Accelerating clinical adoption and benefits realization

Presentation by Maureen Charlebois Chief Nursing Executive & Group Director and Cassie Frazer Benefits Realization & Quality Improvement, Clinical Adoption, Canada Health Infoway to the CNIA 2009 Conference November 23, 2009
Presentation objectives

- *Infoway* Strategy Overview
- Benefits Realization Approach
  - Adoption
  - Change Management
  - Benefits Evaluation
  - Knowledge Management
Canada Health Infoway

- Created in 2001
- $1.6 billion in federal funding
  - An additional $500 million allocated in 2009 Federal Budget
- Independent, not-for-profit corporation
- Accountable to 14 federal/provincial/territorial governments
- Goal by 2010
  - Every Canadian will benefit from modern health information systems; and, 50 per cent of Canadians will have an electronic health record accessible by authorized health care providers.
Investment model

Upon ratification of the Federal Funding Agreement, Infoway’s commitment will total more than $2.1 billion in 12 targeted investment programs.
Infoway business strategies

- Participate in health care renewal
- Collaborate with our partners
- Target the investments
- Support solution deployment
- Promote solution adoption and benefits realization
**Infoway approach**

- Strategic investor - gated funding approach

- Clinical adoption
  - Emphasis on benefits realization, quality improvement, professional practice & clinical informatics
    - Integrated approach to change management, adoption & benefits evaluation

Knowledge management is core to our business
Evolution towards benefits realization

- Business Case
- Solution Impl’n
- Solution Adoption
- Net Benefits Realized

User satisfaction
Net benefits
Access
Productivity
Quality
Service quality
Information quality
System quality

Business Case
Solution Impl’n
Solution Adoption
Net Benefits Realized
4 critical questions

1. Are clinicians using the health information systems (HIS)?
2. Are they using it effectively?
3. Are they better able to provide quality patient care on the account of it?
4. Are the systems of benefit?
Accelerating adoption & benefits realization

- Adoption is a process, not an end state
- Benefits realization activities involve three core activities:
  - Articulation of the benefits;
  - Identification of key assumptions or conditions, and the development of action plans to address these; and
  - Measurement against objectives
“Whatever the mind of man can conceive and believe it can achieve”

Napolean Hill Quote
Maturity model – adoption & benefits curve

Low Breadth of Adoption High

Functionality, Integration.
Maturity model – the journey

Adoption is a process, not an end state

- Occasional use
- Not well integrated
- Low functionality
- Low measurement and analysis capability
- Low-hanging benefits

- Clinical Transformation
- Fully integrated
- Advanced functionality
- Data drives quality improvement
- Maximum Benefits

Low Breadth of Adoption High
Maturity model – Stages of EHR adoption & expected benefits

High

Higher level benefits require targeted efforts for realization

Examples:
- Productivity
- Improved System Management
- Knowledge Based Practice

Low

Examples:
- Coordination of Care across settings
- Early patient safety benefits

Examples:
- DI Film Costs
- Filling information gaps

Low Breadth of Adoption  High Richness of Adoption

Functionality, Integration, etc.
Maturity model – adoption measurement

Increasing sophistication of measurement helps drive maturity

Clinician driven focus on quality improvement

Surveys and check points are critical to understand quality and address drivers & barriers

Measurement is complex; start simple, but plan ahead and celebrate along the way

Low Breadth of Adoption High

Measure active users – user and access patterns combined. What are the measures of success?
Clinical Adoption: Benefits realization approach
Infoway benefits realization approach

Change Management
- Stakeholder Engagement
- Workflow Analysis
- Communication Planning & Delivery
- Education & Training

Adoption
- Adoption Targets
- System & Use survey
- End User Strategy
- Research

Benefits Evaluation
- Pan-Canadian studies
- Benefits evaluation projects
- Outcomes

Knowledge Management

Project Timeline
- Planning
- Implementation
- Active Use

Go-Live
Applying these concepts
Infoway benefit evaluation framework

ORGANIZATIONAL & CONTEXT FACTORS: STRATEGY, CULTURE & BUSINESS PROCESS – OUT OF SCOPE

Based on the Delone & McLean IS Success Model
Focus on adoption and benefits

Common scope of IT Projects

- System quality
- Information quality
- Service quality

Net benefits
- Quality
- Productivity

Clinical Adoption

- Use
- Satisfaction

Clinicians engaged early & integrated into day-to-day processes
Value proposition
Systems approach
Achievable targets and benefits
Adoption targets approach

- **Success**: 80%
- **Critical Mass**: 50%

Tipping point at 10-20% adoption

*Source: Gladwell, 2002*
Adoption target setting principles

- Milestones based on adoption curve
- Clearly articulated metrics
- Comparable targets
- Ongoing review and monitoring
- Clear and consistent reimbursement structure
System use survey

Assessment of user perceptions, drivers & barriers to change:

- Diagnose and address adoption and benefits realization issues
- Demonstrate early evidence of benefits

Based on the Delone & McLean IS Success Model
Impact of change management on adoption

Stakeholder Engagement

- Sense of ownership of finished ‘product’ by users
- Product that meets the needs of target users
- Champions at all level

Workflow Analysis

- System employs efficient practices and eliminates wasteful ones
- Opportunity to optimize patchwork processes that accumulated over time
- Don’t automate bad processes!
Impact of change management on adoption (2)

Communication Planning & Delivery
- Build excitement and anticipation
- Set realistic expectations
- Keep organization informed of progress
- Reduce anxiety about change

Education & Training
- Prepare users for new system
- Support users during transition & ongoing
- Obtain feedback of system use and functionality
Continuous quality improvement

- Feedback loop – ensures continuous quality improvement
  - Lessons learned (process built into each project)
  - Project milestones and test points
- Revise deliverables as projects evolve in order to accommodate internal/external changes
  - Technology
  - Data capture/data quality
  - Jurisdictional strategies
Reference guide and checklist

- Guide ensures that three components of Clinical Adoption strategy (Change Management, Adoption, Benefits Evaluation) are addressed throughout stages of project life cycle
- Project checklist outlines key steps in the process and provides project teams with guidance and quality assurance
## PROJECT CHARTER CHECKLIST

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<thead>
<tr>
<th>Quality Indicator</th>
<th>Evidence</th>
<th>Completed</th>
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<tbody>
<tr>
<td>○ Project governance is described with respect to structure, inter-committee relations, contact persons and end-users.</td>
<td>○ A Project Charter containing clear evidence of the noted indicators</td>
<td></td>
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<tr>
<td>○ All appropriate stakeholders are identified and are adequately represented.</td>
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<tr>
<td>○ Team member roles and responsibilities are well defined, as well as the accountability for leading change management activities.</td>
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<td>○ Mechanisms are in place to enable project teams and final end users to collaborate on planning, implementation and evaluation.</td>
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In summary…points to note

- Methodical planning up front and every step of the way.
- Users and organizations progress along the adoption course in stages that require incremental change leadership and support.
- Clear benefits and adoption targets must be aligned to each stage to allow users to understand the benefits.
- Importance of having effective techniques to measure adoption and user satisfaction against the objectives.

Celebrate!!
"Many of life's failures are people who did not realize how close they were to success when they gave up."

Thomas A. Edison
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Thank you