



# Personalizing Healthcare

Engaging Patients in a Digital Age



# The world has dramatically changed in the past few months

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The way we work, and live, has also changed. The healthcare industry has had to pivot to remote work and virtual experiences even as it struggles to understand the future after the global health pandemic. These recent events have shown that digital technology and data have become indispensable tools for healthcare professionals as they adapt to changes across their organizations. Many healthcare leaders are reassessing their plans and imagining a future where technology is seen as a key tool in helping to handle and overcome the challenges caused by the pandemic.

Microsoft is committed to helping the healthcare industry get the tools it needs to overcome its challenges. We are also committed to helping the world stay connected, secure, and productive through the crisis and beyond.

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# Meeting new consumer expectations

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**What do these trends mean  
for healthcare?**

**Individualized care and  
enriched patient experiences**

Case study: Providence St.  
Joseph Health

**Value-added personalized  
patient services**

Case study: CHFT

## Telehealth. Virtual visits. Easy, secure access to health data.

Recent changes to the way we experience healthcare mean that now, more than ever, consumers are looking for new, safe ways to engage with healthcare providers and monitor their own wellness.

Healthcare organizations are also changing, as they look for solutions to keep them connected with patients beyond direct interactions and help improve communication and patient loyalty.

These changes have placed new pressures on healthcare organizations to adapt quickly to this rapidly changing landscape.

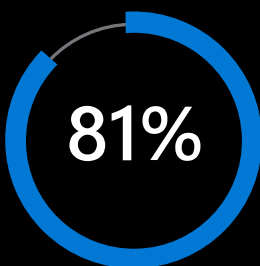




**64%**  
**of patients use a digital device** to manage their health, and they expect the experience to be as seamless as one they might find in the retail space.<sup>1</sup>



**93%**  
**of patients rated a care provider's** ability to easily share and receive important information about their medical history as the most important factor when receiving personalized care.<sup>1</sup>



**81%**  
**of patients are unsatisfied** with their current healthcare experience.<sup>2</sup>

Just as digital transformation in other industries has led to increased consumer expectations, patients have higher expectations than ever for their doctors, their insurers, and the treatments they receive.

**This e-book is designed to help. In it, you'll learn:**

- How healthcare providers are using technology to rapidly adjust and respond to current events with new, streamlined processes and automated workflows.
- How these providers are connecting their people, systems, and operations in new ways to enable their teams to be productive from anywhere, as well as the strategies they've adopted to better manage and secure access to their apps, data, and devices.
- How we're working alongside them to help reduce costs, deliver new patient experiences, realize new opportunities, and shape the future.

#### **What do these trends mean for healthcare?**

Patients want to access services whenever they want, from wherever they are, and on whatever device they're using. In addition to access, they're looking for more personalized and transparent healthcare services.

While technology can help to develop and deliver new patient experiences, it's not without challenges.

As healthcare organizations respond to this rapidly evolving environment, they must do so with an understanding of the risks these challenges bring.

## Individualized care and enriched patient experiences

Drawing data from electronic health records (EHRs) and other critical sources, healthcare providers can create a fully personalized care model and engage with patients in ways that go far beyond the traditional healthcare experience. Through this model, you can give patients more control over their care, strengthen engagement, and empower them to take a more active role in their health and wellness.

### Challenges

Being timely when engaging individuals in their care decisions, with patient data classically residing in different systems that don't interact or communicate.

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Navigating multiple interaction points within health systems, making it difficult for patients to access, secure, and control healthcare records.

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Having the ability to capture patient data from the beginning to the end of their healthcare journey, including medical record history, call records, payments, wellness management, and messages.

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## How digital transformation can help

- ✓ Provide patients with a tailored preventive care management program that aligns with their expectations and helps promote better health outcomes.
- ✓ Increase patient engagement. This not only helps patients invest in their care, but also provides them with a sense of control over their health, which in turn boosts their confidence and loyalty.
- ✓ Turn care and wellness management into a collaborative exercise that promotes patient satisfaction and well-being.
- ✓ Reduce call volumes and in-person visits by deploying secure virtual visits, triage assessments, and remote health monitoring.
- ✓ Facilitate new consumer acquisition and create personalized patient nurture journeys.



