



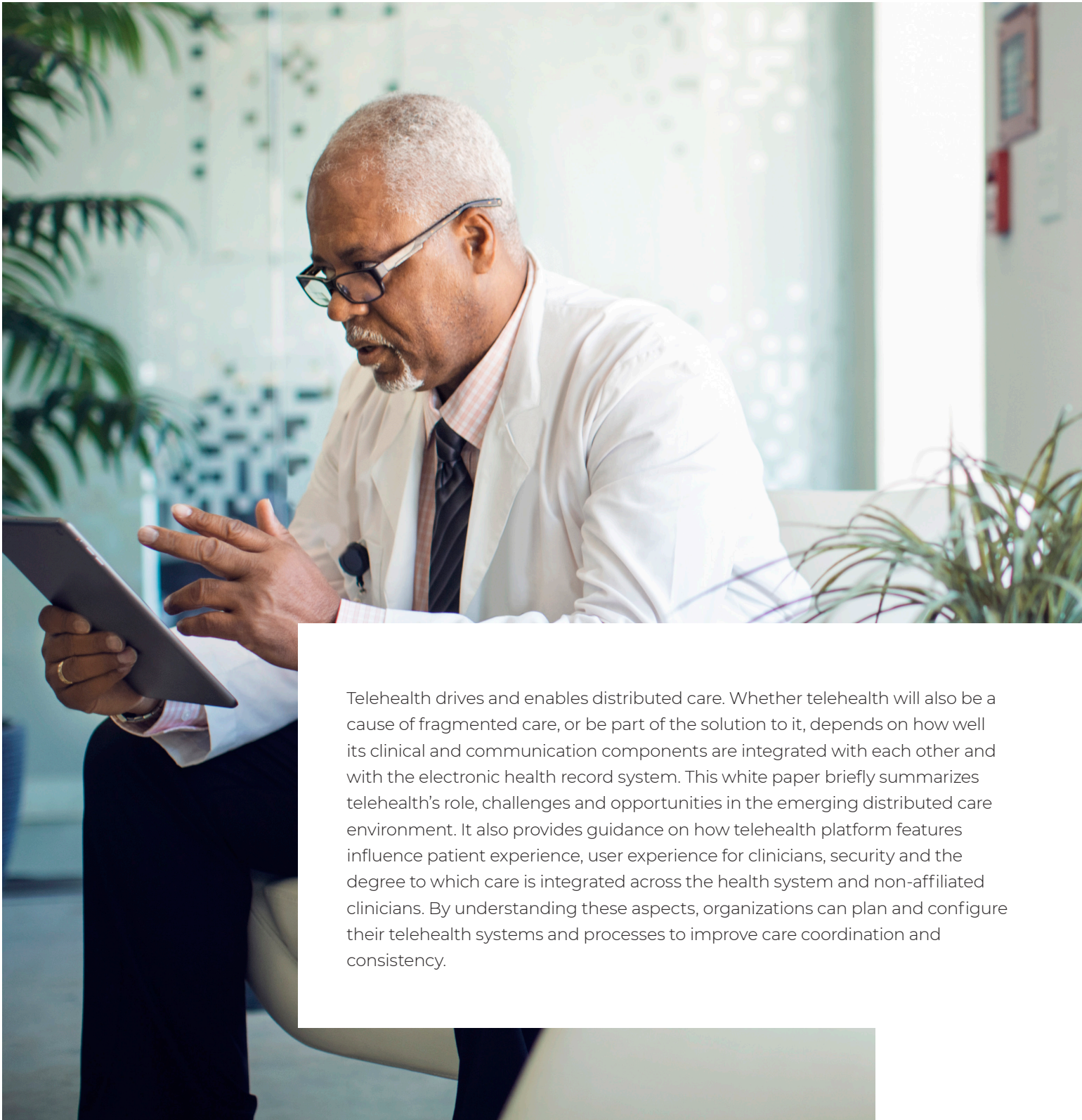
WHITE PAPER

Making Telehealth the Enabler to More Connected Care

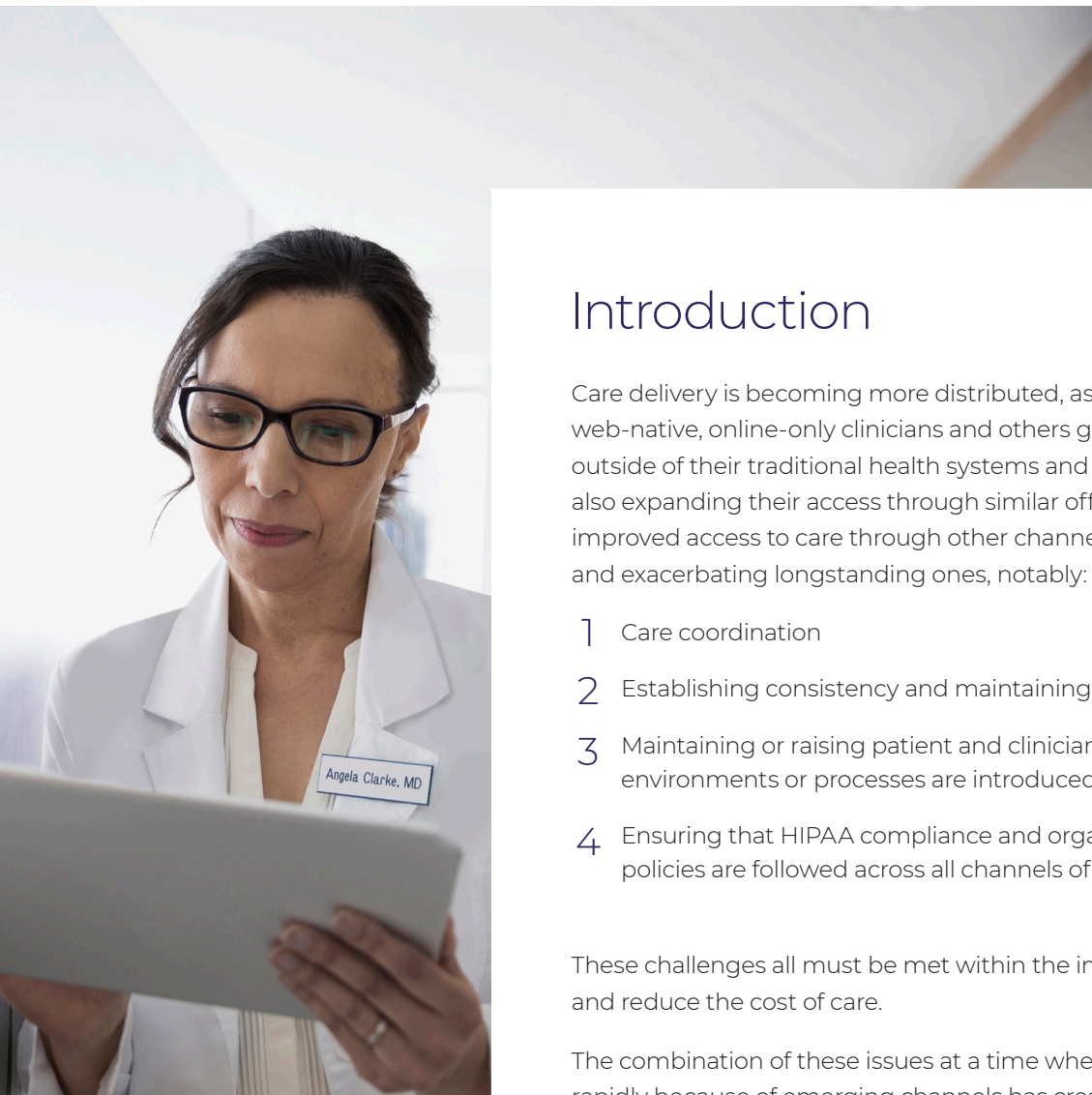
Shayan Vyas, MD, MBA
SVP and Medical Director, Teladoc Health



Improve effectiveness & simplify communications by harmonizing care, communications and workflows across in-person and virtual channels



Telehealth drives and enables distributed care. Whether telehealth will also be a cause of fragmented care, or be part of the solution to it, depends on how well its clinical and communication components are integrated with each other and with the electronic health record system. This white paper briefly summarizes telehealth's role, challenges and opportunities in the emerging distributed care environment. It also provides guidance on how telehealth platform features influence patient experience, user experience for clinicians, security and the degree to which care is integrated across the health system and non-affiliated clinicians. By understanding these aspects, organizations can plan and configure their telehealth systems and processes to improve care coordination and consistency.



