Infoway's End User Strategy

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Outline

- Expectations

- Canada Health Infoway

- Change/Engagement Challenges

- The End User Strategy – The Projects

- Meeting the Change/Engagement Challenges

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Expectations

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What Canadians expect from the healthcare system

- Accurate information that moves with them

- Their providers communicate with each other

- Protection of their privacy

- Input into decisions

- Elimination of undue risk

- Timely access/results

- To learn on their own with help from their providers

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What Dr. Smith expects from the healthcare system

- Environment allows her to provide quality care
- Recognition for providing quality care
- Work that is appropriate for skill set
- Fair compensation
- Accurate, timely and accessible patient information
- Information systems that do not:
  - Intrude on natural workflow
  - Expose her to risk
- Assistance with acquiring information systems:
  - Financial
  - Product selection and implementation

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What a Deputy Minister of Health expects from the healthcare system

- Quality

- Productivity

- Access

- Data that evaluate quality, efficiency and access

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In spite of spectacular advances in medicine, the foundation of healthcare delivery is still primarily *paper-based*

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Last Year, in Canada

- **35 million diagnostic images**
- **440 million laboratory tests**
- **2.8 million inpatient hospitalizations**
- **382 million prescriptions filled**
- **3.4 million Vioxx prescriptions in 2003 for patients that had to be contacted in 2004**
- **322 million office-based physicians visits - 94% resulting in handwritten paper records**
- **60,000 physicians faced 1.8 million new medical papers in 20,000 journals and 300,000 clinical trials**

Information is the lifeblood of our healthcare system!
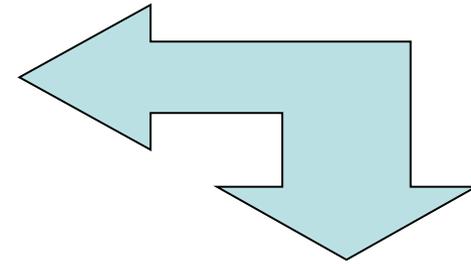
About 2,000 health care transactions per minute, many quite complex, and all requiring documentation and information flow

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Huge potential benefits

Undercapitalized infrastructure

Providers, managers, patients, public are demanding more

IT has potential to enable solutions to address pressures

Convinced of need

Enables healthcare reform

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Canada Health Infoway

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About Infoway

Mission:

- Foster and accelerate the development and adoption of electronic health information systems with compatible standards and communications technologies on a pan-Canadian basis, with tangible benefits to Canadians

Approach:

- Established by the First Ministers of Canada's federal, provincial and territorial governments in 2001

- A not-for-profit corporation

- Funded by the Government of Canada, funding was allocated to Infoway in 2001 ($500m), 2003 ($600m), 2004 ($100m) and 2007 ($400m)

- Infoway's Members are Canada's 14 federal, provincial and territorial Deputy Ministers of Health

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Infoway's Strategic Investor Role

Funder	Strategic Investor	Intervener	Developer

"Fund & ignore"	*"Invest, advise & monitor"*	*"Work alongside & take over if needed"*	*"Write code & build modules"*

Funder — *"Fund & ignore"*
- Grants funding
- Is uninvolved in project execution
- Checks on status of phase-based deliverables

Strategic Investor — *"Invest, advise & monitor"*
- **Invests with Partners**
- **Involved in project planning**
- **Monitors progress of projects and quality of deliverables**
  Gated funding approach allows management of risk

  Infoway also provides leadership in setting the strategic direction and standards for EHR deployment across Canada

Intervener — *"Work alongside & take over if needed"*
- Invests with partner
- Involved with partner in planning, and execution
- Ensures success through ongoing, active participation or intervention when something goes wrong

