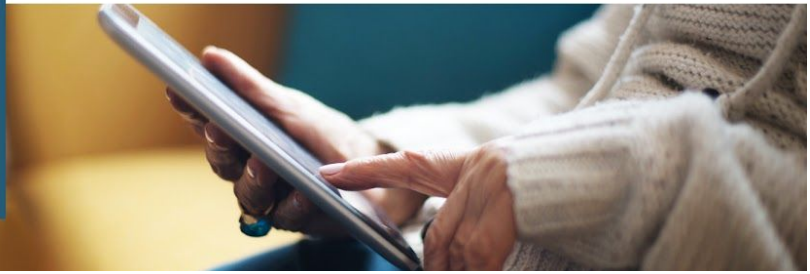


Ontario Shores

Advances Patient Engagement with MEDITECH



Ontario Shores Centre for Mental Health Sciences is a 346-bed public teaching hospital in Whitby, Ontario, that provides a wide range of assessment and treatment services to those living with complex and serious mental illness. By employing evidence-based approaches that leverage clinical best practices, innovative technology, and the latest advances in research, Ontario Shores became the first HIMSS Davies Enterprise Award recipient in Canada and the first behavioral health organization in the world to achieve HIMSS EMRAM Stage 7.

Executive Summary

Patient engagement is vital to healthcare organizations of all kinds, but perhaps none more so than mental and behavioral health providers. This paper examines how Ontario Shores Centre for Mental Health Sciences uses MEDITECH's Patient and Consumer Health Portal to engage their patients, as well as the positive impact it's having on patients and staff. Following implementation of the portal, Ontario Shores conducted a rigorous, peer-reviewed study that found significant benefits for both patients and healthcare organizations.

Findings include:

Patient Benefits



ACTIVATION
16% improvement in portal users' self-assessment scores*



RECOVERY
Improvement in 7 of 8 self-assessment

Organizational Benefits



PRODUCTIVITY
Portal users were 67% more likely to attend appointments



EFFICIENCY
Portal users were nearly 30% less likely to make requests for information

* Based on the Mental Health Recovery Measure (MHRM), a patient self-reporting tool used at Ontario Shores to assess the recovery process for individuals with serious mental illness.

Leveraging Technology to Engage Patients

Ontario Shores is recognized as one of the world's leading advocates for the "recovery model" of mental health care, which is focused on restoring fuller function and quality of life to those living with mental illness.¹ Under this model, patients are encouraged to become more active participants in their own care and care planning. Patient

engagement, therefore, is considered an essential component of the recovery model of care.

Ontario Shores implemented MEDITECH's Enterprise Health Record In 2011. The organization moved their individualized care plans directly into the EHR, making them accessible to any authorized provider across their care network. The ability to share care plans across all of the organization's inpatient and outpatient settings created a strong foundation for personalized care and patient engagement. Following their EHR implementation, executives at Ontario Shores identified an opportunity to extend medical information access to patients, in support of maintaining care continuity.

Before Ontario Shores' portal implementation, patients had limited access to their own care data. Their health information requests were processed manually by the organization's health information management (HIM) department, which could take weeks. Communication with caregivers was limited between appointments, and prescription refills were processed manually, requiring extra time and resources. In addition, patients could not easily share their medical record information with providers outside of Ontario Shores' network.

Ontario Shores felt that MEDITECH's patient portal could help them make significant strides toward their four primary patient engagement goals:

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-  1. To enhance patient access to their care providers and their own care data.
 -  2. To support the paradigm shift toward service-user-driven care.
 -  3. To remedy gaps in patient engagement and partnership between patients, families, and healthcare providers
 -  4. To evolve existing practices and culture from a provider-centric model to a patient-provider partnership.
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Involving Clinicians in Portal Design and Implementation

