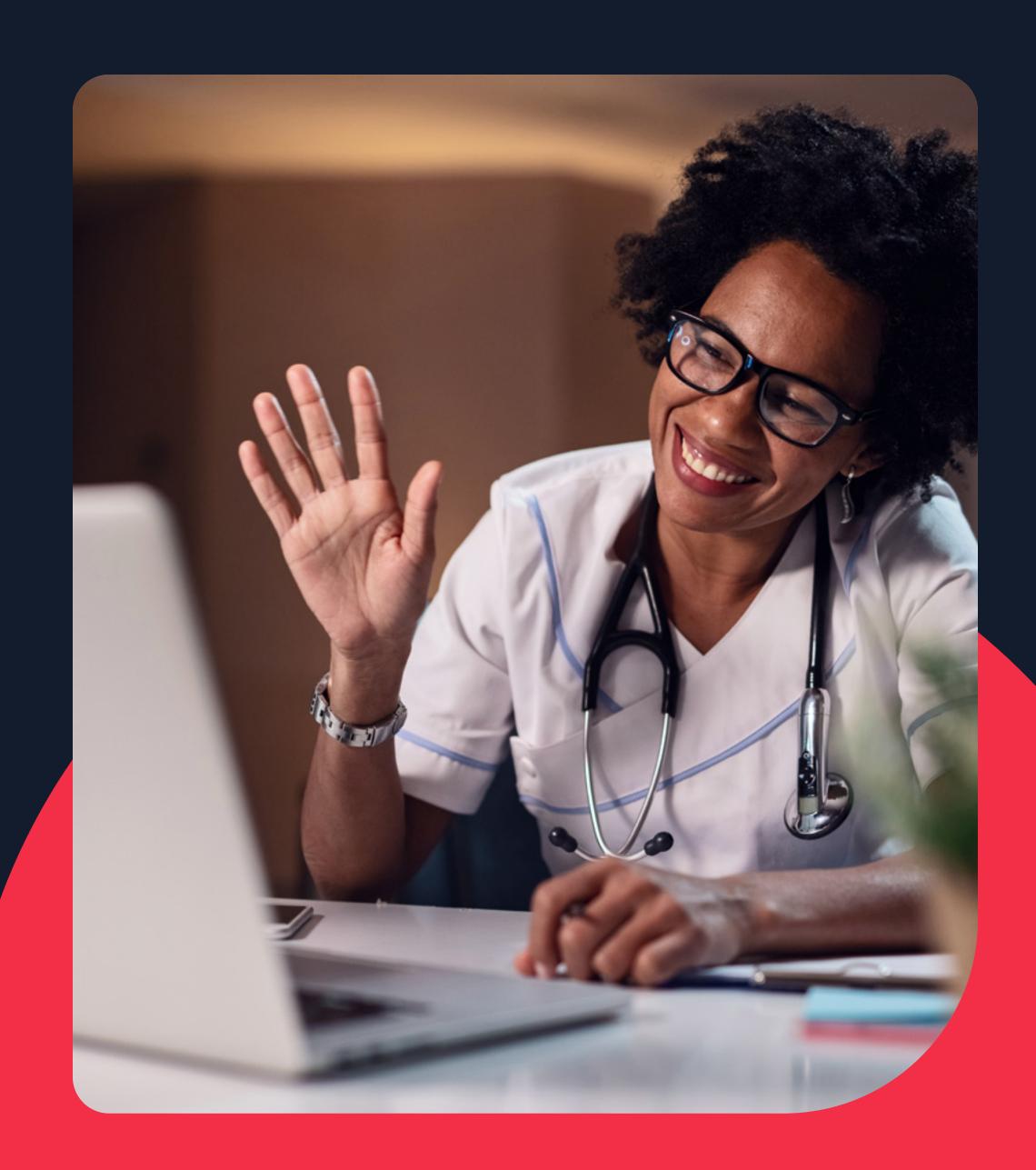