Developer — *"Write code & build modules"*
- Invests independently
- Engages potential partners in needs analysis and testing
- Aims for speed and success by working without a partner or on behalf of a future partner
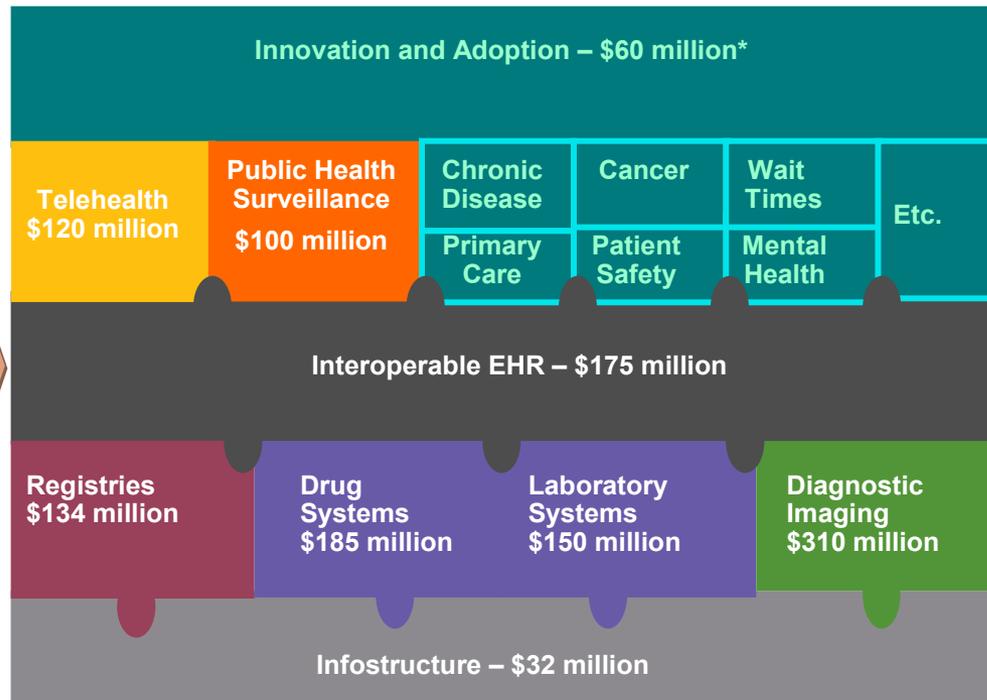
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Infoway's Programs

Infoway's Goal

By 2010 ,every province and territory and the population they serve will benefit from new health Information systems that will help modernize the healthcare system. Further, 50 percent of Canadians will have their electronic health record readily available to the authorized professionals who provide their healthcare services.

Innovation and Adoption – $60 million*

| Telehealth $120 million | Public Health Surveillance $100 million | Chronic Disease | Cancer | Wait Times | Etc. |
| | | Primary Care | Patient Safety | Mental Health | |

Interoperable EHR – $175 million

| Registries $134 million | Drug Systems $185 million | Laboratory Systems $150 million | Diagnostic Imaging $310 million |

Infostructure – $32 million

Basic Elements of EHR

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EHR Defined

An electronic health record (EHR) is a secure and private lifetime
record of an individual's health and care history, available electronically to authorized health providers.

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EMR versus EHR

EMR

- Record is specific to an organization
- The equivalent of its paper predecessor
- Includes everything that is recorded about an individual
- Has "depth" but lacks "breadth"

EHR

- Record for a specific individual that incorporates information from every health care encounter
- Draws from every EMR that is maintained for that individual
- Also draws from other point of service systems (e.g. pharmacy, lab)
- Has "breadth" but lacks "depth"

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Change/Engagement Challenges

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"We can only succeed in making electronic health records a reality if healthcare providers adopt the technology. Without their acceptance, our efforts are futile."

Richard Alvarez,
President and CEO, Canada Health Infoway

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Engagement/Change Management Challenges

- Majority of Canadian clinicians learned their professions in the absence of automation and continue to practice without it

- Concerns prevail:

    - Privacy of patient information
    - Impact on efficiency of work
    - Cost of automation
    - Quality of available solutions
    - Understanding how to make the transition from paper-based to electronic documentation

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Challenges: Technology Adoption in Practice Setting

- A large, complex, diverse and multi-structured system

- Not clear who is "in charge"

- One size or solution may not fit all – flexibility required

- Technology must support - not drive - healthcare reform

- Understanding the fundamental work flow transitions from paper to electronic

- Need to demonstrate clearly the benefits and value to making the change

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Change and Adoption Priorities

- Seeking clinician leadership for EHR initiatives

- Demonstrate early and visible benefits

- Coordinated approaches to change management

- Addressing the capacity issues that real change management requires

- Ongoing support to sustain change management activities

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Key Learnings

- Collaboration, partnerships and engagement are essential

- Need a strong, proactive network of champions and peer supports

- Need to document and communicate best practices and wins

- Influence knowledge sharing and training

- Set targets for adoption/use and report on them

- Measure benefits and impacts and adjust programs and strategies

- Understand your users and their work flow, requirements – involve the user early and often