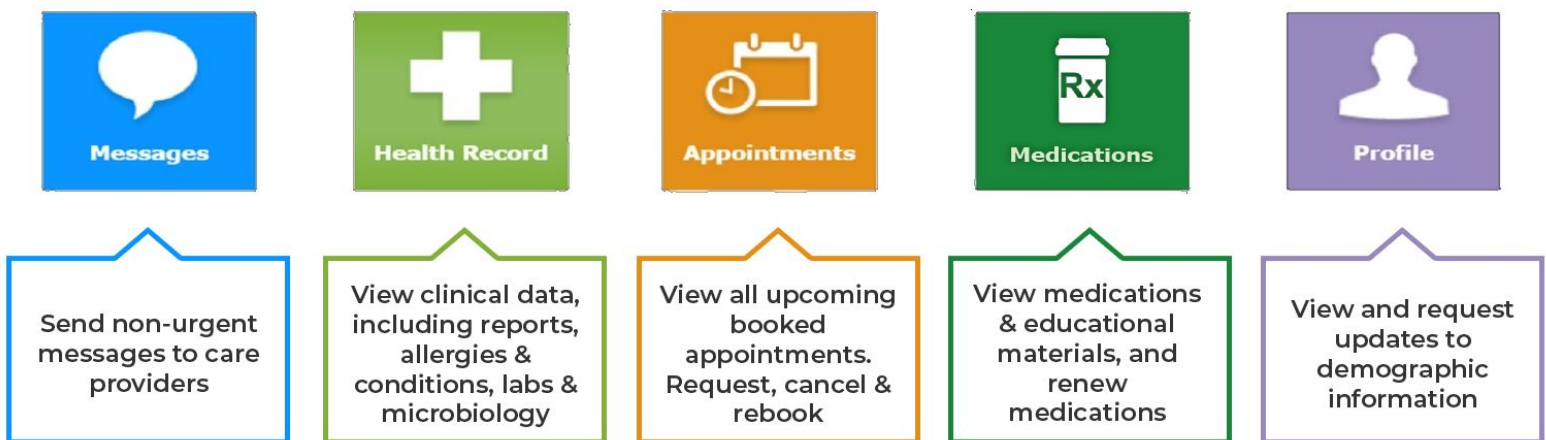
Ontario Shores began their portal implementation in September 2014. From the start, Ontario Shores involved their clinicians, patients, and other healthcare professionals in the design, planning, and implementation of the portal, along with leadership in information technology, clinical informatics, and HIM.

The primary features of MEDITECH's Consumer and Patient Health Portal that Ontario Shores chose to implement included:

- **Secure Messaging**
Enables patients to communicate directly with their providers
- **Medications**
Provides the ability to view and renew medications, and access educational materials
- **Appointments**
Allows patients to view, request, cancel, and/or reschedule appointments
- **Health Records**
Provides access to lab results, reports, visit history, and other personal medical information.

The organization also wanted to enable their users to view, download, print, and share their record with health care providers at other facilities to support continuity of care.

Primary Portal Features Implemented at Ontario Shores



Preparing for General Rollout

One month prior to general rollout, a pilot test of the portal was conducted with a small group of users, allowing time for final feedback and adjustment. During the month-long pilot test, Ontario Shores' implementation team gained a better understanding of how the portal worked after clinicians and patients were actually using it, and adjusted workflow processes to aid their providers and patients; no software changes were necessary.

To train staff for the general rollout, Ontario Shores used a demonstration account and a screencam video. They incorporated the portal screencam video into clinical orientation for all new hires, and added it to their existing learning management system module. Once trained, clinicians and other direct care providers received additional support through the organization's medical advisory council, nursing council, other professional councils, and on-unit services.

To market the portal to staff and patients, Ontario Shores branded their portal “Ontario Shores’ HealthCheck,” so that users would associate it with the world-renowned organization. The MEDITECH portal offers organizations the ability to visually brand screens to complement their existing websites.



To assess the impact of the patient portal, Ontario Shores worked with Canada Health Infoway (CHI) to undertake a Portal Benefits Evaluation designed by CHI. With the launch of the portal in December 2014, Ontario Shores’ staff began capturing baseline metrics to measure the impact of portal use. The evaluation enabled them to collect both qualitative and quantitative information.

