

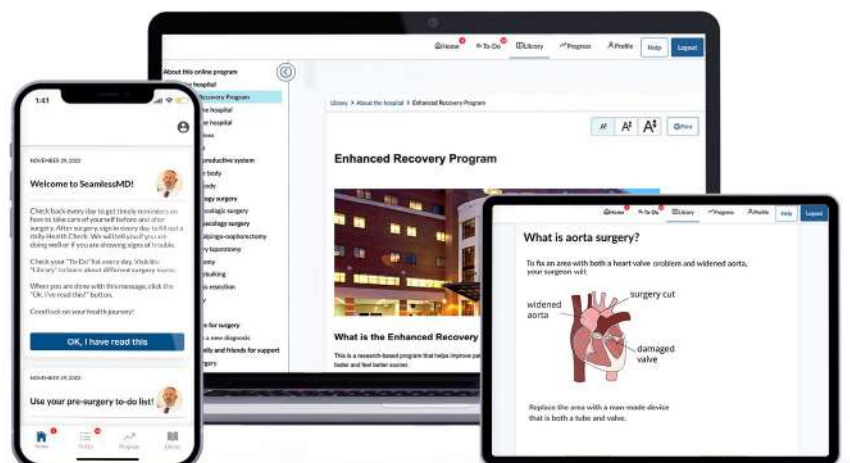
Hoag Cuts Length of Stay by 15% and Reduces Readmissions by 28% by Deploying Digital Care Journeys for Cardiac Surgery

Key Results:

- ↓ 28.30% Readmissions
- ↓ 15.25% Avg. Length of Stay (Days)
- ✓ 98% of patients would recommend SeamlessMD
- ✓ 98% of patients found the information easy to read
- ✓ 94% of patients said SeamlessMD made them feel more confident before surgery
- ✓ 40% of patients avoided making 1+ calls to their care team

Hoag is a not-for-profit regional health care delivery system in Orange County, California that treats nearly 30,000 inpatients and 350,000 outpatients annually. Hoag consists of two acute-care hospitals, 10 health and wellness centers, and 15 urgent care centers. Hoag is the highest ranked hospital in Orange County by U.S. News & World Report and the only OC hospital ranked in the Top 10 in California, as well as a designated Magnet® hospital by the American Nurses Credentialing Center (ANCC). Hoag offers a comprehensive blend of health care services that includes seven institutes providing specialized services in the following areas: cancer, heart and vascular, digestive health, neurosciences, spine, women's health, and orthopedics through Hoag's affiliate Hoag Orthopedic Institute.

Aligned with their mission to serve its communities by providing health care services of the highest quality and as part of its plan to develop an "Everyday Clinic", Hoag was seeking an innovative way to increase patient satisfaction, optimize the patient experience, digitize patient education and supplement current Enhanced Recovery After Surgery (ERAS) education - while also improving already high-performing clinical outcomes such as length of stay, readmissions, and ED visits.



Digital Care Journeys Automate the Delivery of Interactive Patient Education and Enhance the Patient Experience

In 2021, Hoag's Jeffrey M. Carlton Heart & Vascular Institute partnered with SeamlessMD, a leading Digital Care Journey platform, to connect, engage, and monitor patients before and after Cardiac Surgery.

Collaborating closely with the Hoag team, SeamlessMD's Customer Success and Patient Education teams customized the pre-built content provided with the platform to comply with Hoag's protocols and quality standards. Using SeamlessMD the care team can:

- ✓ Engage patients with a mobile and web-enabled, virtual companion; guiding them from pre-op preparation through post-op recovery
- ✓ Deliver interactive, personalized education such as reminders, to-do-lists, videos and evidence-based education
- ✓ Collect Patient-Reported Outcomes (PROs) such as mood, anxiety, wound pain, daily habits, and more
- ✓ Monitor patient compliance, symptoms, and recovery progress (e.g., chlorhexidine wash, eating and drinking cessation, incision photos, etc.)
- ✓ Automate patient self-care guidance via smart algorithms and workflows; and
- ✓ Receive alerts and monitor dashboards to identify when a patient's health status changes, enabling the care team to intervene sooner.

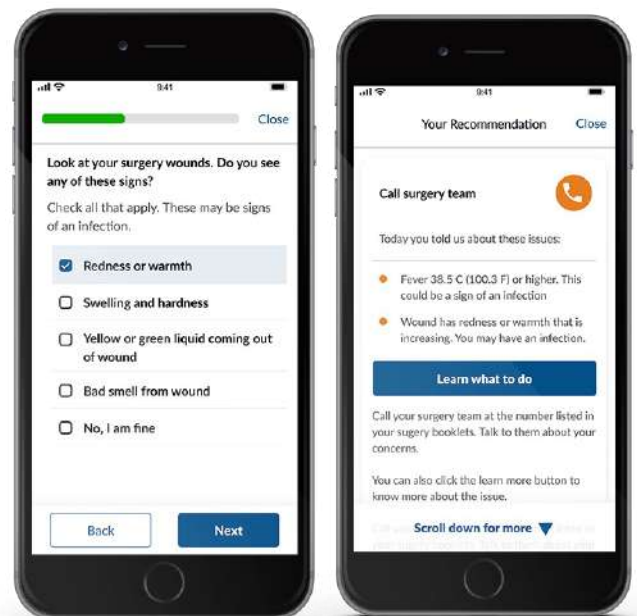
Since automating the delivery of patient education, more than 12,000 library pages have been viewed over the past 12 months and patients have spent more than 605 hours viewing various types of content provided through SeamlessMD. Popular content includes instructions for breathing exercises, mobility and home exercises, what to expect day 1, 2 and 3 after the procedure, how to check-in, and getting ready to go home.