- Set realistic expectations – and meet them

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End User Engagement: Strategic Challenges

- Obtaining a return on investments in EHR infrastructure requires substantial change in the work behaviours of health professionals

- Change must occur across a complex landscape

- End user engagement is a critical enabler of EHR solutions

- Health provider use of technology is slow and must be accelerated

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Implementing the End User Strategy – The Projects

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Purpose Of End User Strategy

- Accelerate the adoption of electronic health record solutions by health providers within the practice setting

- Support and add value to jurisdictional efforts to advance the use of health information technology by health care providers

- Create a body of knowledge on end user engagement

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Process to Develop Strategy and Projects

- Conduct a current state assessment of end user engagement of EMR and EHR (technology in practice) in Canada and internationally

- Consult stakeholders on benefits, barriers and suggested strategies for Infoway

- Develop a set of practical strategies to increase health provider use of EMR and EHR (technology in practice)

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End User Strategy

Collaborative Engagement

- Engage key stakeholders toward establishing front line readiness and transition support; provide conditions for success and confidence for clinicians to move forward

Peer-to-Peer Network

- Strong, supported network of EHR users across Canada to accelerate use of EMR and EHR through peer-to-peer support

Demonstration & Documents

- Document and demonstrate knowledge to support front-line for readiness EHR implementation

Education & Training

- Influence EHR education and training for future clinicians and supported EHR continuous learning

Evaluation

- Evaluate End User Strategy Projects and impact on accelerating adoption of EHR solutions

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1. Collaborative engagement

Key Outputs

- Physician office system requirements and conformance testing
- Change management tools and training
- National provider leadership
- Symposia
- Influenced EHR as standard of care

Progress to May 2007

- CIOs from nine jurisdictions engaged in defining pan-Canadian EMR functional requirements
- Jurisdictional Change Management Advisory Group developing cross-program change management models, tools and techniques
- Clinician Team promoting the value of health IT and strategies to accelerate clinician adoption with provider organizations

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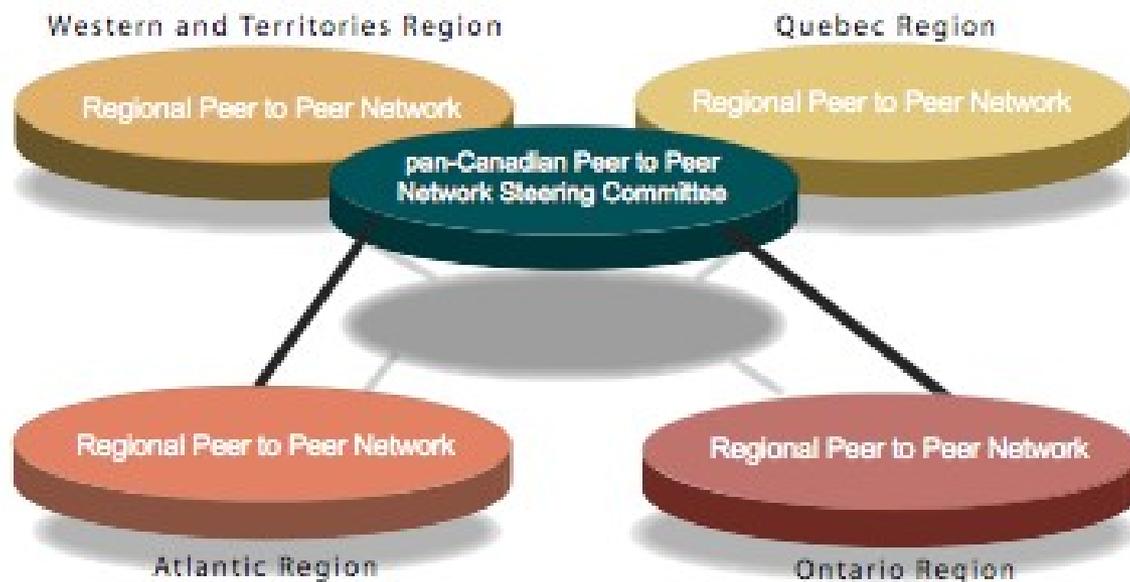
2. Peer-to-Peer Network