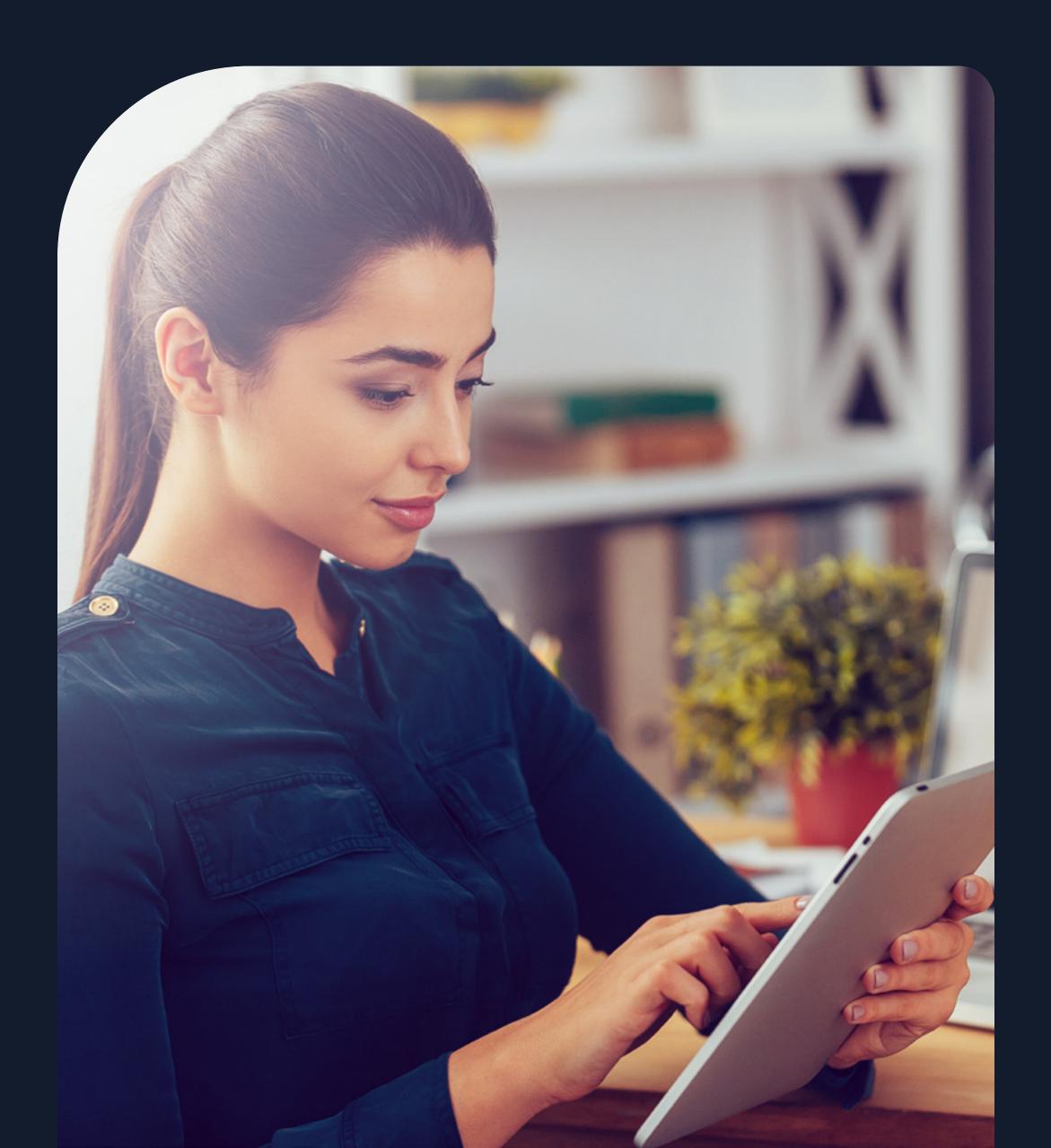