Launching the Portal: Enhancing Access and Engagement

Enhancing Access

Once the portal was officially launched in December 2014, all registered inpatients and outpatients were offered the opportunity to enroll and use it. The MEDITECH portal provided these patients with:

- Secure, web-based access to key medical data, including lab results, medications, visit history, discharge instructions, and educational materials
- A secure method to electronically communicate with their caregivers
- The ability to view and request appointments, renew their prescriptions, and update their demographic information
- Access via any web browser on any computer or electronic device with Internet connectivity
- The ability to show, print, and share pertinent information with health care providers at other facilities, in support of maintaining continuity of care.

Ontario Shores supports the **OpenNotes** movement, which advocates for patient access to all personal health information. Using MEDITECH’s portal, Ontario Shores makes reports available to patients within three days of entry, providing key information from physicians, allied health, and outpatient clinicians. Proxy users — patients’ substitute decision makers, legal guardians, or anyone else to whom a patient has provided consent — have access to the same information as patients.



OpenNotes is an international movement that encourages doctors, nurses, therapists, and other healthcare professionals to share visit notes with patients.

To learn more and see which providers and organizations are sharing notes, visit: opennotes.org.

To promote use of the portal to patients and staff, Ontario Shores organized training facilitated by peer support specialists and an engagement coordinator to represent both perspectives — that of the patient and of the clinician.

- **Peer support specialists** are staff members who have lived experience with mental health issues. They promote the portal to patients and conduct training sessions.
- **The engagement coordinator** — an RN — was a temporary position funded by Canada Health Infoway (CHI) during the portal launch. The coordinator promoted the portal’s benefits to both staff and patients.

Ontario Shores depended on the engagement coordinator to encourage enrollment and noticed a drop-off when the temporary position ended. To increase enrollment and strengthen the portal’s sustainability, Ontario Shores built clinician prompts into the documentation for admissions and treatment reviews, encouraging providers to

offer portal enrollment to patients.

Enhancing Engagement

The implementation helped Ontario Shores progress toward all four of their patient engagement goals:

- 1 The patient portal enhances patients' access to their care providers and their own care data.** By enabling secure private messaging with caregivers, easier and more timely appointment requests, and convenient access to a wide range of personal health record data, the portal has enhanced patient access to both providers and care data.
- 2 The patient portal supports the paradigm shift toward service-user-driven care.** The portal is, by nature, a service-user-driven tool that empowers patients to take fuller control of their own care management. The ability to refill medications, request appointments, and access educational materials are just a few examples of its functionality.
- 3 The patient portal remedies gaps between patients, families, and healthcare providers.** The portal helps foster bonds between patients and healthcare providers by establishing a secure communication channel. Moreover, by enabling proxy access to authorized family members, it brings them more fully into the care partnership.
- 4 The patient portal helps evolve practices and culture from a provider-centric model toward a more collaborative patient-provider model.** It does this by engaging and empowering patients as equal partners in their own care and recovery.

Several Ontario Shores patients said they felt an increased sense of autonomy, having access to their own medical information. Their feedback included the observations that “having my own access has given me freedom as a patient,” and the portal is “an excellent tool to cultivate autonomy.”² Other patients found prescription renewal requests “easy to use” and noted that the “system is very helpful for appointment reminders.”³

“Ontario Shores is committed to continuously advancing care for individuals with mental illness,” says Sanaz Riahi, senior director, Professional Practice & Clinical Information at Ontario Shores. “The patient portal is a valuable tool that empowers patients to be active participants in their own care, and clinicians are able to partner with patients to further support their recovery goals and stay connected to their progress.”

