



The Role of Digital Care Journeys in a Health System's Digital Front Door Strategy

The key to engaging, monitoring, and staying connected with patients

SeamlessMD

Today's patients approach their healthcare differently than in the past—they experience it as active consumers rather than passive recipients. Unfortunately, a patient's experience is often siloed, with their care being unstandardized, disconnected, and uncoordinated.

With the rise of digital-savvy healthcare consumers, health systems have shifted their digital transformation strategy from optimizing the EHR to digitizing the patient experience. In a report from Deloitte and the Scottsdale Institute on Digital Transformation in Healthcare published in October 2021 (based on a roundtable of health system leaders), they identified two priorities for digital transformation:

1. Better consumer (patient) satisfaction and engagement
2. Improved quality of care and patient outcomes.

Many health systems have succeeded with priority #1 by leveraging digital technologies to improve the beginning (e.g., patient acquisition) and end experiences (e.g., payment). But, most have only recently begun determining their strategy for using digital consumer experiences to improve patient outcomes. It's critical to nail down a great strategy since today's consumers want a world-class patient experience and a world-class health outcome.

An individual's health journey is complex and personal, and barriers often exist in the medical system that prevent people from feeling well informed and connected. Patients need care that engages and informs them and allows them to stay connected with providers to achieve the best possible health outcomes. With pressures from an increasingly value-based care reimbursement model, healthcare organizations need solutions to engage, acquire, and retain patients while delivering high-quality care at a lower cost.

This e-book will explore how digital care journeys hold the key to delivering high-quality, lower-cost care. Digital technologies can provide tools and support for a highly coordinated and standardized patient experience across all stages of life—from acute episodes of care (e.g., surgery) to chronic conditions requiring ongoing management.



Digital patient engagement trends

With the world at their fingertips, people expect autonomy over every element of their daily lives. Healthcare is no different. Patients now can access more information than ever before and use it to make informed decisions about their health behaviors. Let's review three current trends affecting digital patient engagement.

Trend 1: Healthcare consumerism

Many people accomplish most of their day-to-day tasks online from their smartphones. The "Amazon Effect" creates expectations of instant access to everything from groceries to movies, car insurance, and healthcare. People are accustomed to getting what they need now—*right now*.

People no longer drive to the bank during business hours, wait in line for a teller, and deposit their checks manually. Instead, they access their banking account digitally at any hour and make deposits, transfers, and payments instantly. Feel like a movie on a Friday night? No more trips to Blockbuster or the neighborhood convenience store—from horrors to rom-coms, almost any movie is available for instant streaming. Need a ride? Ride-hailing apps like Uber are available wherever we are, whenever we need them. This culture of consumerism is driving change within all industries today and extends into healthcare.

Healthcare consumers prioritize choice. As high-deductible health plans (HDHPs) become commonplace, patients are now one of the primary payers of healthcare. They have more responsibility to manage and finance their health than ever before. This means knowing how to navigate an ever-growing, complex healthcare system. And patients want more choices to go along with these burdens.

"I think that true patient-centered care," says [Lydia Lee](#), Chair of HIMSS Americas Board of Advisors, "means that the entire health enterprise... is really aligned to and engineered to deliver on what the patients actually expect. In order to be able to do that, you have to first understand what is it that our patients want and expect from us as care providers."

Today's healthcare consumer has higher expectations of healthcare providers than even just a decade ago. To meet the challenge of patient expectations, providers need to reimagine how they interact with patients. Healthcare organizations must work to create meaningful connections between patients and caregivers through engaging digital platforms.

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Trend 2: A shift toward value-based care

Healthcare systems must evolve as payment is increasingly dependent on better outcomes and patient satisfaction rather than simply providing care. This shift to value-based care has nudged many healthcare systems toward coordinated and standardized healthcare delivery on a system-wide level. By reducing variability in care, patients receive a higher level of care at a lower cost. To deliver this, providers need to engage patients outside the four walls of the hospital/clinic to meet their needs and lower costs.

In the quest for value-based care, digital solutions are key to reducing unnecessary high-cost services, such as readmissions and ED visits. They can also tackle potentially expensive delays in care by streamlining the care pathway through reminders, to-do lists, self-service evidence-based education, and real-time monitoring.