## CASE STUDY

### Providence St. Joseph Health provides a personalized patient experience with Microsoft Dynamics 365

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Providence St. Joseph Health is moving beyond the typical call center, using Dynamics 365 to provide more personalized experiences for every patient.

Liaisons from its Patient & Provider Engagement Center are responding to a rapidly changing environment. They now look for safe ways to care for patients where they're comfortable. Oftentimes, this is in the patient's home.

Efficiently addressing patient needs is also a chief concern, which means staff need new capacities, such as the ability to monitor at-risk patients at home. Oftentimes, treating patients in their homes eases the burden on emergency departments and helps patients access the right care from the right providers.

[Learn more >](#)



“We’re translators.  
We’re navigators. We’re  
problem solvers. We’re  
communicators. ... You treat  
them like family. The callers  
are an extension of us.”

Darla, Patient Engagement Center Liaison,  
Providence St. Joseph Health

## Value-added personalized patient services

Healthcare is not just a business. When people are sick or in need of help, what they want most from healthcare providers is not just a service, but a sense of care. By delivering patient-centric services like remote monitoring or alerts based on predictive healthcare analytics, you can nurture direct, lasting relationships with the people who depend on your care.

By shifting to virtual operations, organizations can avoid serious disruption and still deliver on expectations with patients outside the office. This allows you to provide care where it's needed, keep patients out of emergency rooms, reduce unnecessary clinical visits, and control healthcare costs.

### Challenges

Difficulty adjusting to unprecedented changes, and a lack of organizational agility to respond to sharp increases in patient inquiries.

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Respecting how customers want to engage without compromising personalized care.

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Mitigating the impact of reduced in-person engagement between frontline employees and patients.

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Handling the rapid growth of patient data that wearables and other connected home health devices create.

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Responding quickly to undesirable metrics, such as high blood pressure and high blood glucose. In order to address potential emergencies before they happen, metrics such as these demand automated communication tools.

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Navigating the complexity of automated processes and tools, including data security, control, development, and operational cost.

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Balancing the need for more user-friendly experiences with the strict regulations around privacy and patient data.

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## How digital transformation can help

- ✓ Get clarity when it matters most. Respond to increases in customer inquiries in real time and quickly deliver insights to teams that need them.
- ✓ Use alerts and messages to enable a quick view into which patients need priority treatment, and make critical decisions faster with real-time analytics and insights.
- ✓ Catch problems sooner, and provide support when patients need it most, by monitoring patient health remotely.
- ✓ Provide patients with health resources that are relevant to their conditions. As a result, patients will be able to proactively manage their health with less direct provider oversight.
- ✓ Save time and cost for both care managers and patients by using infrequent patient visits for more effective, insight-driven consultations, rather than spending time collecting and recording basic data.

## CASE STUDY

### CHFT uses Microsoft Teams to give patients more choice and better care with virtual visits

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Calderdale and Huddersfield NHS Foundation Trust (CHFT) in the United Kingdom has made it easier for patients to see consultants and for consultants to provide timely and personalized services in patients' homes.

Using Microsoft Teams and Microsoft Bookings, clinicians can book virtual visits and consultations quickly, move them flexibly, and host them online so patients don't have to travel long distances.

[Learn more >](#)



“From the patient’s perspective, virtual visits are unique. They benefit the environment, let us deliver care within the patient’s community, and help us provide a better service to our patients.”

Richard Hill, Senior Collaborations Lead for Health Informatics, Calderdale and Huddersfield NHS Foundation Trust



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# Finding new ways to engage with patients

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**Problems and challenges within the existing system**

**The need for a new engagement solution**

**Comprehensive consumer engagement**

Case study: swyMed

Case study: MVP Health Care

The reality of interacting with the traditional healthcare system is often quite different from what consumers expect. Patients are still filling out the same forms multiple times, receiving communications via letter, and waiting for engagement. In today's current environment, healthcare organizations have to pivot and find faster ways to connect with patients.

