>
<td>CPOE, CDSS (clinical protocols)</td>
<td>2.8%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology</td>
<td>37.0%</td>
<td>7.1%</td>
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<tr>
<td>Stage 2</td>
<td>Clinical Data Repository, Controlled Medical Vocabulary, Clinical Decision Support, may have Document Imaging</td>
<td>32.1%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Ancillaries – Lab, Rad, Pharmacy – All Installed</td>
<td>9.0%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Stage 0</td>
<td>All Three Ancillaries Not Installed</td>
<td>14.5%</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

*Stage 5: % may include additional Stage 6 Hospitals not yet validated  
N = 5170 US/648 Canada

Source: HIMSS Analytics™ Database  
© 2009 HIMSS Analytics
HIMMS Analytics – National Survey

Mean EMR Adoption Model Score

SBGH
USA
NS (n=34)
WRHA
Canada
WRHA (O)
MB (n=15)
SK (n=18)
SK (n=61)
MB (n=67)
Why eHealth? It simply makes good business sense:

Community-based care has become big business and is the key to ensuring that care is provided close to home.
Why eHealth? It simply makes good business sense:

Primary Care Providers are no longer islands... the effectiveness of their care depends upon access to information and specialized services
Expected Impacts of EMRs

- Primary care providers (PCPs) are believed to order 25%-40% unnecessary diagnostic tests (i.e. labs, DI and other).

- 15% of PCPs referrals to specialists are unnecessary due to lack of access to information on specialist practices.

- Most chronically ill patients are found to not follow best practices, even when their care is in the hands of a PCP.

- We simply do not have any knowledge about the performance of the health system in a community setting.
EMRs can help improve compliance with Chronic Disease

Electronic systems changing the face of health care

The imprint of modern technology on health care was apparent this week in three separate news announcements.

On Wednesday, Telus said it has signed an agreement with Microsoft to host and operate its HealthVault system in Canada.

The system, expected to be launched in eight to 12 months, will allow people to manage and store their own personal health records and have access to applications like chronic disease management, pediatric care and wellness products.

Telus will make the service available to organizations such as governments, health regions, hospitals, insurers and employers for them in turn to offer it to their constituents. Telus would operate the infrastructure and securely host all stored health data in Canada to help ensure consumer privacy.

Canada Health Infoway, which is the federal agency behind the development of electronic health records in Canada, sees HealthVault as complementary to its efforts. But Infoway president Richard Alvarez wants to ensure that patient information stays in this country.

Ontario Information and Privacy Commissioner Dr. Ann Cavoukian is enthused by the development. “As the health care system transitions from paper-based records to electronic health records, it is essential for patients to become an active part of this process,” she said. “Let the new era of accessibility begin."

Also on Wednesday, the Ontario government announced it will be tabling legislation to allow the use of dispensing machines to fill prescriptions. The user would be able to speak to a pharmacist through a built-in video connection. A successful pilot test of two dispensing machines has been in operation at Sunnybrook Health Sciences Centre in Toronto since last June.

The legislation will also allow pharmacy technicians to dispense drugs under the supervision of a pharmacist by video link-up, and permit mail-order delivery of prescriptions for chronic conditions to patients.

On Tuesday, a study published in the journal Circulation reported on the success of a computer telephone system to remind patients to stay on top of their high blood pressure. The Laval, Quebec study involved 223 hypertension patients who got regular automated calls asking them a series of questions. Information collected was then relayed to attending physicians.

Patients participating in this service were almost twice as likely (46 to 28 per cent) to have their condition under control than those in the study who did not have access to the service.
WHAT IS THE MANITOBA eHEALTH STRATEGY?
Components of the Provincial e-Health Strategy

- A single coherent strategy
- Divided into components only to break the work into manageable pieces
- Components are really complementary ways of looking at the same thing
- Components overlap

Focus on Manitobans and providers

Focus on health system managers
Development of eHealth Strategy Components

Initial Focus
- Acute Care
- Community Care
- Long Term Care
- Primary Care

Coordination of Care / EHR

Developing Focus
- Public Health
- Self Care
- Admin/C corporate

Healthcare System Management

Infrastructure
We have been working with Infoway on the implementation of their Blueprint, and creating the Manitoba EHR solution.
A sample of our Electronic Healthcare Record - patient information from many different systems being displayed to a provider.
Coordination of Care - Transition Overview

Legend: Black = Funding Approved; Blue = in Capital Plan; Gray = Future Funding Required. Note timing beyond 11/12 is only notional and may not be supported by available funding.
Acute Care - Transition Overview

Legend: Black = Funding Approved; Blue = in Capital Plan; Gray = Future Funding Required.
Note timing beyond 11/12 is only notional and may not be supported by available funding.
Community & Public Health - Transition Overview

Legend: Black = Funding Approved; Blue = in Capital Plan; Gray = Future Funding Required.
Note timing beyond 11/12 is only notional and may not be supported by available funding.
Primary Care - Transition Overview

- Deploy EMRs to RHA & FFS Primary Care
- Support Extended PIN Participation
- Establish PC Information Analysis
- CareLink (Current Scope)

Legend: Black = Funding Approved; Blue = in Capital Plan; Gray = Future Funding Required.
Note timing beyond 11/12 is only notional and may not be supported by available funding.
Infrastructure Initiatives

Legend: Black = Funding Approved; Blue = in Capital Plan; Gray = Future Funding Required.
Note timing beyond 11/12 is only notional and may not be supported by available funding.
HOW WILL THE MANITOBA eHEALTH PROGRAM DELIVER THE STRATEGY?
Our Challenges

Large Projects:
- Now have a commitment of a capital planning cap but...
- Operating dollars will be a challenge
- Need to build a local resource base

Complexity
- Focus on long term change through a flexible governance structure

Timelines
- This is not a sprint... but a marathon!

Managing Expectations
- We are all anxious to be at the finish line!

Public Engagement
Resource Forecasts

Anticipated 60% growth in annual capital spending over the next two years, to reach $40M annually;

Significant number of additional resources are required:

- Project Managers: 30-35
- Business Analysts: 45-50
- Clinical Informatics: 17-20
- Technical Specialist: 25-28
- Architects: 18-20
- Interface Analysts: 18-20
- Change Management: 10-13
- Communications Specialists: 5-8
- Infrastructure Support Analysts: 20-25
- Software Developers/Report Writers: 19-22

Additional full-time equivalents (FTE’s): 237-256
Resourcing Strategy

 dévelop organizational standards and vertically integrate standards & processes into local vendor community:

- Operations:
  - ITIL
- Project Management:
  - Prince2
- Change Management:
  - ProSci
- Health Care Information Standards:
  - HL7
- Integration Services
  - Cloverleaf & iEHR HIAL
- Organization
  - CMMI

Strategy enhances local resource pool and facilitates outsourcing of project delivery
... the real story is about people

What happens when you live in a remote northern community, and need to travel far away for health care services, far from loved ones?
Questions

Contact us

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