Driving Engagement in an Evolving Healthcare Ecosystem





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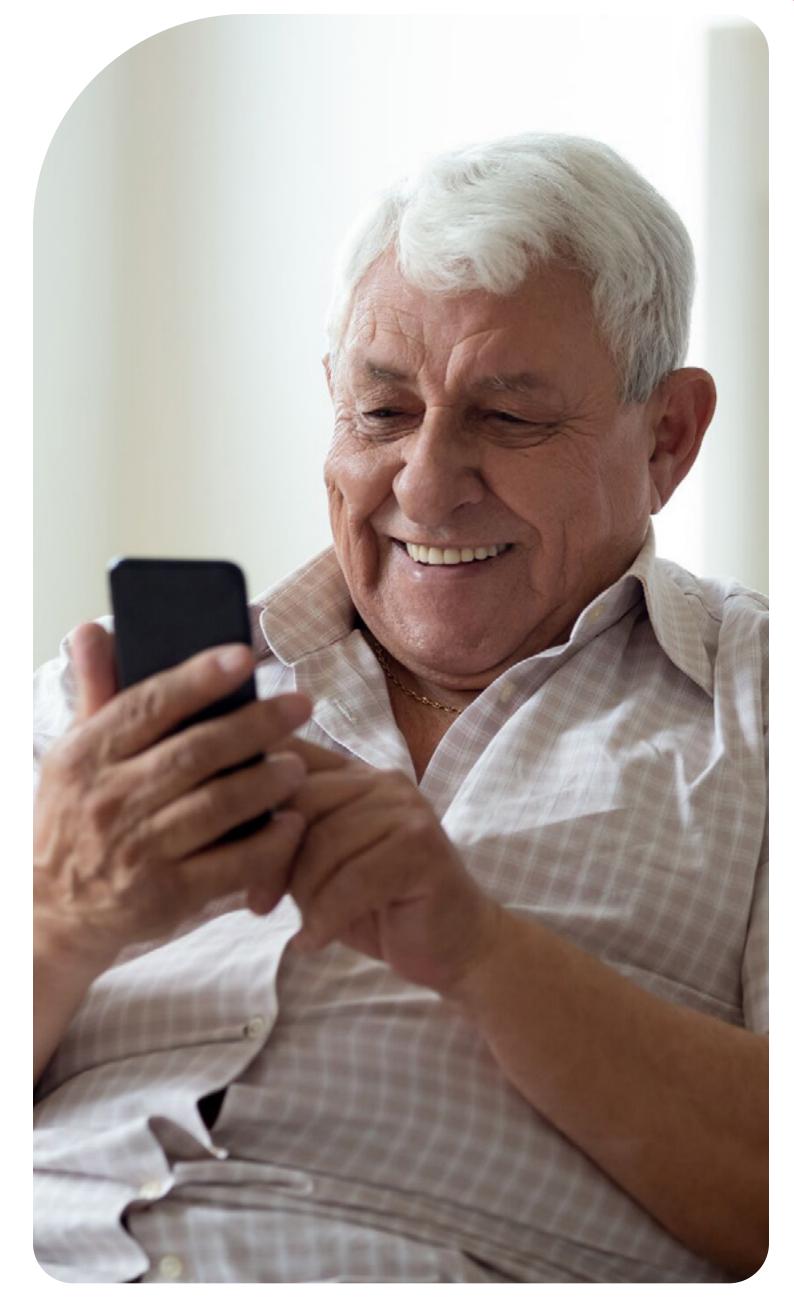
Patients today no longer just want excellent care — they want care delivered with ease, convenience and of choice. A healthcare consumer trends report from the National Research Corporation (NRC) found that 80 percent of patients would switch providers for "convenience factors" alone. This powerful influence on consumer and patient behavior is leading to the growth of non-traditional delivery of care, including retail clinics and telehealth. As the demand for digital modalities picks up and the "consumerization" of healthcare continues, healthcare providers are expected to deliver frictionless and personalized customer experience.

Modern, flexible communication architecture can support engagement capabilities that do not have to be "one-size-fits all." Gaps in communication related to appointment no-shows, medication adherence, and timely consumption and delivery of care among the multiple stakeholders in a patient's journey can be supported through timely, tailored communication. In the case of treating patients with chronic conditions of a longer-term time horizon, improving long-term adherence will likely require personalized and sustained behavioral interventions, found in a study conducted by the **Journal of Clinical Oncology**.

