

CASE STUDY

London Health Sciences Centre Reduces ED Visits by 39% and Readmissions by 30% for Thoracic Surgery with Digital Care Journeys

Key Results

CLINICAL OUTCOMES

↓39%

30-day ED visit rate

↓30%

30-day readmission rate

↓0.20

days average length of stay

PATIENT EXPERIENCE

95%

would recommend SeamlessMD

92%

felt more confident before surgery

91%

felt more confident at home after surgery

86%

avoided 1+ phone call

8 care plans

deployed in 12 months, across thoracic surgery, pediatric and adult trauma, spine and orthopedics

London Health Sciences Centre (LHSC) is one of Canada's largest acute care hospital organizations and the regional referral centre for southwestern Ontario, operating approximately 1,116 beds across three sites: University Hospital, Victoria Hospital and Children's Hospital. As an academic medical center affiliated with the Schulich School of Medicine & Dentistry at Western University, LHSC cares for the most medically complex patients in the region, including critically injured adults and children.

Its thoracic surgery program comprises five thoracic surgeons performing roughly 250 to 550 cases per year, including lung resection, esophagectomy and a broad range of foregut procedures. LHSC had previously managed a post-discharge remote patient monitoring program for thoracic surgery using a device-based platform, reaching around 250 patients. However, LHSC wanted a partner that could scale beyond the post-discharge window and to a broader population beyond thoracic surgery.

LHSC's thoracic and virtual care teams set out to implement a digital care journey covering every thoracic patient across the entire care journey. Their goals were to reduce length of stay, ED visits and readmissions; to better support patients in the pre-op phase; to deliver procedure-specific education; to reduce avoidable phone calls; and to improve patient confidence and reduce patient anxiety.

In August 2025, LHSC partnered with SeamlessMD, a leading Digital Care Journey platform, and enrolled its first lung surgery patient. Within 12 months, LHSC had scaled from that single implementation to eight care plans live across thoracic surgery, pediatric trauma, adult trauma and orthopedics. In this case study, we spotlight the thoracic program, the success it achieved and the winning strategies used along the way.

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We were looking for a technology partner that could support any patient population we needed, from the moment care begins, through recovery at home, on a device the patient already uses. [SeamlessMD was the right partner to help us bridge the great hospital care patients receive to continue with this support while they recover at home.](#) SeamlessMD has been a great collaborative partner and their supportive care plan model allowed us to scale from one clinical area to eight in less than a year.

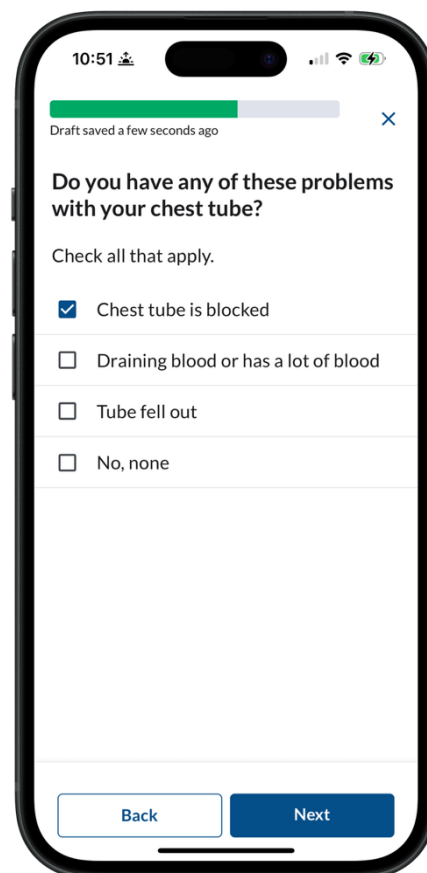
**Nerissa Taylor**

Manager of Operations, Virtual Care Program and MyCarePortal, London Health Sciences Centre

Partnering with SeamlessMD to Cover the Entire Thoracic Patient Journey

SeamlessMD worked with LHSC's interdisciplinary clinical and operations teams to customize protocols and content, enabling the care team to:

- ✓ **Engage patients across text, email, mobile and web** with interactive, evidence-based pathways built specifically for lung and mediastinal surgery – not generic surgical content
- ✓ **Prepare patients before surgery** with education and tasks covering the pre-anaesthesia clinic visit, smoking and alcohol cessation, breathing and walking exercises, diet and instructions on stopping certain medication
- ✓ **Guide recovery at home** with post-operative content on wound care, chest tube care, pain medication management, post-operative diet, and physiotherapy exercises including walking, breathing, coughing and arm and shoulder movement
- ✓ **Automate patient self-care guidance** via smart algorithms and workflows, including guidance on managing low-risk issues and when to escalate to a provider
- ✓ **Remotely monitor patients for 30 days post-discharge** with daily symptom questionnaires, covering pain levels, incision photos, mobility, signs of infection and more



Results: Lung and Mediastinal Surgery

Following the implementation of SeamlessMD, average length of stay, 30-day post-operative return to ED visits and 30-day post-operative readmissions all decreased:

	Control	SeamlessMD	Change
Sample size	223	183	–
Average length of stay	3.36 days	3.16 days	↓ 0.20 days (5.95%)
30-day post-op readmissions	3.14%	2.19%	↓ 30.25%
30-day post-op ED visit rate	8.07%	4.92%	↓ 39.03%

LHSC's monitoring team also reports using SeamlessMD to catch complications earlier. In one case, a patient uploaded an incision photo and noted that they felt their healing was progressing well. Reviewing the image, the Remote Care Management nurse identified subtle early signs of a potential infection and escalated to the surgical care team, which arranged for the patient to be readmitted directly for intravenous antibiotics rather than routing the patient through the Emergency Department.

Currently, LHSC team members enrol patients directly onto the platform, and all thoracic programs are actively monitored by the RCM team.

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SeamlessMD extends our care beyond the hospital walls. It prepares patients before surgery, supports them through recovery and [alerts us when intervention is needed – reducing emergency visits and readmissions while giving patients greater confidence at home.](#)



Dr. Richard Malthaner

Chair, Thoracic Surgery, London Health Sciences Centre

Patient Engagement and Satisfaction

Beyond thoracic surgery, patients report high satisfaction and greater confidence across all of LHSC's care plans covering thoracic, trauma and orthopedic surgery:

PERCENT OF PATIENTS WHO	TOTAL
would recommend SeamlessMD	95%
felt SeamlessMD helped them feel more confident before surgery	92%
felt SeamlessMD helped them feel more confident at home after surgery	91%
reported that SeamlessMD prevented 1+ calls to their healthcare team	88%
reported that SeamlessMD prevented 1+ visits to the hospital	44%

PATIENT FEEDBACK

"The information on the app was great. Being able to check the breathing plan and get updated with what to expect was very helpful."

LHSC PATIENT

"Before my surgery I read the articles provided by SeamlessMD which allowed me to feel prepared for the surgery ahead. This material along with the information provided by my surgical team allowed me to feel confident my surgery and recovery would be a success."

LHSC PATIENT

"This program gave me a lot of peace of mind to know what was normal and what was concerning after I left the hospital. That helped so much with post op anxiety!"

LHSC PATIENT

"It covers all the concerns that I have, submitting pictures was extremely easy and the response time was very efficient from the team. It's also very efficient timewise and saving trips to the hospital."

LHSC PATIENT

"Answered most of my questions before I asked them. Very good source of reference material."

LHSC PATIENT

"I really do not like hospitals but this was the best experience I have had. This program is priceless and needs to be put in all hospitals."

LHSC PATIENT

Scaling from One Care Plan to Eight

The strong collaboration between LHSC and SeamlessMD allowed the organization to scale digital care journeys across eight clinical areas relatively quickly:

CARE PLAN	DATE LAUNCHED
Lung and Mediastinal Surgery	August 2025
Pediatric Trauma (verbal and non-verbal)	December 2025
Esophagectomy and General Thoracic Surgery	January 2026
Spine Surgery	March 2026
Hip and Knee Replacement Surgery	June 2026
Adult Trauma	July 2026