By investing in digital tools and developing strategies to adapt to the current environment, you can evolve business workflows according to changing needs and streamline your processes to more efficiently serve more patients.

### Problems and challenges within the existing system

Current healthcare systems carry the burden of legacy systems, fragmented tools, and escalating costs.

Patient data usually exists in disparate systems that don't interact. Providers must also gather additional information from a broad spectrum of sources, including nonclinical data such as a patient's access to transportation, preferential data like communication preferences, or historical data from patient interactions across channels. To transform that data into knowledge, you need to integrate tools and data sources into a single view.

“It is extremely frustrating for patients when basic tasks in an otherwise interconnected world take too long. They don't understand why they can have a concurrent series of events and interaction with almost any service in the world, but with health, they have to wait for things to happen in the background, with massive gaps in between.”

Gareth Hall, Director of Business Development,  
Microsoft Worldwide Health

## The need for a new engagement solution

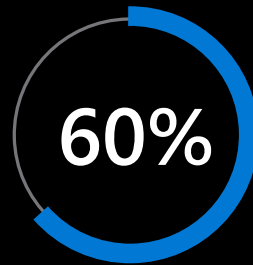
Most health providers think of patient engagement as a program, portal, or app. Instead, consider reframing patient engagement as a strategy and platform for empowerment.

By building—as comprehensively as possible—a picture of each individual patient, you can deliver the information they need, through the channel they prefer. With health data, test results, and billing statements readily available, patients gain a 360-degree view of their wellness.

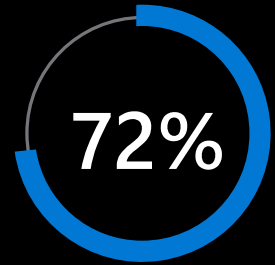
When healthcare organizers can provide this, they offer more than convenience—they give people a sense of being taken care of. The relationship with their members transforms from a simple transaction into a partnership of care.

Through proactive reminders and tailored coaching, you can help patients stay true to care and wellness plans and achieve their health goals. This will increase your ability to deliver care at scale and move to more value-based care.

In offering modern patient experiences, gaining insights isn't enough. You need to act on insights through new systems of engagement.



**of adults in the US** have a chronic disease. Furthermore, 40% have two or more. Chronic diseases are one of the leading drivers of the nation's \$3.5 trillion in annual health care costs.<sup>3</sup>



**of healthcare executives** say that one of the biggest barriers to better use of patient data is the lack of interoperability between disconnected technology solutions.<sup>4</sup>

**Analysts at McKinsey rate siloed technology solutions as one of the main obstacles** in preparing for a digital future, advising healthcare organizations to “use a comprehensive, integrated approach, not piecemeal initiatives,” to develop a long-term technology strategy.<sup>5</sup>



# Comprehensive consumer engagement

By automatically tracking the data patients want to share, and the devices they're using to share it, you can eliminate the need to locate patient data. This way, you'll always have access to the most up-to-date, comprehensive view of patients' health—regardless of the devices they use.

A comprehensive, integrated, and personalized care approach enables you to focus on improving outcomes. It can help you stay connected to patients, keeping them informed while increasing their satisfaction with your services.

## Challenges

Relying on manual, duplicative data collection processes to track patient health. This creates inefficiencies across your healthcare organization.

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Using disparate systems that force you to consolidate patient data from various sources. This impacts your organization's ability to get actionable insights into a patient's health.

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Continuing to use existing systems that create frustration for both patients and caregivers. Patients must go through redundant steps with multiple caregivers to receive effective treatment. Caregivers must react quickly, with limited insights from patient data, to provide a diagnosis and prescribe treatment.

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Making data accessible, connected, and consumable by the right people at the right time—while still maintaining strict standards of privacy.