There is an opportunity to create streamlined patient experiences where providers can easily communicate with patients through digital channels and offer support

proactively based on patient behavior, preferences, and needs. This applies to everything from how people schedule appointments to the one- on-one conversations they have with clinicians. Healthcare delivery models can now address generational preferences and can adapt to each patient's unique circumstances. For example, as digital natives growing up using the internet, younger generations prefer the ease of mobile communications and real-time correspondence via SMS or a chatbot.

The rapid adoption of digital delivery methods and remote monitoring has increased capabilities to build customized patient journeys centered around patient-provider engagement. Similar to the consumer engagement model in retail, providers can now meet patient expectations based on a holistic view of the consumer leveraging data from EHRs, CRM platforms, and other patient interactions. Rather than focus on episodic care, providers can cultivate continuous relationships by communicating with the patient prior, during, and after an appointment or treatment.





#### The right message at the right time with Arkansas Children's Hospital

Arkansas Children's Hospital is one of the largest pediatric medical providers in the US, with over 5,000 physicians, pediatric residents, and employees. The cost of patient no-shows is two-fold, jeopardizing patient outcomes and hurting the hospital's bottom-line. They decided to replace their on-premise call center with a cloud-based contact center platform, using Twilio's Programmable Voice APIs, powering an Interactive Voice Response (IVR) system. Its automated and personalized appointment reminder service allows Arkansas Children's Hospital to contact more patients about their appointments and changes in clinic opening hours, at greater speed and scale.

When a patient books an appointment, they select their preference for an SMS or phone call reminder. The hospital's platform automates contacting patients a day before their appointment to remind them of their appointment, and asks if they'll still be able to attend the appointment. If "yes," the IVR will confirm the appointment time once again and hang up. If they say "no," the script will remind the patient to reschedule, and give them the number to call to make a new appointment.

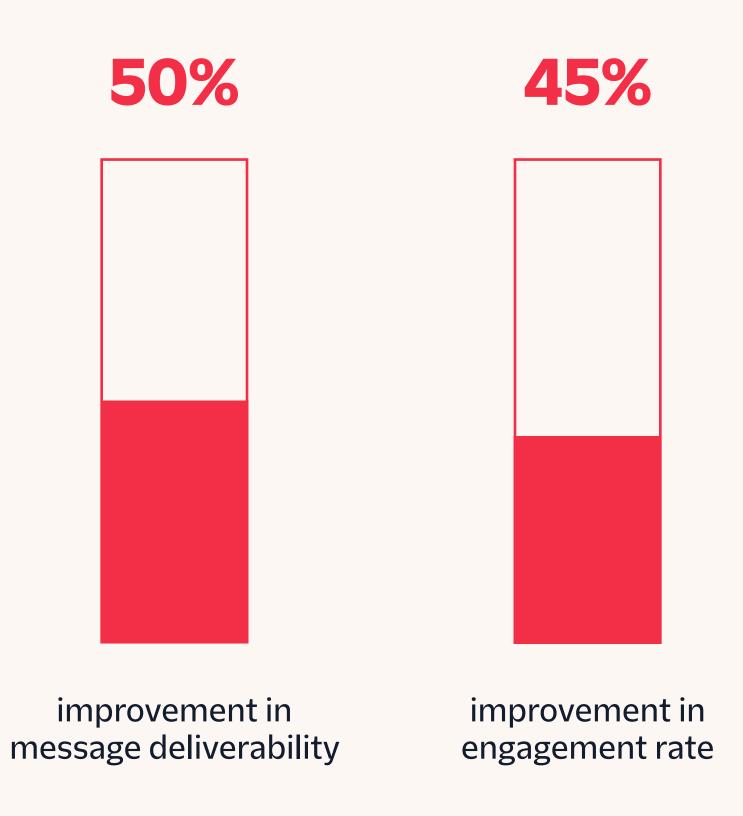
"Texting is ubiquitous, everybody does it and our alerts arrive just in time."

#### **Stewart Whaley**

Team Leader, Systems Development Group at Arkansas Children's Hospital

Delivering the message through the preferred channel resulted in a 90 percent improvement in missed appointments.