Key Outputs

- Peer support networks

- Adoption/Engagement lessons

Progress to May 2007

- Peer-to-peer networks initiated in jurisdictions

- Content under development to support recruited peer leaders

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Peer-to-Peer Network

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Peer Network - Role of Peer Leader

- Provide hands-on support to health providers

- Provide support/assistance on an individual basis

- Providing change management and transition support

- Provide ongoing support/mentoring to health providers

- Lead local events for health providers

- Provide individual level of support to designated health providers

- Assist designated health providers with goal and priority setting

- Document key lessons learned

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Peer-to-Peer Support

- Electronic Communications System – links peers locally and nationally and provides access to up-to-date materials and information

- Peer-to-Peer Network Project Manager – provides support and guidance as required

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3. Demonstration & Documents

Key Outputs

- Value proposition
- Case studies
- Demonstration sites
- Tool kits

Progress to May 2007

- Physician engagement lessons captured in BC Northern Health Authority
- Case studies commissioned, in collaboration with the CMA, to illustrate best practices and value derived from IT implemented in multiple practice settings
- Criteria and initial list of demonstration sites established
- Communications strategy and materials developed

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Demonstration Sites

- The purpose of the demonstration sites project is to demonstrate health information technologies in practice to clinicians contemplating EMR implementation in an applied setting

- Target for 50 practice sites in all, 3-5 per jurisdiction across Canada

- Funding support for providers to support:

  – in person demonstrations
  – supported by conference call/remote support

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Demonstration Site Criteria

- Purpose is to demonstrate technology in practice for health providers

- Selection of demonstration sites based on:
    - Location/geography/site type
    - Implementation experience
    - Level of engagement possible for demonstration site
    - Demonstrated strong vendor partnership
    - Existence of practice champion
    - Available and accessible documentation to review

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Case Studies

- There will be up to thirty case studies conducted with stories written that illustrate best practice

- The case studies will be real life accounts of the opportunities and challenges faced by clinicians at various stages of EMR adoption

- The case studies will provide potential adopters of EMR technologies a better understand of what to expect

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Value Proposition Studies

- There will be up to ten value proposition studies conducted that will illustrate best practices

- Methodology includes both qualitative and quantitative survey tools to capture benefit and cost components

- Value proposition scope includes both initial implementation and on-going value proposition story

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4. Education & Training

Key Outputs

- Environmental scan
- Academic education strategy
- EHR curricula content
- Provider portal content

Progress to May 2007

- Environmental scan completed to assess the status of EHR/health informatics training and use in medical, nursing and pharmacy faculties and continuing education

- Strategy for influencing curricula and professional development to promote the use of health IT is under development

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5. Evaluation

Key Outputs

- Evaluation Report

Progress to May 2007

- Evaluation framework, indicators and methodologies under development with support of Evaluation Advisory Group

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Purpose/Scope of Evaluation

- Evaluate impact of end user strategy projects/initiatives in relation to established project/initiatives outcomes on health providers' behaviours and confidence to:
  - Decide to use technology
  - Use technology effectively
  - Build a sustained body of knowledge on end user engagement
  - To change behavior/attitudes of health providers toward use of technology
- Provide evaluation results to decision makers

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Meeting Change and Engagement Challenges

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Infoway Addressing the Challenges

1. Clinician leadership:

- The development and funding of peer-to-peer networks to support clinicians making the change in their practices

- EHR advocates from clinicians, nurses and pharmacists as leaders and transformers

- Show it to me: 3 or 4 successful demonstration sites/province

2. Early visible benefits:

- Established a benefits evaluation framework to measure the impact of change

- Strong knowledge sharing and communication program in collaboration with the CMA

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Infoway Addressing the Challenges

3. Coordinated approaches to change management:

- Implement change management approaches that eliminate multiple approaches/efforts to change management activities

- Streamline efforts and touch points with end users that are generically focused

4. Capacity issues:

- Take advice: funded several P/T advisory groups to guide and inform on best methodologies and training to self-build capacity

- Regional team-based approach of Infoway change management specialists

5. Sustained approach:

- Infoway supports adoption and transition post implementation

- Setting adoption targets and monitoring the process

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Thank You!

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