



## CLOSE THE GAPS IN TELEHEALTH ACCESS BY GIVING PATIENTS MORE OPTIONS TO CONNECT



### Introduction

In the last few years, telehealth use has seen exponential growth, offering providers and patients the flexibility to safely connect amidst COVID-19. But with growth comes challenges, and access is still a fundamental limitation of the practice: many patients, including several vulnerable patient populations, lack convenient, reliable access to computers and broadband networks. For example, 23% of Americans do not have broadband access at home, and 30% of those that do say they often or sometimes have trouble connecting.<sup>1</sup>

In February 2022, the U.S. Department of Health & Human Services Office of Health Policy reported:<sup>2</sup> "Video telehealth rates were lowest among those without a high school diploma, adults ages 65 and older, and Latino, Asian and Black individuals," and noted "Significant disparities among subgroups in terms of audio versus video telehealth use."

Digital divides like these limit the total patients that can be served through telehealth. Many of these divides can be bridged if healthcare organizations invest in expanding their telehealth capabilities to meet patients where they are, e.g., by making services available to patients without home computers and broadband. This is a necessary step in telehealth maturation that will enable health systems to expand access to care in a meaningful way.

One of the best opportunities to expand telehealth access and convenience is to give patients the option of using their smartphones for virtual appointments. Significantly more Americans own smartphones than PCs, and the gaps are larger for senior and minority populations. Across all patient populations, more than two-thirds of Americans say smartphones are their preferred device for virtual visits<sup>3</sup>, yet not all care providers offer patients a mobile-first option.

## Close the Gaps in Telehealth Access by Giving Patients More Options to Connect

This white paper highlights the considerations and advantages of implementing a multichannel telehealth strategy that gives patients multiple ways to access virtual care.

A multichannel telehealth strategy offers several advantages for increasing telehealth acceptance, utilization and value. Specifically, healthcare organizations can:

- Reduce health inequity by making telehealth available to patients that do not have PCs or reliable internet access
- Improve provider productivity by reducing no-show visits
- Gain the flexibility to take best-of-breed approaches targeted to different patient populations and practice areas
- Integrate telehealth visits with the EHR
- Align themselves with the powerful consumerism trend where patients want control over where and how telehealth visits are conducted (for example, by desktop video on a PC or tablet, a video or audio encounter on their smartphone, or an audio-only call)

While this paper focuses on smartphones, a multichannel platform may also need to support telehealth visits through patient portals, audio-only calls, video conferencing software, tablets, other devices and channels, plus traditional desktop and laptop computers.

### SMARTPHONES CAN NARROW THE DIGITAL DIVIDE

Offering smartphone-based appointments is an effective tool for closing the digital divide. Consider these findings from the January 2021 Pew Research Foundation fact sheet and the U.S. Census Bureau's April 2020 Household Pulse Survey:

**81%** of Americans own smartphones

**74%** own PCs

**19%** of Americans that own smartphones do not have broadband at home

**41%** of Americans ages 65 and older do not use home broadband; 53% have smartphones

**39%** of Hispanics and 34% of Blacks do not use home broadband

**68%** of patients say smartphones are their first choice for virtual care visits<sup>3</sup>

While gaps will remain in which populations can be served by smartphones, offering the option opens the possibility of virtual care to many patients.



## SMARTPHONES HELP SAFETY NET HOSPITALS SERVE HARD-TO-REACH PATIENT POPULATIONS

In a 2021 article for the Journal of the American Academy of Dermatology, dermatologists in New York City described how adding smartphone-based video visits to their telehealth offering helped bridge the digital divide and provide care to patient populations that historically had low telehealth adoption rates, including low-income, non-English speaking and minority patients.

