## CASE STUDY



## Sault Area Hospital Deploys Digital Care Journeys Reducing ED Visits by 72% and Readmissions by 64%

### **Key Results:**

- 172% in 30-day ED Visits
- ↓ 64% in 30-day Readmissions
- 18% in Length of Stay
- ✓ 37% of patients reported that SeamlessMD prevented 1+ calls to the hospital
- 96% would recommend **SeamlessMD**
- 94% felt SeamlessMD helped them feel more confident before surgery
- ✓ 85% felt SeamlessMD helped them feel less worried before surgery

#### 13 Care Plans Across:

- $\rightarrow$  General Surgery
- $\rightarrow$  Orthopaedic Surgery
- $\rightarrow$  Women's Health

**EHR Integration:** MEDITECH Expanse

"Technology has increased our ability to connect with patients and encourage them to become active participants in their healthcare journey. Our patients report feeling more supported because of it. The integration of SeamlessMD into our EHR helps our providers to deliver high quality care more efficiently and with a patient-centred approach."



Dr. James Chan, Director of Innovation, Sault Area Hospital

Sault Area Hospital (SAH) is a 300-bed hospital that serves a population of approximately 115,000 residents in Sault Ste. Marie and the district of Algoma. The hospital provides a wide-range of services, including Emergency and Critical Care, Cardiac, Medicine, Surgery, Obstetrics, Maternity and Pediatrics, Mental Health and Addictions, Complex Continuing Care, Rehabilitation, and more.

To keep up with the rising demands for accessible patient-centred care, SAH's Digital Health strategy focuses on leveraging technology to improve engagement and create more timely communication between patients and providers. SAH partnered with SeamlessMD, a leading Digital Care Journey solution, to launch a surgical remote monitoring program. The program enables safer transitions from hospital to home, increases patient satisfaction, and improves clinical outcomes such as lower ED visits and length of stay.

## **Collaborating with SeamlessMD to Customize Pre-Built Digital Care Journeys**

Since launching SeamlessMD for hip and knee replacement surgery in 2021, SAH has deployed Digital Care Journeys across a total of 13 care pathways.

General	Orthopedic	Women's
Surgery	Surgery	Health
Colorectal Hernia Thyroid/parathyroid Breast Cholecystectomy Urology: TURP ureteroscopy	Shoulder repair / replacement Hip replacement Knee replacement	C-section Hysterectomy

## **SeamlessMD**





# SeamlessMD collaborated with a broad interdisciplinary team at SAH to customize protocols and content on the platform, which enabled the care team to:

- Engage patients with a mobile and web-enabled, virtual companion guiding them from pre-admission preparation through post-discharge recovery
- Deliver evidence-based pathways in the form of multimedia education, reminders and tasks for patients
- Monitor patient compliance, symptoms, and recovery progress (e.g., knee range-of-motion, pain levels, incision photos, ostomy care, etc.)
- Automate patient self-care guidance via smart algorithms and workflows (e.g., education on how to manage low-risk issues or when to escalate to a provider)
- Receive alerts and monitor dashboards to identify when a patient's health status changes, enabling the care team to intervene sooner
- Utilize an RN Navigator role to serve the remote patient population more effectively
- Analyze data from SeamlessMD and application of insights to make changes to hospital protocols and procedures (e.g., analyzing pain score data and using insights to improve pain management practices moving forward)



Example Patient "To Do"

"With our focus on innovating the future of care, clinical informatics solutions like SeamlessMD that digitally engage, connect and monitor patients enable us to continuously improve the quality, consistency, and safety of patient care. The turnkey integration of SeamlessMD with MEDITECH Expanse streamlines our clinical workflows, reducing manual effort and enabling our providers to save valuable time. Automating care delivery strengthens our ability to easily track and monitor patient compliance and adherence with treatment plans to improve patient outcomes, while at the same time empowering patients to take charge of their health through self-management."