Introduction

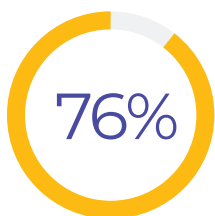
Care delivery is becoming more distributed, as retail clinics, pop-up locations, web-native, online-only clinicians and others give patients more options outside of their traditional health systems and physician practices, which are also expanding their access through similar offerings and partnerships. This improved access to care through other channels is also creating new problems and exacerbating longstanding ones, notably:

- 1 Care coordination
- 2 Establishing consistency and maintaining continuity in patient encounters
- 3 Maintaining or raising patient and clinician satisfaction (especially when new environments or processes are introduced)
- 4 Ensuring that HIPAA compliance and organizational privacy and security policies are followed across all channels of engagement

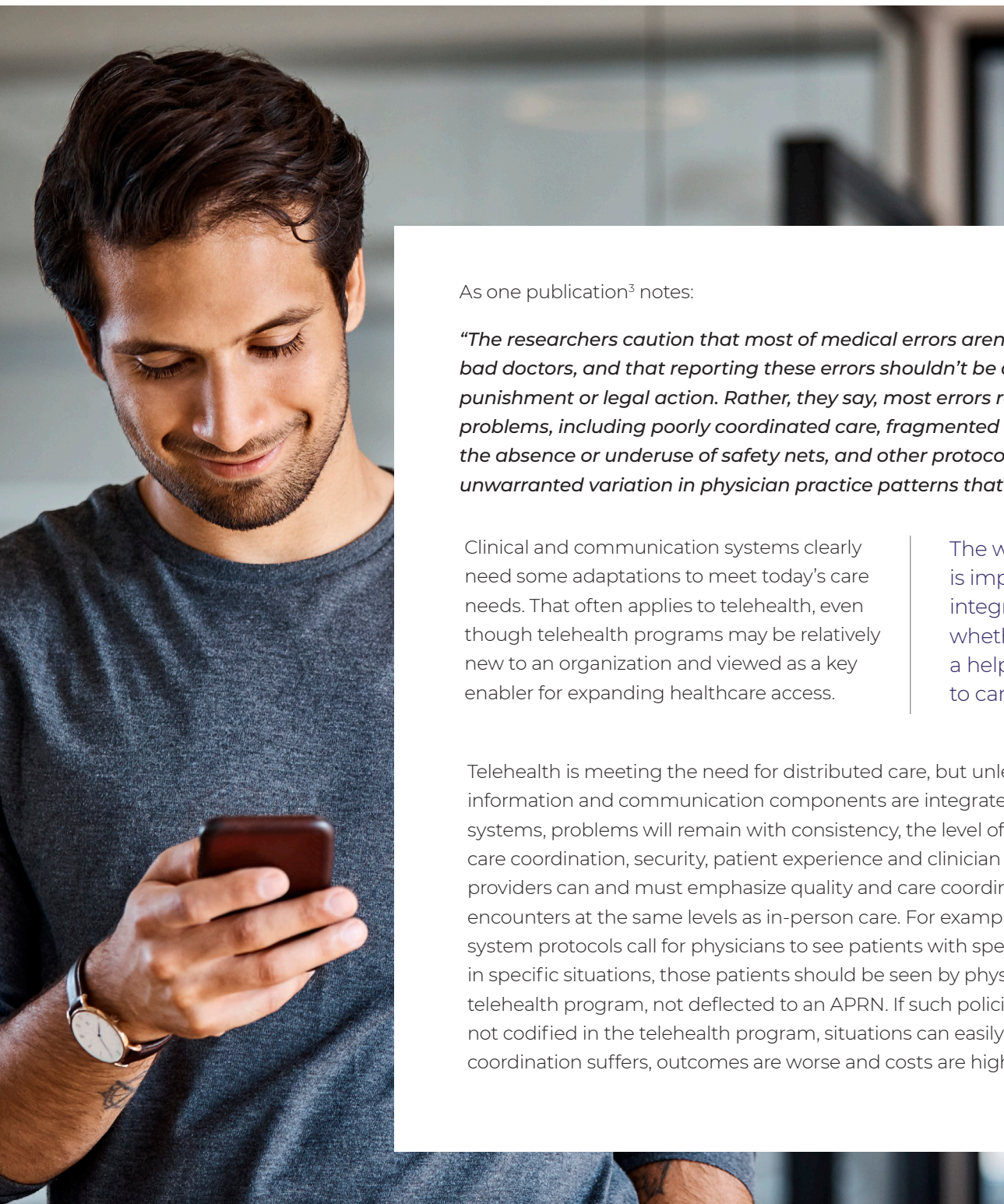
These challenges all must be met within the imperative to improve outcomes and reduce the cost of care.