Evaluating the Results

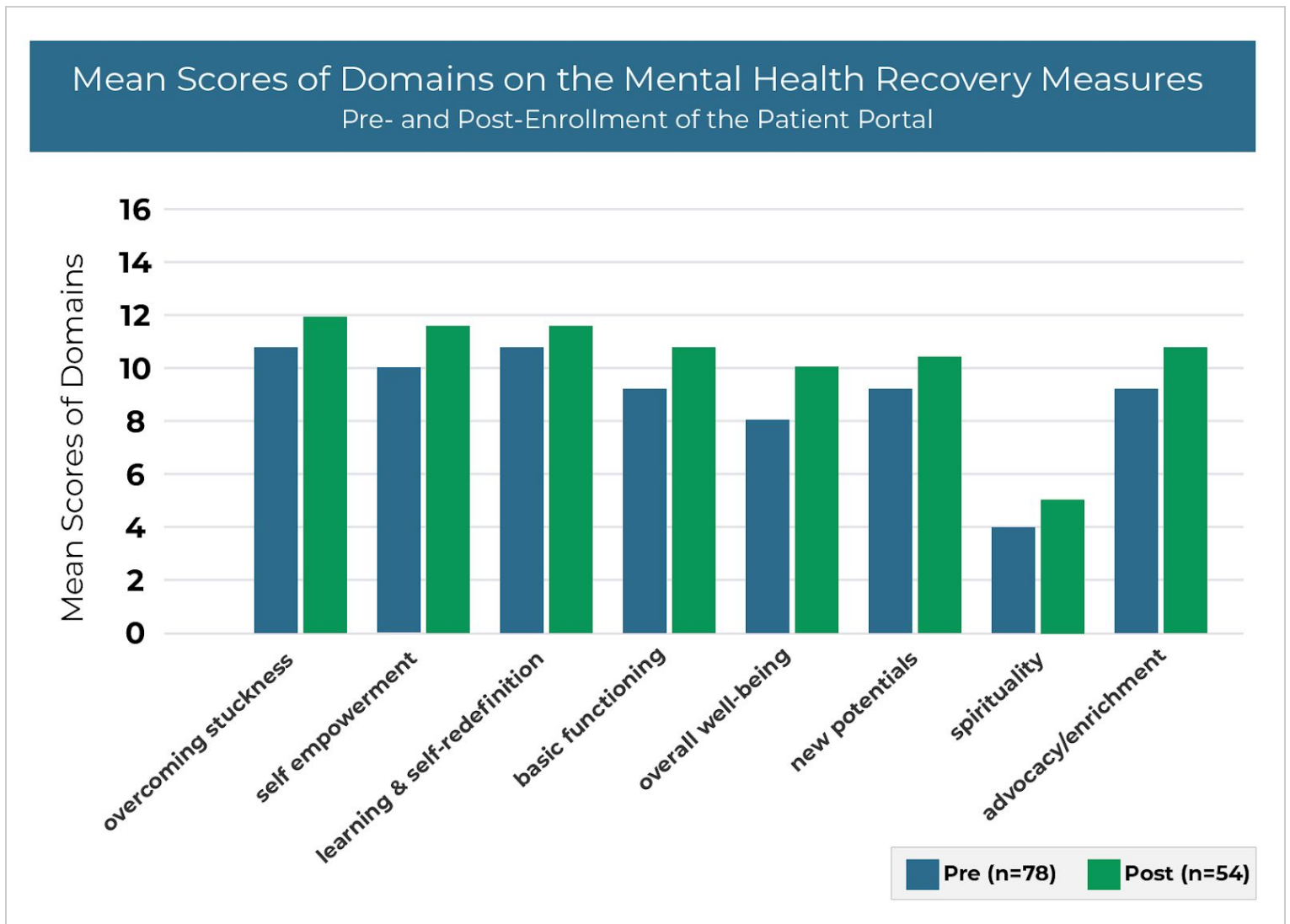
To assess the impact of the patient portal, Ontario Shores worked with CHI to undertake a Portal Benefits Evaluation designed by CHI.