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## How digital transformation can help

- ✓ Save time and money by automating workflows and legacy tasks.
- ✓ Enhance patient engagement and forge deeper connections. Automatically update health data to save patients the time it would take to make updates manually.
- ✓ Create a unified, personalized care strategy based on a holistic view of patients and their care histories.
- ✓ Provide broader access to needed services. Enable your organization to easily, efficiently, and cost-effectively integrate existing devices and systems through solutions that are open and extensible.
- ✓ Deliver a personalized patient experience with the right care at the right time.
- ✓ Improve patient and client experiences to lead to greater well-being and better outcomes.
- ✓ Empower providers to seamlessly and quickly scale their capabilities.

## CASE STUDY

### swyMed's telemedicine solution improves health outcomes by connecting remote patients with specialists

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Since its beginning in 2013, swyMed has been working to expand telemedicine care to places where it was previously unavailable.

When CEO Stefano Migliorisi needed a highly capable yet lightweight device for the swyMed digitally enabled telemedicine backpack, he turned to the Microsoft Surface Pro.

By adapting high-end videoconferencing technology coupled with an ingenious communication protocol that constantly monitors and adapts to changes in 3G coverage, swyMed has created a way for specialists to evaluate a patient remotely and have treatment protocols in place as soon as the patient arrives at the hospital.

[Learn more >](#)



“To bring our vision to life, we needed to combine the right hardware, software, and services. Microsoft is a key partner for us, providing the components that we required to create our solution.”

Stefano Migliorisi, CEO and Founder, swyMed

## CASE STUDY

### MVP Health Care uses Dynamics 365 to personalize member support and promote healthy communities

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MVP Health Care is transforming the healthcare experience. Working with Dynamics 365, the health insurance company has created a centralized collaboration platform that unifies data from many disparate sources to create a single, comprehensive view of each member. This holistic view allows MVP employees to support and care for members in ways that go far beyond the traditional healthcare experience.

For instance, if a member visits the ER right after an outpatient surgical procedure or has missed appointments because they're housebound, an MVP employee can see this and proactively provide transportation services or other appropriate ways to help.

[Learn more >](#)



“By implementing Dynamics 365, we know our members better, so we can meet our commitment to rational rates, personalized services, and healthier communities.”

Michael Della Villa, Chief Information Officer,  
MVP Health Care



03

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# Innovating a next-generation patient engagement system

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### Greater engagement

Case study: Northwell Health

### Real-time patient care

Case study: Providence St. Joseph Health

### Continuous patient engagement

Case study: St. Luke's University Health Network

To meet a patient's expectations, you need to first understand who they are.

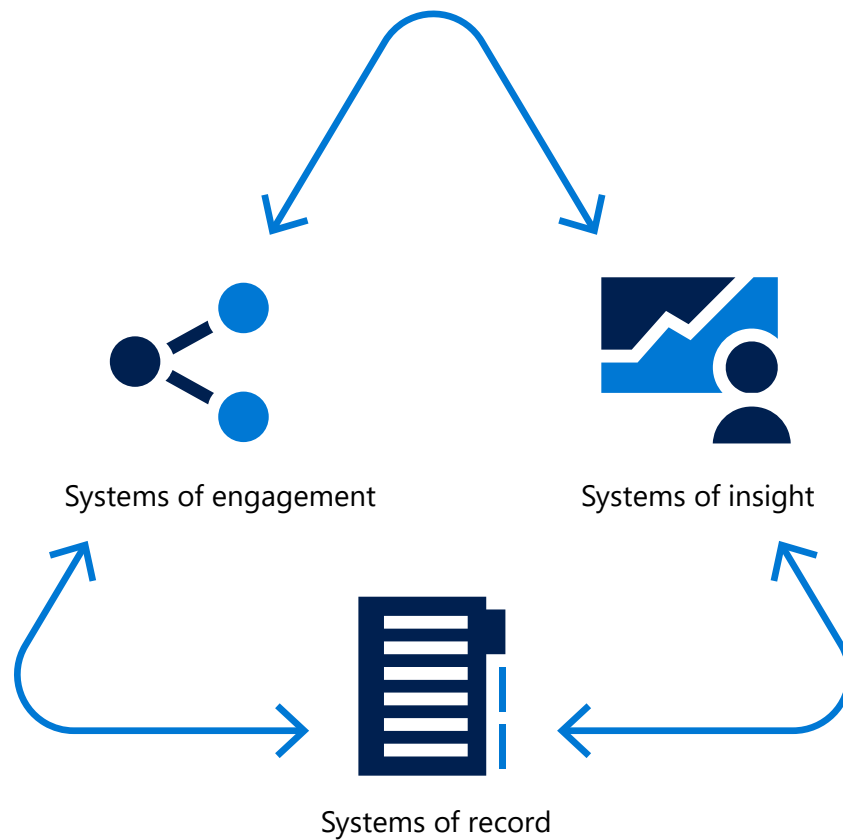
By consolidating information from all parts of the patient experience into a single platform, you can deliver better care and a better experience through the patient's preferred channel.