The combination of these issues at a time when access to care is expanding rapidly because of emerging channels has created a new overarching problem: the virtual fragmentation of healthcare. Without some integration across care channels and patient touchpoints—or at least communication and information sharing compatibilities—inconsistent or contradictory care can become more of an issue than lack of care. For example, improved access to care through new channels can also create siloes, which undermine improvement efforts, can create redundancies or result in risks to patient safety.

Fragmented care can create communication and record-keeping gaps that could lead to medical errors or otherwise negatively influence patient outcomes and increased overall healthcare cost. Healthcare spend today already amounts to almost 20% of the U.S. GDP (\$4.1 trillion¹, or approximately \$12,500 per person). Coordination shortcomings also contribute to staff dissatisfaction and burnout, poor patient experience and elevated risk exposure. For example, 76% of healthcare professionals are concerned that PHI and proprietary health system data are being communicated via unsecure or personal communication tools.² Multiple studies identify communication and inconsistency as leading causes of medical errors.



76% of healthcare professionals are concerned that private or proprietary data are being communicated via unsecure communication tools



As one publication³ notes:

“The researchers caution that most of medical errors aren’t due to inherently bad doctors, and that reporting these errors shouldn’t be addressed by punishment or legal action. Rather, they say, most errors represent systemic problems, including poorly coordinated care, fragmented insurance networks, the absence or underuse of safety nets, and other protocols, in addition to unwarranted variation in physician practice patterns that lack accountability.”

Clinical and communication systems clearly need some adaptations to meet today’s care needs. That often applies to telehealth, even though telehealth programs may be relatively new to an organization and viewed as a key enabler for expanding healthcare access.

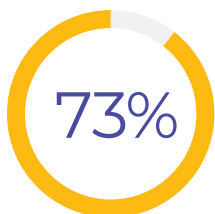
The way telehealth is implemented and integrated determines whether the program will be a helpful or harmful variable to care fragmentation.

Telehealth is meeting the need for distributed care, but unless its clinical information and communication components are integrated with hospital systems, problems will remain with consistency, the level of care and its quality, care coordination, security, patient experience and clinician satisfaction. Healthcare providers can and must emphasize quality and care coordination in telehealth encounters at the same levels as in-person care. For example, if existing health system protocols call for physicians to see patients with specific conditions or in specific situations, those patients should be seen by physicians through the telehealth program, not deflected to an APRN. If such policies and processes are not codified in the telehealth program, situations can easily develop where care coordination suffers, outcomes are worse and costs are higher.



Understanding the Telehealth Variable to Care Coordination

A major reason virtual care acceptance and utilization have grown so rapidly is that it provides benefits for both patients and hospitals and health systems, and is proving popular with each. Telehealth is well-suited for meeting current health system needs, both for supporting distributed care and advancing the Quadruple Aim.



of healthcare professionals surveyed cite “increased workload not related to direct patient care” as contributing to fatigue and burnout

More specifically, telehealth is a proven enabler for:

- Expanding access to high-quality care and creating healthcare equality
- Managing chronic condition patients and other patient populations that need frequent follow-ups
- Satisfying consumer-driven patient preferences, including strengthening patient loyalty by providing a convenient, digital care option
- Allowing health systems to better leverage specialists and additional staff

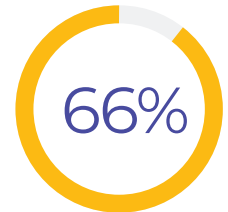
While this paper references “telehealth” generally, it is important to remember that there is a wide range of available telehealth platforms and components, and their capabilities vary greatly. If telehealth is not well integrated and easy to use, it can exacerbate challenges like staff overload, patient dissatisfaction and risks associated with uncoordinated care. For example, non-optimized telehealth systems can require more “screen time” for clinicians rather than freeing them to spend more time with patients, as has occurred with patient portals.



A 2021 journal article⁴ highlighted this issue:

“The pandemic-driven shifts toward virtual treatment, and the corresponding change in patient expectations and awareness of communication tools such as secure messaging via the EHR, have substantially altered the nature of ambulatory care. Further, as telehealth and the pandemic incentivized patients to become familiar with the use of online portals to access their health information and connect with clinicians, the time required for those clinicians to manage the care of their patients through the EHR increased.”