Due to the expectations of healthcare consumers and the shift to value-based care, [the top priorities for digital transformation](#) are:

- Higher patient satisfaction and engagement
- Improved quality of care and patient outcomes
- Lower healthcare costs

Today's patients expect healthcare solutions that are coordinated, customized, convenient, and accessible.

Trend 3: Remote services go mainstream

"The pandemic has shifted patient attitudes and expectations as they have embraced new digital tools," says [Stuart Henderson](#), Global Life Sciences Lead for Accenture. As many patients embraced remote tools for the first time throughout the pandemic—from Facetiming with their grandkids to checking in with their doctor via telehealth—they changed their relationship with technology. Since the COVID-19 pandemic began, downloads of health apps increased by 25%, with daily health app downloads up from four to five million. [According to a report by the IQVIA Institute for Human Data Science](#) on digital health trends, an average of 250 healthcare apps were added daily in 2020.

Clearly, patients have grown accustomed to and now expect digital healthcare technology at the start of their patient journey as well as throughout the entire process. Beyond the convenience of one-off telemedicine visits, patients are now expecting continuous, digital care. The [2019 Accenture Digital Health Consumer Survey](#) showed that 53% of patients are more likely to use a provider who offers remote monitoring, and the [2020 Survey](#) found that 57% of consumers are open to being remotely monitored.

This trend presents a need for healthcare organizations to implement and expand remote digital services so that patients can access timely, continuous care both in and out of the hospital. This approach benefits both the patient and healthcare provider, as care teams can create long-term, data-informed connections with patients, and patients have peace of mind knowing that they will be able to receive the right care at the right time.



Digital front door strategies

Today's healthcare consumers expect digital care options. Digital front doors offer a convenient, seamless, and integrated experience for both patients and providers.

Traditionally, digital front doors have been used to start and end patient journeys, such as for administrative tasks like scheduling appointments and making payments. They are also used for clinical tasks like checking symptoms and triaging the severity of an illness.

Examples of digital front doors include:

- Triage
- Specialist referral assistance
- Appointment scheduling, reminders, and cancellations
- Intake
- Call centers
- Invoice inquiries
- Medical library navigation
- FAQ
- Telemedicine options
- Chat with a doctor via secure messaging
- Patient portals
- Pre-visit recommendations
- Pre-lab instructions
- On-site wayfinding
- Remote patient monitoring

Leading health systems have realized that digital front door strategies must go beyond the bookends of the patient journey and instead provide continuous guidance throughout. Digital care journeys fill this gap by engaging patients via smartphone, tablet, or computer with step-by-step education, monitoring, and guidance. Importantly, they offer support both pre- and post-care for a range of care journeys including surgery, oncology or maternity. These strategies break barriers and reach patients beyond one-off appointments and telemedicine visits—patients can now receive the clinical support and medical guidance they need between visits, and at their fingertips from their own homes. Every provider's overall plan should include EHR-integrated digital care journeys.

Digital care journeys also help tackle patient anxiety about the unknowns of surgical care. A digital front door strategy that includes digital care journeys reduces uncertainty by providing patients with accessible, evidence-based education through an online platform. This helps patients:

- Educate themselves
- Prepare for surgery
- Self-manage aspects of their recovery
- Stay on track with their care plan with just-in-time reminders
- Track recovery symptoms (e.g. pain levels, surgical incision photos, etc.)
- Receive automated guidance.

Altogether, these features assure patients that their recovery is going well and prompts them when necessary to contact their healthcare team for help. Moreover, care teams can receive alerts and monitor dashboards for this patient-reported recovery data, which allows healthcare providers to catch issues early and helps patients receive the most optimal care possible.

Digital care journeys improve outcomes by providing timely access to good care. Implementing one as part of an overall front door strategy is critical for patient acquisition, satisfaction, and retention.

The key components of an effective digital front door strategy

Over the past decade, health systems have focused on implementing and optimizing their Electronic Health Records (EHR). But now, with the rise of the healthcare consumer, health systems are looking to digitize more and more of the patient experience. The digitally savvy healthcare consumer expects to find ratings and reviews about their healthcare provider online, schedule appointments through app-based tools, be provided with digital wayfinding tools that enable mobile check-ins, **and** access personalized digital care journeys—the newest component of any digital front door strategy.