"Our team places an emphasis on answering patients' questions thoroughly and engaging them completely in their health care journey. SeamlessMD complements our approach by interactively delivering the right education materials to patients when they need it throughout their entire episode of care - pre- and post-op. The remote monitoring alerts also enabled us to intercept a bunch of issues sooner that would have ended up in visits to the ER or family doctor."



Dr. Anthony Caffarelli, MD

*Newkirk Family Endowed Chair in Aortic Care,
Director of Hoag Cardiovascular Surgery and
the Elaine & Robert Matranga Aortic Center*



Example Patient Post-op Health Check and Recommendation

Alerts and Remote Monitoring Capabilities to Improve Patient Outcomes

With SeamlessMD, patients can self-report their pain scores, opioid consumption, symptoms, and share incision photos with their care team. Based on this data, patients who report low-risk concerns (e.g. constipation) receive personalized, automated feedback on how to self-manage concerns at home. When patients report high-risk issues (e.g. fever), clinicians also have access to alerts and dashboards to monitor patients remotely and intervene to address patients at risk. This helps to reduce avoidable readmissions and unnecessary calls to their care team and allows the surgical team to focus on those patients needing more attention.

By enabling patients to stay connected to the care team, SeamlessMD enables Hoag to further reduce their already low readmissions and shorten length of stay while increasing patient satisfaction and enhancing the overall patient experience.

Here's what patients like most about the program:

- “Wow - it just walks you from pre-surgery to post surgery in a **very clear way**. When all of this is unfamiliar it was so good to have **lists and reminders and explanations** at every step of the way. Stellar program!”
- “I felt **a personal connection** between my recovery and Dr. Cafferelli's office and with the Hoag Hospital in general. The on-line reminders regarding good daily health habits helped me to **stay dialed in to my recovery**. I felt I was in the hands of a very well-established recovery program. **The constant contact and outreach** the SeamlessMD program offered was really a big part of my recovery and positive state of mind. Thank you for your care and support!”
- “It helped **manage expectations** about the course of recovery and also explained the various stages of recovery. The information was **extremely helpful**, and the steps were **clear and easy to follow**.”
- “It was nice to have the reminders right there every day. It helped **gently push me through recovery**, letting me know when I was supposed to walk more and it gave me exercises I could do if I was feeling tight or stiff.”

“Our collaboration with SeamlessMD has enabled us to further reduce our readmissions and shorten length of stay while increasing patient satisfaction and enhancing the overall patient experience. Undergoing surgery can be scary, our patients tell us having access to SeamlessMD helps them stay informed, prepare for what to expect, and be more confident before and after surgery. The platform enables us to optimize operational efficiencies by automating the delivery of interactive patient education and discharging patients sooner knowing that we can stay connected by way of remote monitoring and that they are less likely to require multiple follow-up phone calls.”



Angela Devlin, MBA, RN, BSN

Executive Director, Hoag
Jeffrey M. Carlton Heart & Vascular Institute

Results

1. Outcomes Analysis: Patients that Underwent Elective Open-Heart Surgery

	Control*	SeamlessMD**	Change
Sample Size	131	131	--
Average LOS (days)	5.9	5.0	↓ 15.25%
Readmissions (%)	5.3%	3.8%	↓ 28.30%

*131 "Non-SeamlessMD" is per category risk match (Timeframe: 7/6/2020-2/7/2023)

**131 Included SeamlessMD Group (Timeframe: 11/18/2021-2/28/2023)

2. Call and Visit Avoidance

Metric	Result
% Patients who reported that SeamlessMD prevented 1 or more calls to their care team	40%
% Patients who reported that SeamlessMD prevented 1 or more visits	4%

3. Improved Patient Engagement and Satisfaction

Metric	Result
% Patients who recommend SeamlessMD	98%
% Patients who said SeamlessMD helped them feel more confident before surgery	94%
% Patients who said SeamlessMD helped them feel less worried before surgery	89%
% Patients who said SeamlessMD helped them feel more confident post-procedure at home	92%
% Patients who reported that SeamlessMD prevented 1 or more calls to their care team	40%

4. Accessibility and Health Literacy

Metric	Result
% Patients found the information they needed easy to read	98%
% Patients found the information they needed easy to find	96%