Reducing the record-keeping effort for clinicians and the “swivel chair syndrome” that requires them to pivot between two or more screens to conduct a virtual visit should be considered when planning telehealth platforms and processes. When healthcare professionals were surveyed about what aspects of clinical tools and technology contributed most to fatigue and burnout, **“Burdensome or increased workload not related to direct patient care”** ranked first (cited by 73% of respondents), and **“Poor integration into clinical workflow”** ranked second (66%).⁵



of healthcare professionals surveyed cite “poor integration into clinical workflow” as contributing to fatigue and burnout

Those burnout factors and prevention opportunities have important implications for telehealth. One way to protect against burnout is to help doctors and other clinicians practice at the top of their license—that means minimizing the time they need to spend on administrative and other tasks that take them away from patients. The pandemic has elevated telehealth’s acceptance, its scale of use, and the level to which patients and hospitals and health systems depend on it. If the telehealth platform burdens clinicians with additional administrative time and inconvenient workflows, the channel will be unsustainable at elevated volumes. Patients and clinicians were willing to put up with some non-optimized experiences and other inconveniences during the pandemic, but those issues must be addressed to provide satisfactory patient and clinician experience going forward. Less time spent switching among systems or troubleshooting appointment connections for patients means more time is available for meaningful patient interaction.

Many of the clinical and communication components of telehealth systems—including video conference solutions that were implemented in response to or before the pandemic—will need to be adapted for a new environment where distributed care will play a larger and ongoing role in care delivery. Video conference solutions that were built for business and team meetings are not healthcare grade. Patient care is highly specialized, and that extends to the communication component of telehealth, which has high and specific standards for security, reliability and other performance characteristics that general-purpose video conferencing often doesn’t require or provide.



Tuning Telehealth Systems to Meet Current and Future Needs

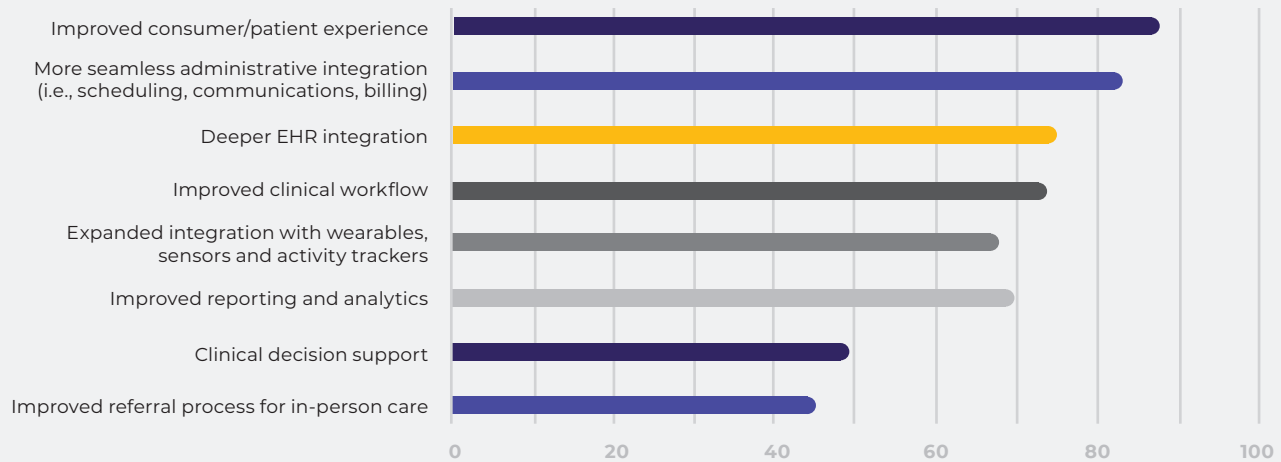
The leading challenges that clinicians and patients encounter with telehealth include the need to conduct multiple logins and access multiple screens, dropped connections and other connectivity issues, and lack of access to patient records and other information. **These and other leading challenges can all be mitigated by focusing on two aspects of telehealth systems:**

Improving user experience

Enabling real-time collaboration (both patient-to-clinician and clinician-to-clinician), with access to relevant records and systems

These focus areas are related. For example, making logins more convenient and preventing dropped connections will improve the user experience for both clinicians and patients. So will improving access to information, so clinicians don't need to ask for records that are already in a clinical system, and patients won't be required to answer the same questions multiple times for multiple clinicians. Having on-demand access to more complete information also contributes to more successful encounters and outcomes.

