

Ambulatory Electronic Mental Health Record Solution

... with connection to EHR Services, delivers patient-centered care model and platform for service delivery

June 2014



Partners

- Mackenzie Health and Southlake Regional Health Centre share Information Communication Technology (ICT)
- Canada Health Infoway
- B Sharp Technologies
- McKesson Technologies and Partners including:
 - RelayHealth
 - ThoughtWire



Presentation Objectives

- Project Overview
- Critical Success factors
- Quality benefits
- Productivity benefits



Environmental Scan

- Few hospitals have developed an electronic mental health record to link all care settings
- Statistics assembled by the Mood Disorders Society of Canada shows, 1/3 of all hospitalizations in Canada are due to mental illness as either a primary or secondary diagnosis
- *"well-planned transitions (from hospital to community) and continuity in services would probably reduce these rates, improve clinical outcomes and ultimately affect the social functioning of individuals living with mental illnesses."*
2011 Health Indicators Report, CIHI



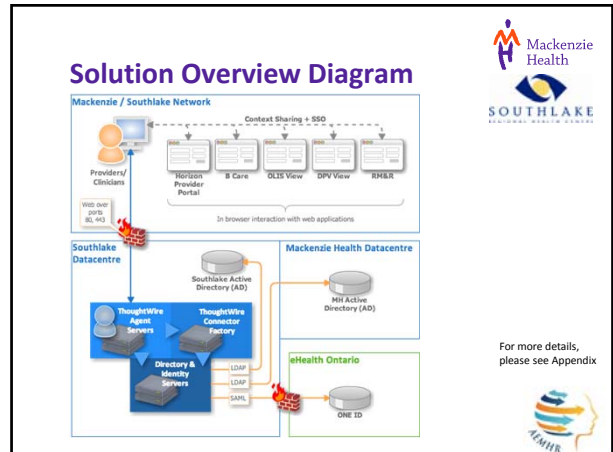


Project Phase Description

The project has 2 elements:

- **Ambulatory Electronic Mental Health Record (AEMHR)**
 - Structured (synoptic) mental health documentation system, assessments, hospital information systems linkages (lab and DI results) to electronic patient record
- **HIS Connect**
 - Infoway program requirement so Ambulatory EMR users can access regional or provincial EHR services seamlessly. Our project links B Care users to
 - McKesson Horizon Physician Portal (complete)
 - Ontario Lab Information System (complete)
 - Resource Matching & Referral (end of June)
 - Drug Profile Viewer (TBD)

Mackenzie Health SOUTH LAKE logo



Value Proposition



- Benefits to Patients
- Benefits to Health Care Providers
- Benefits to Sector



Business Goals for HIS Connect



- Provide clinicians with a critical set of supporting information that is seamless and integrated, needed for patient care through an advanced user experience.
- This User Experience provides for **Single Sign On (SSO)** across systems, and the **Contextual Alignment** of the relevant health systems based upon the context of the patient, to create an integrated experience, even across a set of disparate systems.

Business Goals for AEMHR



- Provide better community-based outpatient care and reduce the inpatient demand by delivering proactive ambulatory care
- Reduce the use of paper as the primary means of capturing and sharing patient information
- Reduce wait times by automating workflow and freeing up staff to work more effectively with their patients
- Set the standard for streamlining and consolidating information.
 - It is believed this is a truly unique project which will be replicated by other hospitals in Ontario and nationally



Key Deliverables




- Longitudinal electronic mental health record
- Mental Health clinical dashboard
- Mental Health synoptic reports






CRITICAL SUCCESS FACTORS



Establishing Best Practice

- Leveraged proven methodologies (e.g. from Infoway)
 - Project management framework
 - Privacy and Security toolkit (LPIA/LTRA)
 - Planning & Design Benefits Realization metrics
 - Thorough understanding of Clinician requirements
 - Functional business requirements
 - Change Management methodology
 - Map out existing flows/forms/documents
 - Define data elements
 - Training and Communication plans



Critical Success Factors

- Establishing best practices
- Strong project governance model = effective decision making
- Managing multiple relationships and stakeholder engagement
- Risk management
- Adoption and acceptance (Benefits Realization)



Project Governance Model

- Executive sponsorship from all involved partner organizations
- Detailed project plan with milestone completion directly aligned with funding
- Meeting discipline (frequent, minutes, action log, progress updates)
- Motivated teams to succeed



Managing Relationships

- Engage front-line
- Define teams early in the project
- Clear understanding for the involvement of numerous departments, roles and responsibilities for every partner organization
- Set clear expectations and accountabilities
- Execute on an effective communication plan
- Establish project milestone deliverables, closely monitor progress of each and reward / announce achievements



What Would We Do Differently

- Greater attention to contingency Planning
- Ensure budget assigned to contingency planning
- Apply greater attention to external dependencies
- Strengthen the change control process



Risk Management

- Define mutually agreed-to risks as early as possible
 - Review and update frequently
- Emphasis on collaboration and teamwork
- Minimize competing priorities
- Ensure project team focus on completing the tasks and keeping common goals




Benefits Evaluation

- Quality
 - Support more effective decision making
 - Provided for a consistent & standardized processes
 - Patient's don't need to repeat their story
- Access
 - 100% of targeted users are enrolled and using the solution
 - 95+% of admissions are electronic vs paper
 - Integration between In-Patient and Out-Patient settings
 - Availability – Removed chart contention
- Productivity
 - Reduction in time to access critical patient information
 - Access to longitudinal patient record across all encounters
 - Information sharing across various assessment







BENEFITS REALIZED





Benefits Evaluated

- From McKesson / ThoughtWire (eConnect)
 - It took **approx 7min** for a 'seasoned' user to completely log into each system (BCARE, Provider Portal and OLIS) with unique log in; find patients and validate them across different system
- Using eConnect – the process for a Physician would take **approximately 1 minute**
 - Open eConnect, launch B Care, find pt, view record in HPP, view results in OLIS
 - Similar one-click process to access DPV and RM&R
- Both eHealth Ontario and the hospitals agree accessibility and accountability were improved using eConnect

Increased Availability!