**56%** of patients were unprepared for video visits through their hospital's patient portal but could participate in a video visit via a text message link sent on their smartphone

**32%** of smartphone-based video visits were completed by patients ages 65 and older; the same demographic accounted for only 2.9% of video visits conducted through the patient portal

### The authors concluded:

“...safety-net hospitals are enriched with populations that have language and digital literacy barriers to facily use such portals to connect. Although training patients to navigate these digital health tools has been proven effective, resource-limited settings may not always have the funding and staff available to dedicate to this task. These results show that the use of a readily available smartphone application can be a useful adjunct to directly engage patients in video visits in a safety-net hospital.”

[Access the full JAAD article here >](#)

## Why a Multichannel Strategy is Worth the Effort

Having a choice of devices and communication channels promotes acceptance, and eventually, greater telehealth utilization for both patients and clinicians. In addition to giving patients more choices for devices and video or voice visits, a multichannel platform can also protect health systems against vendor-lock by giving them access to more solution development roadmaps and innovations. A multichannel approach also builds redundancy into care delivery programs and thus promotes business continuity; if one telehealth channel goes down, appointments can be shifted to others. That reduces missed appointments and protects the clinician's ability to deliver care in case of a system outage. As previously noted, 30% of all Americans with broadband sometimes or often experience problems connecting.

The gains in telehealth use in recent years are even more impressive when we consider how access to telehealth and its ease of use for both patients and clinicians is far from consistent or universal. There are significant telehealth adoption gaps that will remain in place until fundamental healthcare equity, consumerism forces and acceptance obstacles for both patients and healthcare organizations are addressed.

Many of the obstacles center on how easy it is for patients and clinicians to use telehealth services. Today, 75% of patients say telehealth is easy to use.<sup>4</sup> That means 25% of patients still think telehealth is not convenient. That is a level that is too high for telehealth to reach its full potential, and one that is keeping healthcare organizations from getting the full value from the investments they've already made in virtual care.

## Close the Gaps in Telehealth Access by Giving Patients More Options to Connect

Providing a mobile-first choice may also be the only way to make telehealth services available to many patients. For example, more than 26% of Medicare beneficiaries do not have digital access at home.

The non-access rates are even higher for patients of lower socioeconomic status, those in communities of color, widows and widowers, and patients ages 85 or older.<sup>5</sup> There are numerous other documented digital divides based on people's socioeconomic status, neighborhood, ethnicity and other characteristics.

### Options Reduce Inequities

Ongoing telehealth inequities and utilization disparities, plus data on patient satisfaction, indicate that current telehealth programs would benefit from new communication options and additional efforts to engage patients. In a 2020 research report<sup>6</sup> on patient engagement, KLAS recommended meeting patients where they

are: "Today, telehealth solutions are primarily offered through dedicated vendor products; they rarely exist as capabilities built into existing patient engagement solutions. Patients want more consumer-focused capabilities, including comprehensive mobile apps that let them take care of their health and wellness in one place and price transparency tools that let them make educated decisions about their care options."

One of the most practical and widespread reasons to support multiple communication channels and telehealth technology providers on one platform is that most virtual care systems that are in use today do not natively support smartphone-based consultations.

Clearly, smartphones represent more than another communication option for telehealth. They represent an opportunity to reduce a fundamental inequity in access to care while meeting patient expectations for convenient, digital experiences.