**Dr. Derek Garniss,** Chief Medical Information Officer, Sault Area Hospital

## EHR Integration Expedites Patient Enrollment

The turnkey integration of SeamlessMD with MEDITECH Expanse plays a key role in helping to enroll patients more efficiently, as well as generally creating a more effortless provider and patient experience. This enables providers to send their patients instructions and reminders, receive alerts, and measure analytics through dashboards using an integrated experience with Expanse.

SAH is leveraging **HL7v2 integration for automated patient enrollment and data updates** from Expanse to SeamlessMD using ADT and SIU feeds. The Expanse contextual launch integration gives providers the ability to launch SeamlessMD dashboards for remote monitoring from within the Expanse patient chart. The integration reduces manual processes, saving providers and their patients valuable time.

For example, when a surgery is booked in Expanse, patients are automatically enrolled into the SeamlessMD app if they consent to participate in the program. Then, if their surgery date changes, that information is automatically updated in SeamlessMD, along with pre-surgery steps and preparation reminders. Providers can easily view patient-reported information in SeamlessMD without exiting the electronic health record.

## **SeamlessMD**



### Improving Clinical Outcomes with Digital Patient Engagement & Remote Monitoring

Through SeamlessMD, the care team at SAH is able to remotely monitor patients, helping them stay connected to their care team and feel less anxious throughout their healthcare journey – even after leaving the hospital. This enables the care team to address patient concerns earlier and provide personalized care recommendations to improve patient outcomes. SeamlessMD also gives patients access to an expert-approved education library, allowing patients to more effectively self-manage from home.

#### Here's what patients like most about the program:

- "It reminded me to stay focused on recovery from my surgery on a daily basis. It provided info about where to turn for help if needed. It made me feel that the operation is over, and I wasn't left without support or information. I feel that filling out the daily survey was beneficial for me."
- "Knowing that in case of a problem, it was possible to talk to someone rather than go to the emergency. I only called once and felt reassured with the answer."
- "Since this was my first surgery of this type, it helped me to know whether or not my recovery was on track, gave me access to helpful tools and to the healthcare team if you needed."
- "Visuals on exercises, daily reminders, the fact that a healthcare professional is available, list of places to get needed equipment, reminders to look for infection, lists to get you ready for surgery like planning for meals once on your own, what kind of help you will require. Overall Excellent."

#### **Results**

#### 1. Outcomes Analysis: Hospital Wide Reducing Readmissions, ED Visits and LOS

Across all care pathways

Mar 2021 - Oct 2022	Non-SeamlessMD	SeamlessMD	Change
Sample Size	1992	676	-
30-day Readmissions	1.69%	0.60%	↓ <b>64%</b>
30-day ED Visit Rate	11.21%	3.11%	<b>↓72%</b>
Avg. Length of Stay	1.21	1.11	↓8%



### 2. Improved Patient Engagement and Satisfaction

### Call and Visit Avoidance

Percent of Patients Who	Total
reported that SeamlessMD prevented 1+ calls to the hospital	37%
reported that SeamlessMD prevented 1+ visits to the hospital	15%

### SeamlessMD Satisfaction

Percent of Patients Who	Total
would recommend SeamlessMD	96%
felt SeamlessMD helped them feel more confident before surgery	94%
felt SeamlessMD helped them feel less worried before surgery	85%
felt SeamlessMD helped them feel more confident at home after surgery	91%
felt SeamlessMD helped them feel less worried at home after surgery	87%



"For patients experiencing unusual complications during the postoperative period, integration between SeamlessMD and MEDITECH Expanse allows us to gain deeper insight into the patient's day-to-day behavior. These previously unknown details — which we can use to inform diagnosis and treatment — may prove even more valuable when clinicians are assessing a patient that they are not familiar with during on-call."



**Dr. Graham Elder,** Chief of Orthopaedics, Sault Area Hospital

## **SeamlessMD**