With the portal launch in December 2014, Ontario Shores' staff began capturing baseline metrics to measure its impact in four areas: Activation and Recovery, which affect patients, and Productivity and Efficiency, which are associated with the organization.

Patient Activation and Recovery

The concept of patient activation refers to “a patient's knowledge, skills, ability, and willingness to manage his or her own health and care,”⁴ and is an essential component of patient engagement. Ontario Shores measures activation using the Mental Health Recovery Measure (MHRM), a patient self-reporting tool with eight distinct domains:

- Overcoming Stuckness
- Self-Empowerment
- Learning and Self-Redefinition
- Basic Functioning
- Overall Well-Being
- New Potentials
- Spirituality
- Advocacy/Enrichment.



Note: The mean scores for all domains can have a maximum value of 16, except for “spirituality” which can have a maximum value of 8.

During the study, patient scores in these domains were monitored along with their cumulative score. The cumulative score was used to gauge patient activation, while individual domain scores were used to assess recovery. The results showed that Ontario Shores patients using the portal self-reported significantly higher scores for both activation and recovery than they self-reported before using the portal.

Patient Activation

Total MHRM Score



Portal users' total MHRM scores improved by over 16%. Users' self perceptions of recovery across all categories improved significantly.

Patient Recovery

Improvement in MHRM Domains



Portal users' scores improved in 7 out of 8 MHRM domains. Patients using the portal indicated improvement in nearly every category.

Organizational Productivity and Efficiency

Ontario Shores also examined whether patients' access to medical information and their ability to communicate with providers could affect organizational productivity or efficiency.

To measure the impact of portal usage on productivity, they selected missed appointments — a common drain for many healthcare providers — as their proxy. To measure the impact on efficiency, the organization selected information requests as their proxy — since repeated requests for medical record information by patients or their families can pose a significant administrative burden for healthcare staff.

The results showed that portal users were both more likely to attend their appointments and less likely to submit requests for medical record information. The portal made significant improvements for Ontario Shores in the areas of productivity and efficiency.

Organizational Productivity

More Likely to Attend Appointments



Portal users were 67% more likely to attend an appointment than non-users. Provider productivity is significantly enhanced when patients keep and attend their appointments.

Organizational Efficiency

Avoid Requests for Information



Portal users were nearly 30% less likely to make requests for information than non-users. Patients with access to their own medical information could find information themselves.

Conclusion

Following their initial year-long study and evaluation of findings, Ontario Shores' researchers concluded that their data "provides early evidence to suggest that access to electronic health records through a patient portal may have positive effects on patient activation and recovery."⁵

They also observed "a notable improvement in productivity with lower odds of a missed appointment for the users compared with nonusers" and "administrative efficiencies ... with a reduced number of requests for information in the year following compared with the year before portal implementation."⁶

While Ontario Shores limited their conclusions about the impact of patient portals to mental health patients and providers, a number of other studies in traditional acute and long-term care settings have shown positive patient outcomes from the implementation of patient portals, including:

- Improved adherence to treatment
- Reduced medical errors and adverse drug reactions
- Better communication between the patient and provider
- Perceived improvement in care quality
- Increased patient engagement
- An increased sense of autonomy.⁷

These results support the idea that a patient portal, when effectively implemented, can provide significant benefits by engaging and empowering patients, while simultaneously enhancing organizational productivity and efficiency. More than a year after their initial benefits evaluation, Ontario Shores continues to collect data that validates and extends their findings.

Next Steps for Ontario Shores

Ontario Shores is working with MEDITECH to move their patient self-assessment process online, enabling patients to complete their surveys via the portal. Additionally, they continue to examine various service delivery models that leverage technology to expand treatment options and reduce wait times using evidence-based virtual treatments, as a complement to their existing treatment.

Additional Information

- [Ontario Shores Centre for Mental Health Sciences](#) [Website]
- [HIMSS Organization Davies Award](#) [Announcement]
- [MEDITECH Patient and Consumer Health Portal](#) [Functionality Brief]

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