## FOR MANY PATIENTS, THEIR SMARTPHONE IS THEIR DEVICE OF CHOICE; FOR OTHERS IT IS THEIR ONLY OPTION

### Consider:

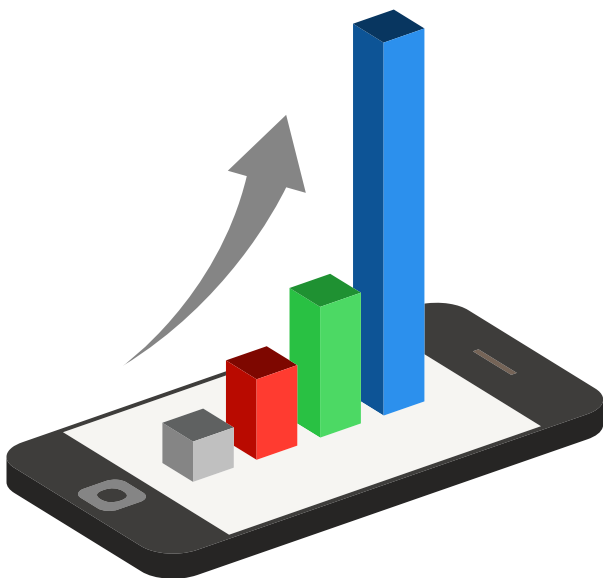
- More prospective patients have smartphones than have PCs or tablets.
- More prospective patients have cellular network access than reliable broadband access.
- Appointment invitations and logins can be sent via text, which is advantageous because for many patients it is easier to access a text than an email.
- Unlike with PCs, laptops or tablets, smartphone visits are not location-dependent — that makes phone-based care great for patients that currently have to use libraries, community centers or other public places to get broadband (and in some cases PC) access.
- Today patients prefer smartphones over PCs for virtual visits by a 4:1 margin (68% of patients say they prefer smartphones, compared to 17% for PCs). Smartphones are most popular among patients and PCs have fallen to fourth, also trailing laptop computers and tablets.<sup>7</sup>
- By giving patients the choice of what device they want to use and where they can use it, clinicians can essentially take telehealth to patients instead of requiring patients to come to them, which aligns to the consumerism ideal of serving patients in the way they want to be served.

## FROEDTERT ELIMINATES TWO-THIRDS OF VIRTUAL VISIT FAILURES AFTER ADDING SMARTPHONE OPTION

Brad Crotty, MD, MPH, is chief medical officer and chief digital engagement officer at Froedtert & the Medical College of Wisconsin Health Network.

That organization previously had to redirect 30% of the virtual visits on its telehealth platform to a phone call because of problems getting or staying connected on the platform. Those time-wasting redirects were reduced by two-thirds after the organization added a smartphone-based communication option to its telehealth offering.

You can read about the program and the additional research the organization conducted on telehealth connectivity issues in this [blog](#) written by Crotty.



## Ease-of-Use Boosts Utilization

Smartphone-based access not only makes telehealth available to more patient populations, it encourages patients to utilize telehealth more by making it easier to use. One health system reported that 30% of its virtual visits had to be restarted because of connection problems before additional communications channels were added (see sidebar). Another reduced its virtual appointment no-show rate by 49% after adding a smartphone option for virtual visits.<sup>8</sup>

Compared to traditional telehealth platforms and adaptations of mainstream video conferencing solutions (e.g., Zoom, Teams), smartphone-based telehealth has a shorter learning curve because it takes place on a device patients and clinicians are already extremely familiar with. Some smartphone-based telehealth solutions do not even require patients to download an app, which eliminates a potential point of failure.

The smartphone already has the camera, speaker and microphone built-in, avoiding any potential incompatibilities among these separate components and the browsers and operating systems that traditional, PC-oriented telehealth platforms support. These characteristics of smartphones all simplify telehealth ease of use. All a patient needs to do to have a telehealth visit is to answer a phone call (the incoming phone number can even be presented as an alias showing the physician or health system's name so the patient knows their clinician is calling).

The ease-of-use advantages cited above for patients apply to clinicians, too. That is important, because physician acceptance and enthusiasm for various telehealth options play a large role in their utilization, and thus the value the provider organization realizes. After studying the VA medical system's experience

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with telehealth, Aswhini Zenooz, a former modernization leader there, concluded: “While most telehealth takes place over newer cloud-based platforms designed with more modern, human-centered experience standards, the potential to add to fatigue and digital overload remains.”<sup>9</sup>”

Almost all physicians use smartphones, and often to support their work, for example, through apps and specialized communities for healthcare professionals. A smartphone-based interface gives clinicians another option for connecting with patients that does not require significant investments in time to learn or equipment to purchase. Minimizing these requirements helps gain physician acceptance, which is a powerful lever to apply to increase telehealth acceptance and utilization.