Here are the many ways health systems provide a digital care experience as they guide patients all the way from acquisition through their entire care journey.

01. Digital awareness and acquisition

For a digital front door to be successful, patients need to know it exists. The first step of implementing a digital front door strategy is engaging with consumers online before requiring care. This includes online advertising, social media, marketing outreach campaigns, and other methods of building consumer awareness of the health system. Healthcare organizations need to have a strong online presence that reinforces their reputation and their willingness to meet patients' needs and expectations.

02. Digital search and schedule

Digital search tools allow patients to find a nearby provider that meets their criteria, whether it be a certain specialty, language, location, or availability. Patients can read reviews of a provider, their staff, or an entire facility. Once they're ready to book, patients can use online or app-based scheduling tools to select a calendar slot that fits their busy schedules.

Digital search and schedule tools support easy rescheduling if needed and offer clear information about parking and accessibility. Other effective pre-visit tools include website chatbots, appointment reminders, and pre-visit patient check-ins. Together, these tools can reduce no-shows and allow for easy follow-up.

03. Digital on-site experience

The digital patient experience extends beyond scheduling appointments and into the actual care site. Healthcare organizations have been taking cues from how airports guide their customers through the flight experience by using mobile check-in and registration to streamline the healthcare process. Digital wayfinding, fall detection, and self-serve kiosks have also been very effective when properly implemented on-site.

04. Digital care journeys

As digital front door strategies evolve, health systems are realizing they need a more comprehensive strategy that includes digital care journeys, thereby delivering a digital experience across the entire consumer health journey.

A [recent survey by Accenture](#) reported that 60% of patients want to use technology more to communicate with their healthcare providers and manage their care. Today's healthcare consumers want access to personalized digital care journeys across various service lines such as orthopedic, maternity, cardiology, bariatric, mental health, oncology, and more. With technology at the forefront of the patient experience, healthcare providers are adopting a digital-first approach to managing care.

"This digital opportunity to engage patients in their own care journey is one of those ways that we meet the promise of our commitment to partner [with patients]," [explains Paige McCall](#), Vice President, System Service Lines, MultiCare Health System. "Shifting the focus from patient transactions to fostering true partnership with patients helps them to feel supported when they are at their most vulnerable."

With digital care journeys, patients are no longer scrambling to find paper-based pre-operative instructions or floundering once they are discharged from the hospital. A digital care journey guarantees that a patient will be remotely monitored, supported, and better able to advocate for themselves from the start to the finish of their healthcare episode.

Digital Care Journeys

Achieving value through personalized digital care journeys

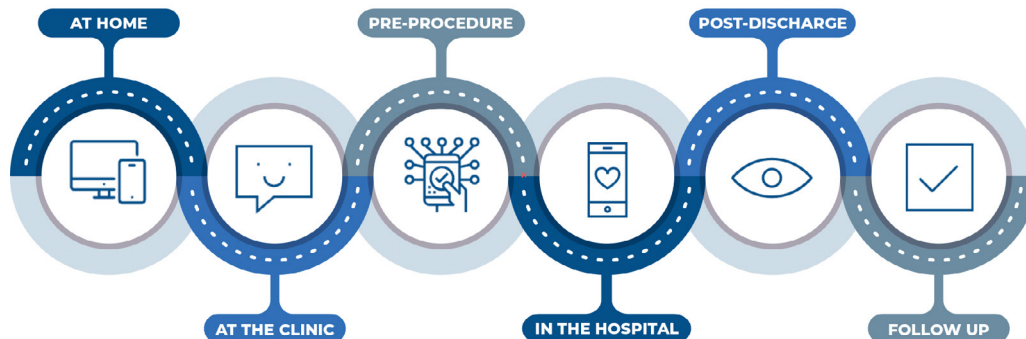
As the shift from in-person to digital interactions gains momentum, patients must remain engaged throughout the entire care journey. Interactive functions like symptom checkers with built-in triaging, online registration, and doctor chats are a great start. However, to truly improve patient outcomes, health systems must engage patients continuously—not only when a need arises in the patient journey.