- Results more readily available across the continuum of care for Clinicians in ED using either B Care or Electronic Health Record (Horizon Patient Folder)
 - As of April 30th, 2014, RelayHealth processes:
 - 94,220 results per month at Southlake
 - 90,959 results per month at Mackenzie Health
 - Since the system went live, RelayHealth contains:
 - 94,995 patient records at Southlake
 - 109,178 patient records at Mackenzie Health

Tremendous success


eConnect helped improve the hospitals' AEMHR project

- *A savings of six minutes* each time an experienced clinical user needed to login to all systems
- *A reduction* in the number of unique username/password combinations versus needed to remember for each system
- *Improved accessibility* to clinical data through automated workflow and patient context sharing across systems
= **Clinicians more likely to use it!**
- *Simplified user experience* and reduced training needs
- The *integration* of provincial/regional assets into workflows
- *Improved accountability* through consolidated audit log data across systems






QUESTIONS?


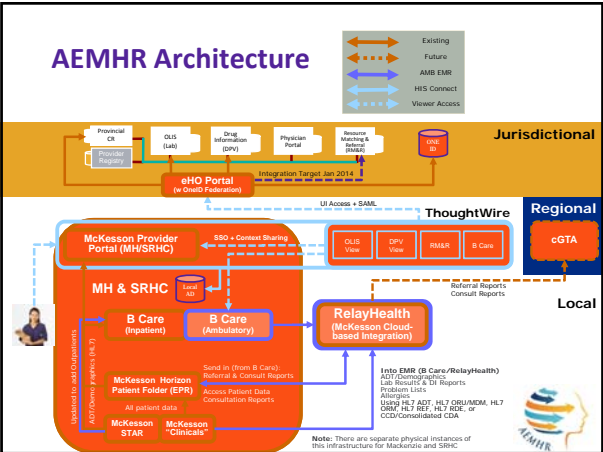



Other Stories

- In the ED, Crisis Workers are excited to obtain information in real-time, at the point of care versus hunting down a paper-based chart which are typically physically located in another part of the hospital. This has resulted in clinicians having immediate access to information including the details of a patient's last depot medication injection and mental status assessment available for review at the point of care instead of having the patient wait for service until the paper-based information is found. This is in precise alignment with improving patient safety, better patient satisfaction and improved experience for our staff.
- For the Central Intake clinician, the system has proven beneficial in retrieving historical data electronically from wherever they are online in real-time. The process has become much quicker and the clinicians are able to access a greater level of detailed information. The previous system involved referring to a spreadsheet with hand-written notes scanned into it, many of which contained blurred, faded or illegible handwriting so were difficult to decipher. Again, this outcome is in absolute alignment with improved patient safety and overall improved staff experience.
- The process of screening and assessing new patients over the phone to determine their level of acuity and most appropriate service required is now captured in the Program's workflow and documented securely and confidentially in the patient's legal record. Referrals for our Outpatient Mental Health services come to Mackenzie Health from a wide variety of community sources and now the hundreds of hours being spent over the phone with patients and/or family members to validate patient information and conduct assessments is finally being captured. Once again this is improving staff satisfaction and patient experience.
- Within the next month, every element of the AEMHR patient care chart will be available in the Horizon Patient Folder (Mackenzie Health's legal electronic patient chart). This is of great beneficial, not just for Mental Health Physicians and clinicians, but also for Physicians and staff anywhere across the hospital where a mental health patient may present themselves.

More detail follows

Single Sign-on (SSO)

eConnect Solution Scope

- SSO reduces the manual effort of logging in separately across multiple applications.
- Patient contexting enables a clinician to see 'same' patient results by moving between systems
- Using the initial eConnect deployment a clinical user reduced the amount of time spent logging into the individual systems by up to 6 minutes each time they were required to login.

To see an eConnect demonstration, please visit www.thoughtwire.com

Context Sharing and Contextual Alignment

Context Sharing & SSO

Context sharing and contextual alignment creates efficiencies in the clinicians workflow in a number of ways:

- The interaction between the clinician and the local and provincial eHealth applications are dramatically simplified by automating the navigation through the separate applications on behalf of the user.
- Massive reductions in time spent navigating through different applications has been achieved.
- The automated navigation reduces training complexity for end-users and can act as a tool to instill best practices for a particular task.
- The solution provides the tools to correlate consolidated audit events across the applications that are part of the solution thereby strengthening security and privacy monitoring.

Before and After

From B Care	Before	After
Charting i.e. Progress Notes	Paper	Electronic
Emergency Dept	Paper Assessment	Electronic
Hospital visibility of MH records for other non MH departments	None	Visibility in Hospital Portal (Patient Repository)
MH information available to Emergency Dept., IP MH, Ambulatory MH	Little information sharing	Full electronic view of the patient longitudinal record
MH patient information with Hospital legal patient chart	Basic demographic data stored only within BCARE	Sharing information stored within legal electronic chart

B Sharp - Before (on paper) versus NOW (electronically)