## On average, organizations using Twilio for customer notifications and reminders experience:

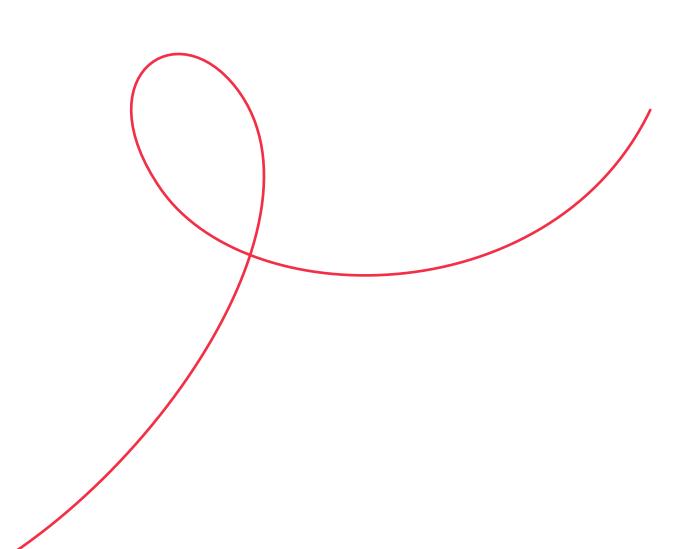


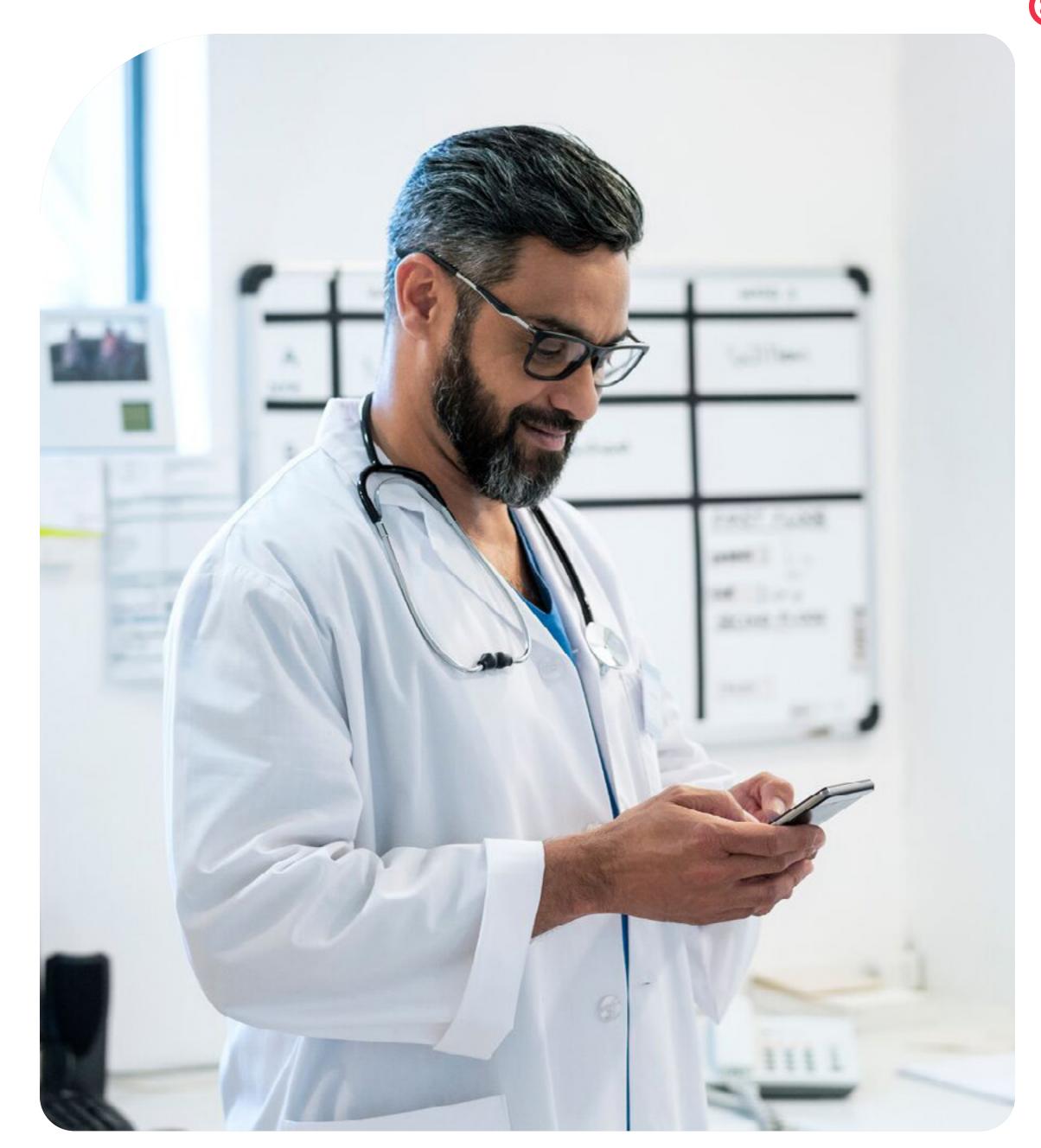
Based on a survey among active Twilio customers in January 2020. Data collected from 214 responses indicating the use of Twilio for customer account notifications & reminders. Percentages are an average of those provided by respondents who have quantified this improvement in message deliverability and engagement rate.