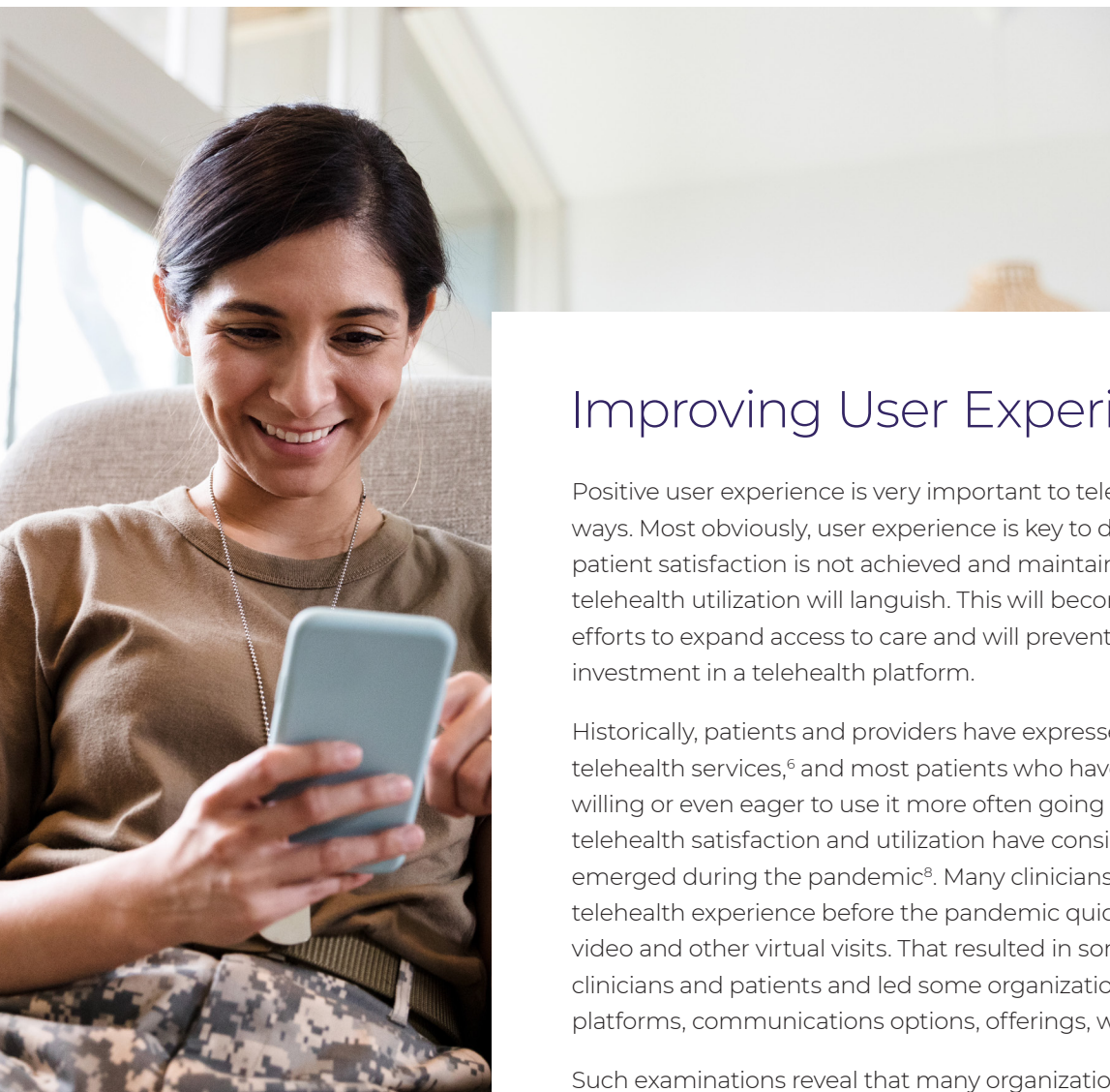
Hospital and health system leaders recognize these needs. When asked what their top “wish list” items were to improve their organization’s current telehealth system, the top four responses all related to improving the experience and workflow (see Figure 1 below).