Digital care journeys involve health systems engaging patients via the patient's smartphone, tablet, or desktop computer to send surgery or condition-specific reminders, deliver pre- and post-care education, and monitor symptoms. Patients can self-monitor via automated workflows (e.g., receive automated guidance on how to manage constipation post-surgery) and providers can get alerts and dashboards to monitor patient progress remotely (e.g., pain, vital signs or incision photos). Depending on the tool they choose, healthcare systems can use a single digital care journey platform system-wide across multiple episodes of care for each patient.

For example, health systems can empower a 70-year-old with a knee replacement through electronic reminders so she doesn't forget what to do before her surgery. Meanwhile, her care team can remotely monitor her knee pain and photos of her surgical incision after surgery. Providers can support a 30-year-old pregnant woman to access relevant instructions on her smartphone throughout each trimester and after delivery, while her care team can monitor her mental health status and blood pressure after her delivery.

"Each episode of care is different. Let patients have care the way they want it." —[Dr. Judd Hollander](#), Senior Vice President of Healthcare Delivery Innovation at Thomas Jefferson University

These apps allow healthcare providers to engage, connect, and monitor patients across care journeys. By doing so, they can elevate the patient experience while improving outcomes and lowering costs. Through smart algorithms and workflows, patient self-care guidance is automated, and healthcare providers receive alerts and monitor dashboards to identify when a patient's health status changes, enabling the care team to intervene sooner. This contributes to an enhanced patient experience throughout the entire healthcare journey.



Patient engagement initiatives are complex undertakings. There is no one-size-fits-all solution to achieving success. Some hospitals rely heavily on community partners or other stakeholders to directly encourage and support patient engagement. Others may instead emphasize internal or provider-driven approaches to achieve patient engagement goals. Below, we discuss how to leverage an effective digital care journey strategy.

Boost patient engagement

Providers can now accompany their patients digitally across the entire care journey through virtual education, procedure instructions, medication, dietary and exercise reminders, incision care, to-do lists, remote monitoring, and more.

Timely, proactive digital communication guides patients through their digital care journey while keeping them engaged. Evidence-based education tools such as videos, information, reminders, and assessments allow patients to take charge of their health and improve their outcomes. Patient engagement is critical to delivering high-value health IT services and programs. Healthcare systems can maximize engagement through accessibility features, such as:

- Step-by-step instructions
- Grade 6 reading level
- Screen reader-friendly text

Of course, successful patient engagement depends on how outcomes are defined and measured. Providers can optimize their patient engagement by incorporating personalized digital care journeys into their patient engagement strategy. Ultimately, these tools result in happier, healthier patients who are empowered to be involved in their own self-care.

“With digital health, you can better engage your consumers so that they have an elevated experience with better outcomes, whilst feeling supported throughout their care journey.” —[Joe Diver](#), Director of Digital Transformation

at Baystate Health & Innovation Strategy Leader at TechSpring, Baystate's Innovation Center

Improve patient outcomes

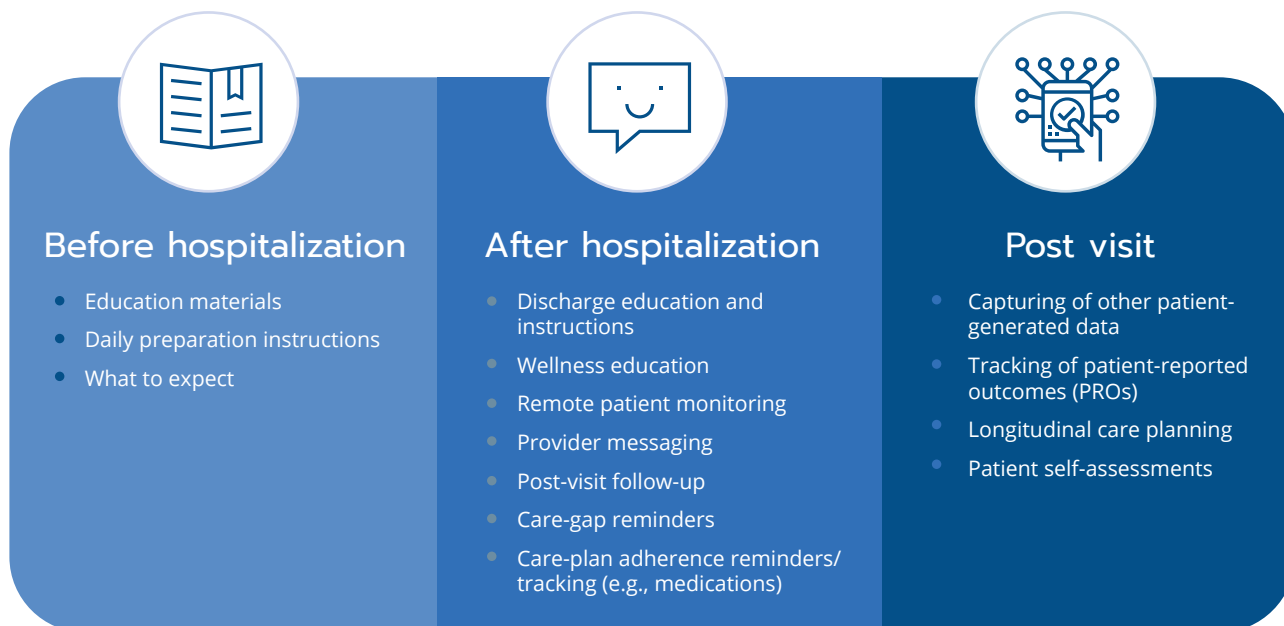
Digital care journeys can improve patient outcomes and thereby reduce length of stay, readmissions, and ED visits. How? By delivering standardized care, patient education, remotely monitoring patients, and automatically collecting patient-reported outcomes on progress.