This new paradigm also helps you rightsize the level of patient interaction.

Reach out to a patient through email, chatbots, or call centers depending on the patient's needs. Plus, keep a history of the patient's interaction availability, offering a personalized experience while using the same technologies to codify a care plan.

“To really reap the benefits of patient engagement—improved care outcomes, healthier lifestyles, and faster recovery—you need an empowerment platform that empowers consumers and the clinicians they trust to stay connected and communicate about the things that matter most to them during the 5,000 hours between office visits.”

Elan Hekier, MD, Chief Medical Information and Innovation Officer, Sharp Rees-Stealy Medical Group



## Greater engagement

To the fullest extent possible, healthcare systems need to track all kinds of interactions—from scheduling appointments to checking lab results. Getting insights from these interactions builds a more comprehensive understanding of what patients are going through and better engages them with their chosen preferences.

A modern patient engagement platform encompasses systems of records, insight, and engagement. Each system supports the other.

- Systems of record are optimized through systems of insight that analyze data to help predict and prevent health incidents and determine effective treatments.
- Systems of engagement provide new ways to treat illness faster and more long-term.

This unified platform offers a consistent user experience that's easy to integrate and automatically benefits from any updates to the underlying platform.

## CASE STUDY

### New York's largest healthcare provider streamlines patient care processes with Microsoft business applications

Medical organizations of all sizes must constantly adjust to the practical and financial realities of modern healthcare systems while striving to deliver top-rate care. Even with its strong culture of innovation, New York-based Northwell Health is no exception.

As the fee-for-service models evolve to value-based care, Northwell has embarked on a full-scale digital transformation to improve patient outcomes while driving clinical and business success.

With Dynamics 365 and Microsoft Power Apps, Northwell is creating a 360-degree view of each patient so it can better understand their situation, needs, and wellness—not just their illness. Northwell is also giving employees powerful new tools to optimize patient care, reduce costs, and ensure regulatory compliance. The organization has enhanced its daily rounding app with AI capabilities that empower the app to communicate with the [Microsoft Bot Framework](#), so clinicians and administrators can interact with it for fast answers to questions about patients.

[Learn more >](#)



“Having all our data in one place in a common data model makes it very easy for us to build new use cases. It also opens up new possibilities for using Dynamics 365 across the enterprise to transform the way we manage information—it’s time for healthcare to move on from the world of faxes into the digital domain.”

Vishwanath Anantraman, Chief Innovation Architect, Northwell Health

## Real-time patient care

A real-time patient care platform can help your teams connect and share information quickly, so you can give patients the information and care they need in real time. By working with patients at the right time and with the right information when both sides need it, you can recognize health abnormalities when they occur and ensure faster, smarter interventions.

### Challenges

Dealing with communication delays among care team members, care facilities, and payors. These communication processes can take days or weeks to resolve.

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Frustrating patients by complicating basic tasks.

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Navigating interoperability issues among EHRs and integrating legacy EHRs with analytics solutions, which can present obstacles to taking true advantage of real-time data analytics.

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Mitigating the effects that information gaps can have on decision-making. This is especially true for patients in nonoptimal circumstances.

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Maintaining the integrity and resiliency of a platform, which can prove critical to patient outcomes.

