

# Horizon Health Network Reduces Readmissions, ED Visits and Length of Stay with Digital Care Journeys

# **Key Results:**

## **Orthopedic Surgery:**

**J** 52% Readmissions

**J.** 42% Average Length of Stay

#### **Cardiac Surgery:**

**J** 47% **ED Visits** 

**J** 16.7% Average Length of Stay

## **Supporting Safer Surgery and Seamless Transitions** of Care Across New Brunswick

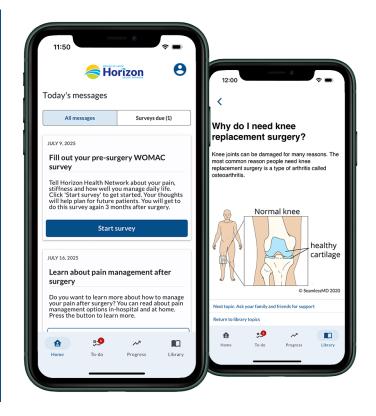
Horizon Health Network (Horizon), the largest regional health authority in New Brunswick and the second-largest in Atlantic Canada, serves a population of over half a million people. Known for its commitment to delivering safe, high-quality care, Horizon regularly pushes the boundaries of innovation to enhance the patient experience, improve outcomes, and support health care sustainability.

In 2023, as part of its system-wide focus on quality, patient experience and digital innovation, Horizon partnered with SeamlessMD to launch bilingual digital care journeys across multiple high-impact specialties - starting with Cardiac <u>Surgery</u> and <u>Orthopedic Surgery</u> — to standardize bestpractice care across the province, improve patient outcomes, reduce system strain, and modernize the patient experience.

"SeamlessMD has been instrumental in transforming how we support patients across our health care system. After seeing significant improvements in length of stay for our cardiac population, it was clear we had an opportunity to scale that impact further. The results from orthopedics have reinforced that digital care journeys can play a critical role in enhancing recovery, reducing system strain, and delivering a better experience for patients regardless of the procedure."



Margaret Melanson, President and Chief Executive Officer, Horizon Health Network





## Partnering with SeamlessMD to Deliver Bilingual, Digital Support at Scale

SeamlessMD worked closely with Horizon's interdisciplinary clinical and operations teams to develop and launch bilingual digital care plans. Patients also provided feedback on the app content, which was tailored for patients undergoing heart, TAVI (Transcatheter Aortic Valve Implantation), hip replacement and knee replacement surgeries. Through the partnership, Horizon is able to:

✓ Engage patients with a mobile and web-enabled, virtual companion—guiding. them from pre-admission preparation through post-discharge recovery

- ✓ Deliver interactive evidence-based pathways in the form of multimedia education, reminders, to-do lists, and tasks
- ✓ Monitor patient compliance, symptoms, and recovery progress (e.g., knee range-of-motion, pain levels, incision photos, etc.)
- ✓ Remotely monitor patients through daily health checks during the 30-day postoperative period
- ✓ Digitally collect Patient-Reported Outcomes (PROs)
- ✓ 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); and
- ✓ Receive alerts and monitor dashboards to identify when a patient's health status changes, enabling the care team to intervene sooner.

Importantly, this implementation spanned the entire province, requiring close coordination across multiple areas to ensure clinical alignment and local customization. This partnership was a key enabler for the province's Enhanced Recovery After Surgery (ERAS) initiative, bringing clinicians across the province together to deliver standardized, step-by-step guidance for patients in alignment with best-practice care.



Example orthopedic patient post-op survey reviewing knee range of motion

"We describe SeamlessMD to patients as your digital friend. It's a companion that helps you while you're waiting for your surgical intervention or hospital visit, as well as afterwards. The program is available to patients across the province of New Brunswick in the language of their choice. The data doesn't lie. It shows this is a fantastic investment—for patients, families, and care teams."



Jennifer Sheils, Vice President Strategy, Transformation and Chief Innovation Officer (CIO), Horizon Health Network







## **Driving Measurable Improvements in Patient Outcomes for Cardiac Surgery**

Horizon started SeamlessMD with patients undergoing open heart surgery and TAVI in early 2023 at the renowned New Brunswick Heart Centre. The goal: reduce preventable ED visits and improve recovery at home for one of its most complex surgical populations.

The results were significant. From March to August 2023, Horizon achieved:

- ↓ 47% reduction in 30-day ED visits
- ↓ 16.7% decrease in cumulative length of stay days

#### Cardiac Surgery Outcomes Analysis (March - August 2023)

	Baseline (FY 2021-2022)	SeamlessMD (Mar-Aug 2023)	Change
Sample size	748	433	
ED visits within 30 days	29.2%	15.4%	<b>↓47%</b>

	Baseline (FY 2021-2022)	SeamlessMD (Mar-Jun 2023)	Change
Sample size	748	232	
Cumulative LOS Days	13.2	11	↓16.67%

## **Expanding Impact to Orthopedic Surgery Patients**

Building on the success of its initial rollout in Cardiac Surgery, Horizon expanded SeamlessMD to support patients undergoing hip and knee replacement procedures. A comparative outcomes analysis for patients discharged between April and June 2024 demonstrated similarly strong improvements.

## Hip and Knee Replacement Outcomes Analysis (April – June 2024)

	Non-SeamlessMD	SeamlessMD	Change
Sample size	298	312	
Average LOS	2.47	1.44	<b>↓42%</b>
Readmissions within 30 Days	2.7% (8/298)	1.3% (4/312)	<b>↓52%</b>
ED Visits within 30 Days (Total Visits)	24.5% (73)	22.4% (70)	↓8%
ED Visits within 30 Days (Unique Patients)	14.8% (44/298)	15.4% (48/312)	<b>†4</b> %







## **Looking Ahead**

Following strong results in both Cardiac and Orthopedic Surgery, Horizon has already rolled SeamlessMD out to patients with congestive heart failure, with programs for maternity care, pancreas surgery and liver surgery on the way. With a growing body of evidence, Horizon continues to lead the way in digital transformation — driving better outcomes for patients and families cared for at its facilities.

"With SeamlessMD, we've been able to reduce readmissions and shorten patient stays without compromising quality. It's a powerful way to deliver consistent care while also scaling innovation across a large, diverse province."



Amy McCavour, Executive Director, Surgical Services, Medical Device Reprocessing, NB Organ and Tissue Program, Horizon Health Network