Source: Teladoc Health 2021 Telehealth Benchmark Survey

The following sections provide more detail about what specific functionality is needed to support the changing expectations and scale for telehealth, and the benefits that optimized platforms can provide.





Improving User Experience

Positive user experience is very important to telehealth programs in two ways. Most obviously, user experience is key to driving patient satisfaction. If patient satisfaction is not achieved and maintained at a consistently high level, telehealth utilization will languish. This will become an obstacle to organizational efforts to expand access to care and will prevent realizing the full value of an investment in a telehealth platform.

Historically, patients and providers have expressed high satisfaction with telehealth services,⁶ and most patients who have tried telehealth have been willing or even eager to use it more often going forward.⁷ While overall telehealth satisfaction and utilization have consistently risen, some variations emerged during the pandemic⁸. Many clinicians that had limited or no prior telehealth experience before the pandemic quickly pivoted to begin offering video and other virtual visits. That resulted in some frustrations among clinicians and patients and led some organizations to reexamine their telehealth platforms, communications options, offerings, workflows and more.

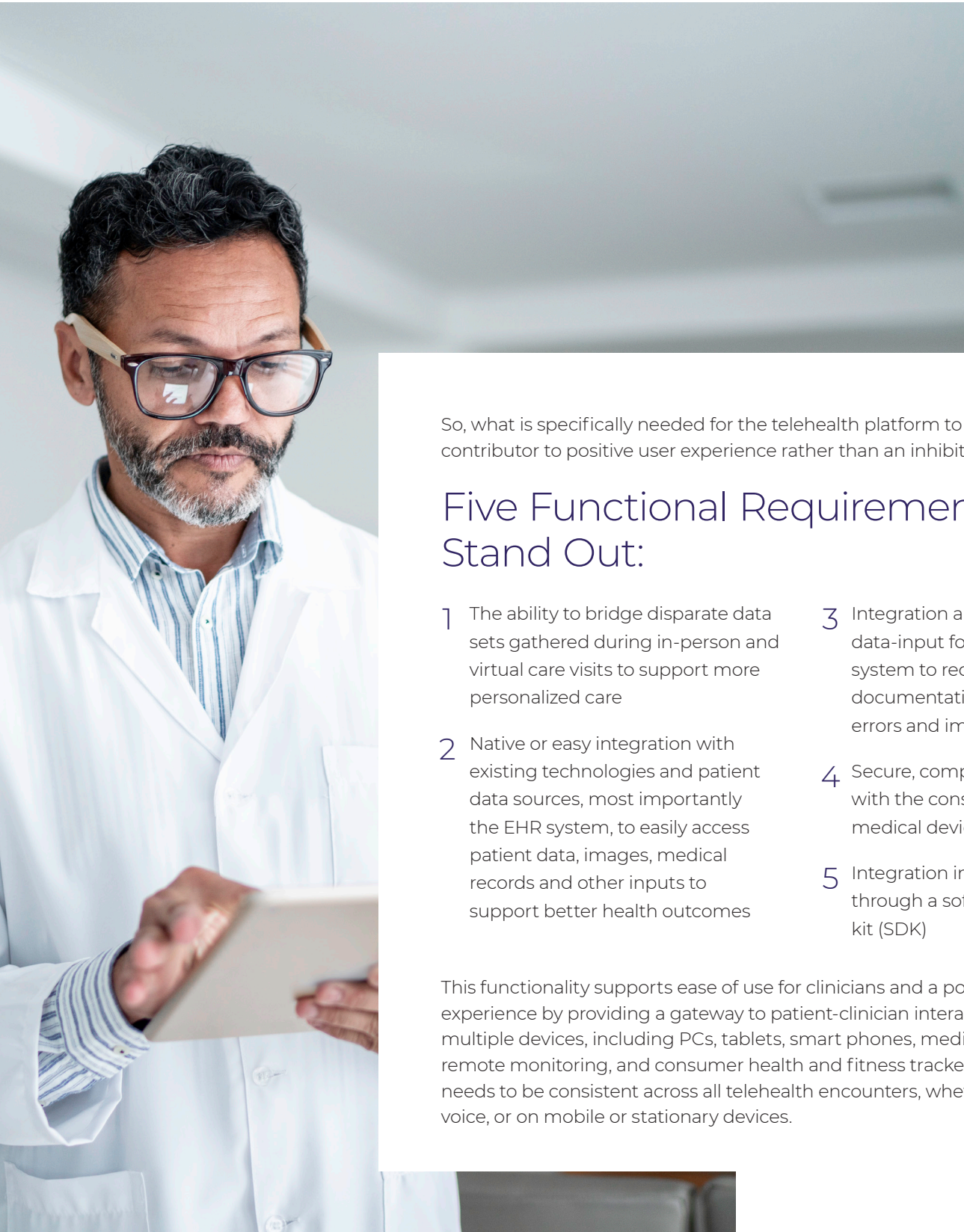
Such examinations reveal that many organizations offering telehealth have the opportunity to simplify communications (across platforms and devices) to connect disparate systems across the care continuum. By doing so, they can help clinicians use their time for care delivery, rather than providing de facto tech support during patient visits or performing additional administrative tasks before and after.