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## How digital transformation can help

- ✓ Provide care teams with the tools they need to communicate and work together virtually. This improves patient outcomes and reduces costs.
- ✓ Strengthen patient relationships and quality of care by sharing real-time information, not only with those who are receiving health services, but also with the people around them who provide support.
- ✓ Deliver more targeted and rapid care to high-risk patients.
- ✓ Enable real-time patient reporting to improve the transparency of patient care.
- ✓ Quickly deliver insights to teams to help them gain a better understanding of their patients and drive the next best action.
- ✓ Support real-time patient care whenever possible. Implement actionable, clinically translated intelligence into workflows.
- ✓ Increase operational efficiency by streamlining your processes.

## CASE STUDY

### Providence, one of the largest health systems in the US, builds a tool to fight COVID-19

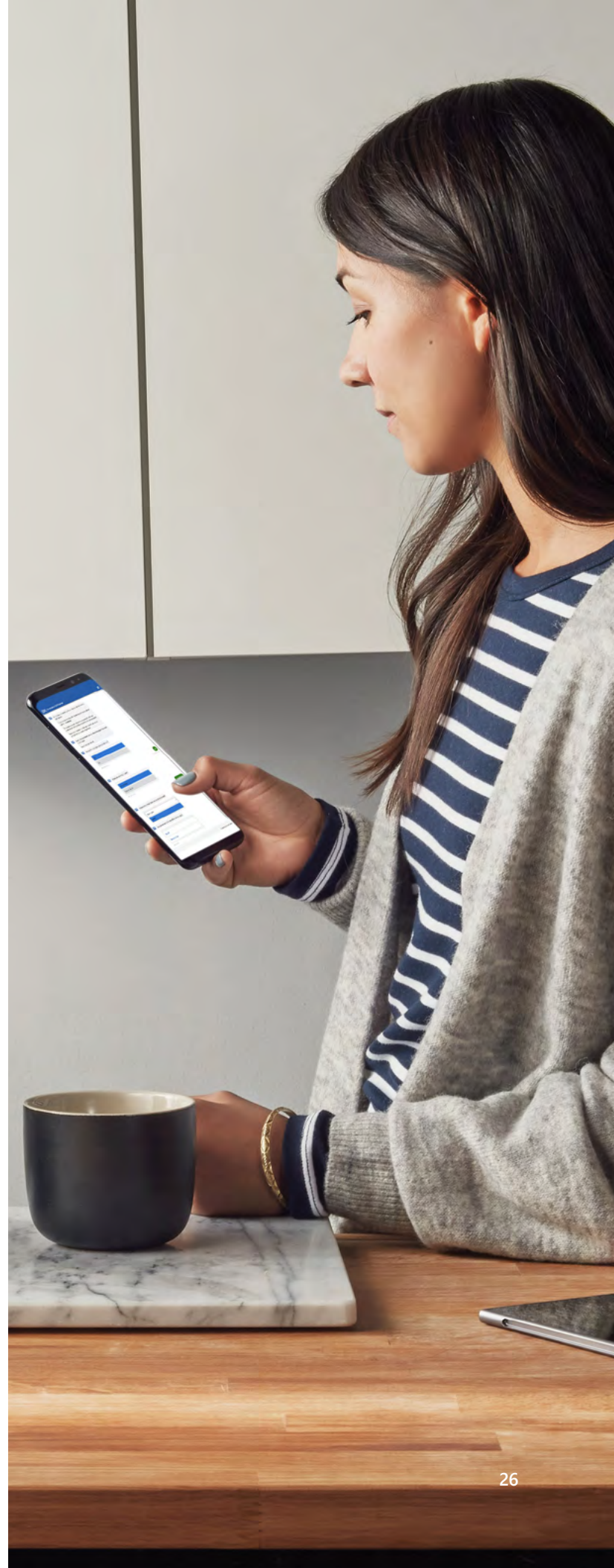
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Using the Microsoft Healthcare Bot service, Providence St. Joseph Health was able to build a [Coronavirus Assessment Tool](#) in just three days to help people in the communities it serves know whether they should seek medical attention for their respiratory symptoms.

The tool, which launched in early March, brings a prospective patient directly into a telehealth session with a clinician to get immediate care.