Traditionally, patient education has primarily been delivered through manual, paper-based methods—healthcare providers would simply hand patients a paper packet and hope they could read, understand, and adhere to the information throughout their care journey. This process is vastly improved when a digital front door strategy extends to include personalized digital care journeys.

“The daily health checks within the app are very helpful,” says [Dr. Haller Smith](#), an obstetrician-gynecologist at the University of Alabama at Birmingham, “as [providers] can either reassure a patient that their recovery is on track, or prompt them to contact their surgical team to flag issues that are outside of the norm, hopefully enabling us to catch any potential complications early.”

Standardization of education and instructions through a platform ensures high-reliability care delivery and a centralized system for continuous improvement of the care journey content. “Pre-surgical care coordination has long been a challenge,” says [Karl Zander, Intermountain Healthcare St. Mary’s Chief Operating Officer](#). “This type of innovative patient engagement technology has the potential to improve patient outcomes and population health.”

Digital Care Journeys Deliver Education & Remotely Monitor Patients



Combat staffing challenges

Many hospitals and health systems face the challenges of rising costs alongside staffing issues such as burnout and shortages—all as patients are wanting more out of their healthcare experiences. Using digital solutions to empower patients to self-manage across their care journey—while only escalating high-risk issues to the care team—leads to fewer phone calls to providers and less time spent on routine patient education. Ultimately this leads to higher staff satisfaction, time saved, and lower staff turnover and burnout.

“Phone call volumes can overwhelm staff and negatively impact operational efficiencies,” says [Gregory D. Rushing](#), MD Division of Cardiac Surgery University Hospitals. “By providing patients with the tools to effectively self-manage from home, patients are less likely to require multiple follow-up phone calls.” At the same time, these tools can eliminate conflicting advice and help to standardize care.

Up until recently, nurses and physicians were the sole keepers of recovery protocols. And prior to the COVID-19 pandemic, some health systems were hosting in-person, paper-based education sessions with groups of individuals that were scheduled for specific procedures. By providing a patient with access to an app that is pre-loaded with all of the procedure preparation materials, many health systems are no longer running these in-person educational sessions, so they no longer need to allocate a resource to providing these in-person education sessions.

Digital care journeys also provide staff with the tools to receive real-time alerts and see highly informative patient data at a glance to make evidence-based decisions regarding care. By providing a digital safety net for the patients after hospital discharge, both patients and providers have the confidence for the patient to go home sooner, thereby shortening length of stay. Importantly, digital care journeys help health systems to discharge patients earlier and reduce readmissions, reducing the amount of staffing required.

Report and automatically track outcomes

Leading digital care journey platforms provide invaluable reporting and patient tracking to health systems. These reports may include:

- Patient-reported outcomes
- Patient engagement and activity
- Patient compliance with instructions
- Patient health status trends (e.g., opioid consumption)

“This technology enables outstanding patient care by collecting valuable Patient-Reported Outcomes data for continuous quality improvement.”