As Zenooz noted:

**Telehealth adoption ... will be more likely to succeed if it is ‘pulled’ into organizations and workflows by providers rather than ‘pushed’ on them by leadership.<sup>10</sup>”**



## Leverage Public Networks to Gain Reliability, Redundancy

Most organizations have a backup for their appointment scheduling system (and for almost everything else) but may only offer one communication option for conducting virtual care. Supporting more channels builds in the redundancy needed to make service more reliable. A smartphone-based option can raise telehealth availability while reducing the burden on clinicians to also serve as technical troubleshooters for their patients. For example, if the patient’s or clinician’s local network goes down, or the patient portal or main telehealth platform suffers an outage for another reason, clinicians can reconnect with the patient and resume the visit simply by sending a text.

While cellular networks are not perfectly reliable, they provide much-needed redundancy for telehealth programs without requiring healthcare organizations to invest in backup computing and networking infrastructure. Having this capability can reduce patient no-shows or non-completed visits, and thus improve outcomes (and revenues, when applicable). Plus, it saves time for clinicians by enabling them to quickly switch to the smartphone option to continue an interrupted telehealth visit, rather than trying to help the patient find and address the root of the problem, which could be the patient’s PC, the software application, network access or a problem with the telehealth platform host.

## Conclusion

Smartphones represent a convenient, well accepted and widely used resource that healthcare organizations can use to extend telehealth access to more patients and to increase utilization among patients and clinicians. By offering virtual visits via smartphones, hospitals and health systems can close some important gaps in access to care while also connecting with patients in the way they want to be served.

Because many telehealth platforms do not natively support secure smartphone consultations, offering the option often requires a multichannel telehealth platform that supports third-party solutions. The resulting multichannel approach has many advantages, including providing redundancy in case of a system failure, reducing patient no-shows, improving care provider productivity, mitigating vendor lock-in, expanding the addressable patient populations and enhancing overall telehealth acceptance, all while leveraging the previous platform purchase through a small incremental investment. A multichannel telehealth platform with a smartphone option also promotes choice, which helps align the organization with powerful consumerism trends.

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**Despite telemedicine’s strong history as a tool to enhance access, the impact of the COVID-19 pandemic on the wide-scale implementation of telemedicine led to the uncovering of underlying inequities in telemedicine care. The current wider dissemination of telehealth is dependent on telemedicine access via a patient’s individual device, which raises concern for the impact of the digital divide.”**

Lopez, et al, “Barriers to Telemedicine: Can You Hear Me Now?”

American Society of Clinical Oncology Educational Book  
May 19, 2021

**...over half of adults over age 50 (62%) had used telehealth after the pandemic started. However, two-thirds of respondents also expressed some concern over the quality of care that they receive through telehealth, and worries around being able to access devices or programs to use telehealth, especially among respondents who lacked college degrees.”**

Associated Press-NORC Center for Public Affairs Research

December 15, 2021

# SOURCES

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## About Doximity

Founded in 2010, Doximity is the leading digital platform for medical professionals and ranked #1 telehealth video conferencing platform by Best in KLAS 2022. The company's network members include over 80% of U.S. physicians across all specialties and practice areas. Doximity provides its verified clinical membership with digital tools built for medicine, enabling them to collaborate with colleagues, stay up to date with the latest medical news and research, manage their careers and conduct virtual patient visits. Doximity's mission is to help doctors be more productive so they can provide better healthcare for their patients. For more information, please visit [www.doximity.com](http://www.doximity.com).

Doximity Dialer enables clinicians to connect with patients in real-time, from any device. More than 170 U.S. hospitals, including six of the top 10, have deployed [Doximity Dialer Enterprise](#) as a hospital-wide telehealth solution. Doximity Dialer is a HIPAA-compliant telehealth tool that offers both voice and video-calling capabilities, works with all smartphones, and doesn't require a login or any additional setup for patients. It can be integrated with existing telehealth platforms or function as a fully standalone solution.

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