It also aims to prevent healthy people or those with mild symptoms from showing up at clinics and emergency departments, which limits community infection and saves hospital beds and equipment for those who need it.

[Learn more >](#)



# Continuous patient engagement

Connecting with patients at the right time and with the information they need encourages them to be more involved and creates a more integrated, continuous feedback loop. Technology can help you realize this level of engagement, keeping patients connected to providers both inside and outside of care facilities.

Care continues when patients are still well, so you can track success and improve health outcomes. Through intelligent services and trusted platforms, you can develop a more comprehensive relationship with patients that provides them with self-service access and proactive reminders while reducing admissions and readmissions.

## Challenges

Tracking treatment progress or success accurately beyond the clinic.

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Monitoring the progress of patients who don't actively participate in their own care. For example, patients that fail to take their full regimen of prescribed medications.

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Providing patients with secure access to their health data and care plans.

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## How digital transformation can help

- ✓ Adjust to a remote care environment while staying connected to patients. Give teams the tools they need to communicate and work together virtually.
- ✓ Work to strengthen patient relationships and improve outcomes. Achieve more flexibility to effectively engage with patients.
- ✓ Reduce readmissions and boost health outcomes by providing patients with preventive care and other health updates.
- ✓ Stay connected to patients through remotely managed care plans. Help ensure that patients are taking the steps needed at home to stay healthy.
- ✓ Enable patients to stay true to their care plans and achieve personal health goals. Recognize health abnormalities when they do occur to facilitate faster, smarter interventions.
- ✓ Extend care and treatment options to previously hard-to-reach patients.

## CASE STUDY

### When the world changed, so did St. Luke's University Health Network

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Microsoft Teams is helping St. Luke's University Health Network see thousands of patients a day through virtual sessions and telemedicine. The hospital system has rolled out Teams across its network and gone from having essentially no televisits at all to nearly 5,000 patient televisits a day.

When you consider that every call not only saves the use of a mask and gloves but also limits COVID-19 exposure for both patients and medical staff, it's no surprise that staff are calling this partnership a "game-changer."

[Watch video >](#)



"As we discover barriers, it's our job as clinical leaders of the organization to find out and help innovate ways to take down those barriers. With a tool like Teams, that makes our job a whole lot easier."<sup>6</sup>

Jennifer Grell, Director of Clinical Informatics and Training, St. Luke's University Health Network

# 04

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## Summary

Patient expectations have evolved. Rethinking and reworking effective patient engagement strategies and platforms to meet these expectations is just the start. Healthcare companies must now bring many different patient touchpoints into one common journey and build a clear, comprehensive view of each patient.

This personalized approach gives healthcare organizations clarity when it matters and allows health teams to provide the kind of care patients need. Real-time, continuous interactions between patients and caregivers lead to better engagements and better patient outcomes.

Wherever you are on your technology innovation journey, we're here to help.

Together, we can enable your teams to be productive and secure from anywhere, help you rapidly adapt your business processes, and keep you engaged with your consumers—all while securing and managing access to your apps, devices, and data.

The way we work has changed. And adapting to these changes is not only challenging, but constantly evolving. While the issues healthcare organizations face are significant, so are the opportunities.

As always, the best way to move forward is together.

**Visit Microsoft Health** 

# Sources

<sup>1</sup> Transcend Insights, *Patient Expectations of Medical Information Sharing & Personalized Healthcare*, February 2017.

<sup>2</sup> Prophet and GE Healthcare Camden Group, *"The Current State of the Patient Experience,"* accessed June 16, 2020.

<sup>3</sup> Centers for Disease Control and Prevention, *"About Chronic Diseases,"* October 23, 2019.

<sup>4</sup> NEJM Catalyst Insights Council

<sup>5</sup> Venkat Atluri, Jenny Cordina, Paul Mango, Satya Rao, and Sri Velamoor, *How Tech-Enabled Consumers Are Reordering the Healthcare Landscape*, McKinsey & Company, 2016.

<sup>6</sup> Microsoft, *"St. Luke's Transforms Patient Care with Digital Collaboration Among Providers Using Microsoft 365,"* November 4, 2019.

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