



HIMSS Analytics

HIMSS Analytics Stage 7 Case Study

Ontario Shores Centre for Mental Health Sciences



Profile

Ontario Shores Centre for Mental Health Sciences (Ontario Shores) is a public teaching hospital specializing in comprehensive mental health and addiction services for those with complex, serious and persistent mental illness. The facility, located in Whitby (East of Toronto), Ontario, Canada has 17 specialized inpatient units and extensive outpatient and community services. The organization is staffed by approximately 1,200 employees with 326 inpatient beds, and approximately 50,000 annual outpatient visits. **Stage 7 Award received: October 20, 2014**

The Challenge

In 2006, Ontario Shores divested from the Province of Ontario and became one of four stand-alone public psychiatric hospitals. This was a unique opportunity for the leadership at Ontario Shores to develop a clear mission, vision, values and strategy to become a leading mental health care organization in Ontario. Part of this strategy included embarking on a journey of discovery, recovery and hope that would translate into providing exemplary, evidence-based care that is delivered in a safe and therapeutic setting, an enhanced patient experience and improved patient outcomes.

A call to action to achieve these goals resulted in the investment in a fully integrated electronic medical record. The specific goals set forth for technology selection, implementation and expected outcomes were:

- Advance best practice in mental health care through the EMR implementation
- Enhance patient safety and quality of care
- Embed mechanisms to enable standards of care and adherence to clinical practice guidelines
- Enhance overall patient experience and satisfaction
- Employ “state of the art” technology to improve patient outcomes and drive process improvement and increase efficiencies
- Enable a clinician driven solution resulting in a “user friendly” and intuitive experience for physicians, clinicians, and business/administrative users
- Enhance research capability

Implementation Overview

In late 2008, Ontario Shores began its journey to implement a fully integrated EMR system. The implementation of Meditech 6.0, a fully electronic single vendor solution, was accomplished through the financial and visioning support of the board of directors and senior leadership team. Successful implementation of both inpatient and outpatient EMR was completed by 2011, subsequently Ontario Shores was recognized as a HIMSS EMRAM Stage 6 hospital in 2012. This success was due largely to the collaborative leadership of the Clinical Informatics, IT, Professional Practice and Clinical teams.



Utilizing a big bang approach, all supporting modules including registration/ADT, pharmacy, finance, human resources, payroll, staffing and scheduling were live by 2009. By 2010, all advanced clinical modules were enabled for inpatients to allow for online documentation by physicians, nursing and all ancillary staff, supporting a truly interprofessional approach to care. Simultaneously, CPOE, e-MAR and BMV were enabled to support a closed loop medication administration process. In 2011, outpatient implementation was completed which helped to facilitate improved communication among care providers along the patients' care continuum.

The following goals have been the key drivers in the implementation of the EMR: enhance patient safety and quality of care, support a recovery-oriented interprofessional practice structure, and streamline care delivery processes and workflow based on evidence-based practices and standards. Additionally, the implementation of the EMR system has created opportunities to enable a new culture of care, increased accountability and transparency in practice, created the ability to collect more accurate data to support decision making, and improved and enhanced interprofessional communication and best practices.

Resulting Value / ROI

- Ontario Shores has been able to achieve high levels of CPOE, medication and patient ID scanning with implementation of the Meditech system. This has reduced the potential for medication errors. Current rates are 94% CPOE, 98% medication scanned, and 99% patient ID scanned.
- Fully electronic documentation and ordering has been a key enabler for reducing restraint and seclusion use at Ontario Shores. Decision-support is embedded directly within the physician orders for restraint and seclusion and reflex appropriate assessments for nursing staff. Data regarding restraint and seclusion at the organization is generated daily and shared with clinicians and administration so interventions, such as Recovery Rounds, can be implemented. From 2012/13 to 2013/14, an overall savings of \$776, 633 in staffing costs has been realized as a result of the decreased use of restraints and seclusion.
- Clinical practice guidelines for the assessment and treatment of Schizophrenia have been implemented on all of the inpatient units. Decision support is embedded in physician documentation templates, so suggested orders are generated based on the information that physicians enter. Adherence to the clinical practice guidelines are monitored regularly and shared with clinicians. Physicians and clinical units can compare their performance on key indicators against that of their peers. This initiative has seen adherence with recommended metabolic monitoring protocols increase by 100% and reductions in antipsychotic polypharmacy by 20% over 6 months.
- The system provides the opportunity for data mining via SQL which has resulted in the evolution of a business analytics culture. Leadership staff have asked for, and been provided with, detailed information related to the needs of their departments to help guide their operations. We are excited about all the future quality improvement opportunities that a better understanding of our data will bring.



Lessons Learned

- A physician champion (CMIO, Medical Informaticist or similar) is a critical investment to support the transition, trials and tribulations for the medical staff - physician to physician. This leadership role had a significant influence on the clinical design and workflow to support safe and efficient patient care.
- Strong project team, clear governance and rigorous project management. Spend time upfront to plan BUT...don't just develop a project plan and then forget about it, utilize it to track progress. Update progress on project plan weekly. Identify potential slippage early and develop strategies to mitigate slippage risk. Keeps the big picture in focus. It helps to know where you are at any point in time.
- Strong Change Management- involving end users are key. Frontline staff provided input throughout the project from selecting the implementation project name (Project EASIER - Easily Accessible Solution to an Integrated Electronic Record), to selecting a vendor, to participating in design teams, and acting as user champions. The other key change management strategy was focusing on workflow and practice changes – not IT system changes. Go-live support consisted of 24/7 on-unit support from end-user champions for multiple weeks. Extensive training was conducted during the initial phase of each implementation with extensive ongoing training for on-boarding of new clinical staff. Additionally, physicians receive one-on-one training as new hires and on an ongoing basis per request. This enables a culture of strong best practice rather than the system driving clinical workflows and practice. The system is only an enabler.
- Pre-work pays off. The readiness work completed around organizational culture and readiness for change played a key role in our success. Understanding the current state, mapping current processes and identifying gaps, duplication, and opportunities was time well spent. Consideration of level of computer literacy of clinical staff was also important.
- Senior Management Team support and leadership.

Achieving Stage 7 reflects the high standard of quality at Ontario Shores and demonstrates how we are advancing care for individuals living with mental illness. Our electronic medical record system improves the delivery and quality of care that we provide and standardizes clinical documentation in an environment which is efficient, secure and collaborative.

Karim Mamdani

President and CEO

Ontario Shores Centre for Mental Health Sciences