— [Dr. Friedrich Boettner](#),
Orthopedic Surgeon, Hospital
for Special Surgery

Stories from the front lines

Digital care journey solutions are reimagining healthcare. Here’s some real-life examples of how health systems are using SeamlessMD, a leading EHR-integrated digital care journey platform, to extend high-quality care beyond their four walls.

MultiCare

MultiCare is a not-for-profit health care organization with a network of care consisting of 11 hospitals and more than 20,000 team members. Their comprehensive system of health serves patients from around the Pacific Northwest and includes numerous inpatient care, primary care, virtual care, urgent care, dedicated pediatric care and specialty services.

The organization selected SeamlessMD for its industry-leading clinical evidence across multiple specialties, deep integrations with Epic and MyChart, out-of-the-box care plans and clinical content and their high-touch services team. Since launching SeamlessMD in June 2021, MultiCare has launched Digital Care Journeys for hip and knee replacement surgery, spine surgery, bariatric surgery, and maternity care.



“What we found to be probably the most valuable and the most standout in this relationship is the Epic integration between SeamlessMD and MultiCare’s instance of Epic, both on the provider side and on the patient side within MyChart. Using that SMART on FHIR integration via the App Orchard, providers really can monitor patients without leaving Epic,” shared [Ben Chao](#), President CareConnect at MultiCare Health System.

The results? MultiCare has recognized a significant reduction in length of stay and 30 and 90-day readmission rates for hip and knee replacement surgeries. MultiCare has also standardized the “MultiCare” experience and delivery of consistent care protocols across their health system.

Factor	Control	SeamlessMD	Difference
Sample size	241	176	
Average LOS	150 Days	1.12 Days	↓ 0.38 Days
30-Day Readmissions	9.1%	5.6%	↓ 37%
90-Day Readmissions	11.2%	6.8%	↓ 39%

Want to know more? Hear [MultiCare executives](#) share how digital care journeys align with their digital strategy to address healthcare consumerism.



Located in Birmingham, UAB Medicine is one of the top academic medical centers in the United States and Alabama’s largest single-site employer. In addition to providing health care services for more than 1.6 million patients annually, they are committed to educating medical professionals and advancing medical science through research. UAB Medicine is anchored by UAB Hospital, which has been named one of U.S. News & World Report’s Best Hospitals and the Best Hospital in Alabama, the No. 1 Best Large Employer for 2021 by Forbes magazine, and received a Top Ten Consumer Choice Award from National Research Corp.

In 2017, UAB deployed SeamlessMD as part of their Enhanced Recovery After Surgery (ERAS) program, a patient-centered approach to integrate evidence-based interventions across the entire surgical pathway, and today the initiative supports thousands of patients a year undergoing colorectal, gynecologic oncology, cardiac, and thoracic surgeries.

“SeamlessMD is a program designed to help patients follow their own care from the very beginning to the very end of the whole surgical journey and from a provider standpoint we can monitor patients remotely and instantly. It’s like a radar screen that tells us if patients are doing well or not doing well. It provides real-time feedback - it’s like a safety net to help us ensure our patients are doing fine.” said [Daniel Chu](#), M.D., UAB’s ERAS Medical Director and Vice Chair of Health Services Research lead for the ERP and associate professor in the [Department of Surgery](#).

With this partnership, UAB provides a digital experience that guides patients from surgery preparation through recovery. Patients can access the digital application through their mobile

phone, tablet, or computer, and they receive reminders to help them follow the ERAS care plan. Patients can also access an education library to learn about what to expect from their surgery and the recovery process. Upon discharge from the hospital, patients can report their pain scores, symptoms, and wound photos from their own devices, enabling them to stay connected with the care team.

Results achieved with SeamlessMD:

- [94.7% patient adoption](#)
- [Thoracic: lowered the cost per patient by \\$8,100](#)
- [Cardiac: lowered the cost per patient by \\$4,576](#)
- [Colorectal: reduced length of stay by 1 day and lowered the cost per patient by \\$1,369](#)



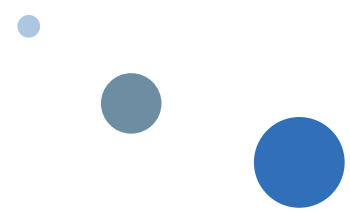
University Hospitals (UH) is an 18-hospital system serving the residents of Northeast Ohio. It consists of 11 Centers of Excellence focusing on all things cardiac care.