There has been a broadening of coverage for telehealth supported by Centers for Medicare & Medicaid Services (CMS). Medicare beneficiaries will be able to receive a specific set of **services** through telehealth including evaluation and management visits (common office visits), mental health counseling, and preventive health screenings. 97 percent of healthcare leaders reported expanding telehealth access amid the COVID-19 pandemic, per a MGMA (Medical Group Management Association) Stat poll.

Especially during a global health crisis, but not exclusively, providers can help deflect calls to a contact center by providing timely Public Health Information (PHI), such as hygiene and wellness best practices through self-service. An Interactive Voice Response system (IVR) helps to scale self-service, thus increasing capacity. Modern IVR systems offer added ease and convenience by offering more ways to receive service including support channels such as SMS and video in existing IVR call flows.





#### **(3)**

#### Virtual healthcare visits with MDLive

Telemedicine provider, MDLive, conducts virtual visits with board-certified physicians and licensed therapists anytime and from anywhere. When the company began to grow, their existing infrastructure was insufficient to meet the demand. To continue providing patients with fast and convenient access to care, MDLIVE integrated Twilio's Programmable Voice, Video, and Messaging application programming interfaces (APIs) into the platform they built to enable faster and easier communication with patients through phone calls, video chats, video recordings, and automated SMS reminders and alerts. For example, a patient requesting a 2 AM consultation in a rural area may not find someone in their immediate area. Based on the state in which the patient is located, the messaging solution within MDLIVE sends an alert to an available provider who is fully licensed to practice medicine in that patient's state and can meet with the patient on a video conference.

"Getting patients connected with providers quickly when it is time for their appointments is critical for MDLIVE, when it comes to creating a positive experience for the patient and keeping the provider on schedule."

**Axel Adida**Platform Development Director at MDLive



Chapter 02 Flexible communications infrastructure



In addition to the clinical challenge of the pandemic, there's a necessity for monitoring patients being managed at home. There's also an increasing number of patients requiring mental and emotional support, in part related to unprecedented job loss and the associated loss of health insurance. Plus, there is the universe of healthcare providers whose businesses are at-risk because their practices were not prepared for delivering virtual care.

During the pandemic, 37 percent of consumers recently surveyed expressed a desire to receive communication on inspiration and strategies to stay healthy. The demand for personalized communications remains largely unmet. A flexible communications infrastructure can potentially support a value-based care system in which communications to patients are tailored to suit their specific health needs.

In an effort to achieve this, providers can build an operating **model** that is unique and relevant to its network, payer partner, and patient population. Providers leveraging patient analytics and EHRs are able to identify gaps in patient care that can be addressed through outreach and follow-up based on preferred communication channels, frequency and messaging.

As providers take on greater responsibility for care and management, hospital systems and independent providers are adapting their delivery modalities to meet the specific needs and circumstances of patients. This not only applies to large, government payers like Medicare or multi-state healthcare providers but also to independent providers who can build a flexible communications infrastructure overlayed on an integrated data platform.