In 2020, Dr. Marc Pelletier, Chief of the Division of Cardiac Surgery, was looking for an innovative way to deliver a standardized, higher-quality consumer experience for open-heart surgery patients. He also wanted to improve outcome metrics, including length of stay and readmissions. Dr. Pelletier and the UH team decided that a digital, consumer-friendly experience could guide, monitor, and elevate patient care, so they incorporated SeamlessMD into their digital strategy.

“SeamlessMD has been a terrific digital patient engagement partner to elevate our hospital’s digital transformation strategy,” says Dr. Pelletier. “It is a very user-friendly platform that has allowed us to [more efficiently deliver cardiac care](#) and engage our patients beyond the four walls of the hospital.”

The program is [deemed a huge success](#):

- Reduced readmissions by 49%
- Decreased ED Visits by 68%
- Minimized phone calls by 59%
- Reduced discharge to skilled nursing facilities by 52%



Driving digital transformation to optimize the patient experience

There is no doubt that technology is quickly overhauling healthcare as we know it. The internet made it possible for patients to find answers to questions about wellness, medical conditions, healthcare providers, and treatment options at any time. It has also changed how patients find doctors and schedule appointments. More recently, it has expanded the scope of treatments available, allowing patients to receive care closer to home or via telemedicine. These changes have given patients an increased role in decision-making and have reshaped their expectations of healthcare providers.

Now we are stretching even further into the future of healthcare through digital care journeys. As part of an overall digital front door strategy, these solutions are optimizing patient experience and standardizing care. Today, a comprehensive digital front door strategy that addresses the evolving needs of healthcare consumers must include digital care journeys.

Over the past few decades, healthcare systems have seen increasingly complex demands. The COVID-19 pandemic has heightened the severity and awareness of all of these. In response, the adoption of digital care journeys is helping many healthcare organizations to enhance collaboration, connectivity, efficiency, and effectiveness. These improvements have led to:

- ✓ Improved patient satisfaction
- ✓ Improved quality and patient safety
- ✓ Automated the delivery of evidence-based education
- ✓ Enabled standardized, high-reliability care
- ✓ Improved medication safety
- ✓ Enhanced digital care across all patient populations

A personalized healthcare experience allows consumers to access information about their care pathway at their convenience. It is a key aspect in fostering long-term loyalty with patients. Digital care journeys have the power to support patients throughout almost any episode of care, while seamlessly connecting them to healthcare providers and ensuring the best outcomes.

**Learn how digital care journeys can supercharge
your digital front door strategy, improve patient quality, and empower
patients, visit www.seamless.md or contact us today at info@seamless.md**

Additional Resources

Below are some additional resources highlighting how delivering digital care journeys are helping leading health systems engage, connect, and monitor patients.

1. [Rush University Medical Center Reduces Length of Stay, SSIs, and Costs](#)
2. [Baystate Health Implements a Patient Engagement Platform For Cardiac Enhanced Recovery After Surgery \(ERAS\)](#)
3. [The Next Big Thing in Remote Patient Monitoring: Personalized Digital Care Journeys](#)

About SeamlessMD

SeamlessMD provides the leading Digital Care Journey platform for hospitals and health systems to engage, monitor and stay connected with patients across healthcare journeys. 30+ clinical studies & evaluations have shown SeamlessMD to improve the patient experience while reducing hospital length of stay, readmissions, and ED visits. Health systems such as UAB, Intermountain, Atrium, University Hospitals, MultiCare, Baystate and others use SeamlessMD to elevate the patient experience, improve outcomes and lower costs. Patients access digital care plans on their smartphones, tablets or computers and are guided via reminders, education, and progress tracking. Providers receive alerts, monitor patients and access analytics to deliver better care. SeamlessMD is directly integrated with EHRs such as Epic, Cerner, Meditech and Allscripts. SeamlessMD is recognized as a Top 5 Condition Specific Platform in the 2022 AVIA Connect Top 50 Remote Monitoring Companies Report.