#### Scaling COVID-19 screenings with CipherHealth

Patient communication platform **CipherHealth** provides specialized, flexible programs for hospital systems and healthcare providers across the country to conduct automated outreach screenings, with implementation taking just a few days. Now, as the nation faces COVID-19 and the long-term ramifications of this health crisis, CipherHealth has launched an automated screening outreach program specific to COVID-19 to ensure that patients who may have symptoms of the virus do not arrive for elective procedures and tests to subsequently expose others.

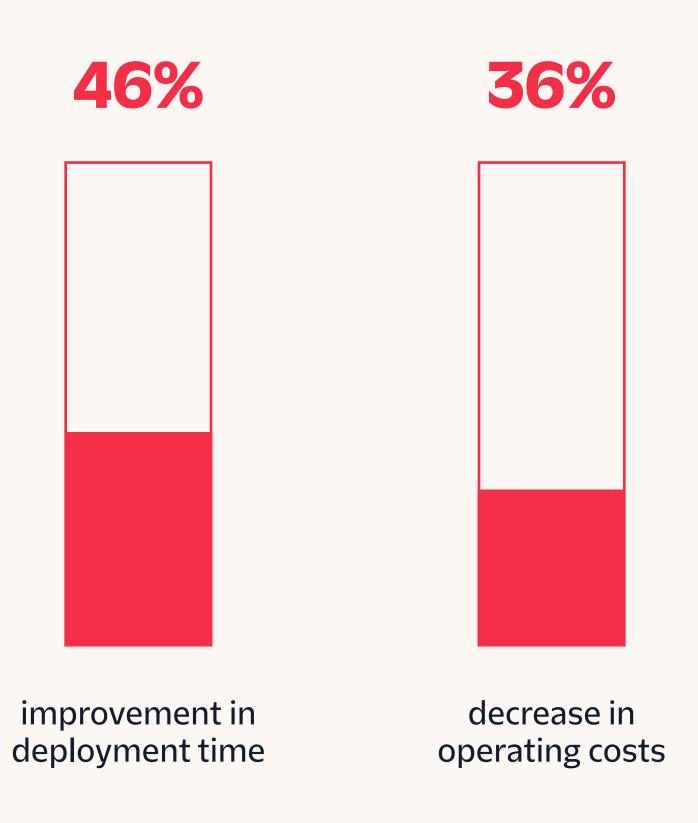
Patients receive either an automated phone call or text message, which delivers a survey. Based on the responses, a provider can then reach out to the patient for further screening and discussion where appropriate. Especially as tests become more available, results and information need to be proactively communicated to paties. CipherHealth serves over 500 hospitals and health systems, sending a combined total of 430,000 weekly calls and texts.

The program also provides patients with information on where to seek care and facilitates a direct call with a member of the care team to reschedule procedures and further screen for identified symptoms where appropriate.

"At the end of the day, we need a vendor that's going to be as agile as we are, and we were able to get the COVID-19 screening program up and running within 48 hours."

**Lisa Romano** Msn, Rn, Chief Nursing Officer at Cipherhealth

### On average, organizations using Twilio for customer notifications and reminders experience:



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# A resilient foundation for better patient outcomes

In a future that remains uncertain, consumers are depending on healthcare providers for immediate care and communication now more than ever before. However, the growing number and variety of customer touchpoints have made the patient journey more complex, while consumers' expectations for personalized service and experience continues to rise. Organizations are shifting away from building discrete applications to creating cohesive, secure connected experiences. Application Program Interfaces (APIs) are powering customer engagement platforms and support interactions that span mobile devices. These applications give healthcare organizations the flexibility to create scalable digital patient engagement.

Healthcare systems have been put to the test to restructure core operating frameworks that can successfully support any future crisis. COVID-19 has forced providers of all sizes to re-imagine how they deliver care and create a model that can adapt to an evolving ecosystem and changing patient expectations. Transformations happening now are laying the foundation for more consumer-centric healthcare delivery that improves patient outcomes, brings new efficiencies and supports a more evolved relationship between patients and provider organizations, leading to a less transactional and more holistic consumer experience.



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