Optimized telehealth systems address these needs to support a better user experience for clinicians and patients. Systems can do this by offering multiple, reliable communication options that make it easy for patients to log into visits and prevent sessions from dropping, and by integrating the telehealth platform to the EHR to make workflows easier for clinicians. This didn't always occur during the pandemic, but needs to go forward.

“

The fact that clinicians spent more time working in the EHR during the COVID-19 pandemic is unsurprising but still concerning.

**Journal of the American
Medical Informatics
Association, February 2022**



So, what is specifically needed for the telehealth platform to be a contributor to positive user experience rather than an inhibitor to it?

Five Functional Requirements Stand Out:

- 1 The ability to bridge disparate data sets gathered during in-person and virtual care visits to support more personalized care
- 2 Native or easy integration with existing technologies and patient data sources, most importantly the EHR system, to easily access patient data, images, medical records and other inputs to support better health outcomes
- 3 Integration and support for various data-input formats used across the system to reduce the need for dual documentation, which can result in errors and impact patient care
- 4 Secure, compliant compatibility with the consumer-oriented and medical devices patients use
- 5 Integration into patients' apps through a software development kit (SDK)

This functionality supports ease of use for clinicians and a positive patient experience by providing a gateway to patient-clinician interaction through multiple devices, including PCs, tablets, smart phones, medical devices for remote monitoring, and consumer health and fitness trackers and apps. It needs to be consistent across all telehealth encounters, whether by video or voice, or on mobile or stationary devices.



TESTIMONIAL

St. Luke's University Health Network (SLUHN) Credits Improved Collaboration with Reducing Mortality⁹



The SLUHN health system in St. Louis has integrated its EHR system, telehealth system and Office 365 in a way that enables clinicians to collaborate and share information without having to switch among multiple applications. During the early days of the COVID pandemic, SLUHN's 15-person pulmonary critical care team began using the Teams communication component of Microsoft Office to simplify remote collaboration. It credits the integration of Teams into workflows for communications and data sharing with helping achieve a 5% reduction in its case mortality rate after the change was made.

[See the full case study here](#)

“

At SLUHN, our clinicians have the luxury of one collaboration system across the entire network, bringing everything together in one presentation, we can easily move between technologies in the interface that Teams provides us. It's a simplified approach that helps to reduce the stress of the practice of medicine on the clinician.

James Balshi, MD, Chief Medical Information Officer and Vascular Surgeon, SLUHN



Enabling & Extending Real-Time Collaboration

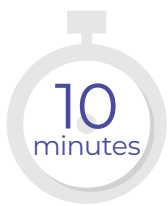
An effective telehealth infrastructure can close the communication gaps that hinder collaboration and continuity of care—and thus improve user experience and outcomes. A well-configured telehealth platform can support this in multiple ways, such as integrating with workflows to enable seamless patient transfers to schedule follow-ups, or making it easy for clinicians to collaborate with specialists or other colleagues without having to log into other systems. During traumas, saving minutes or even seconds in arranging communications and consultations can save lives.

Here's a use case that illustrates the advantages of highly integrated telehealth. Stroke patients can lose eight weeks of healthy life for every 10 minutes between when they arrive at a healthcare facility and when treatment begins, according to 2021 research cited by the American Heart Association.¹⁰

Consider a case where a stroke patient is brought to a facility where there is no neurologist available. Telehealth capabilities well integrated into the EHR would enable clinicians at the facility to quickly identify a neurologist on call elsewhere in the healthcare system, initiate contact via video call, share clinical notes and conduct a remote consultation. This can all be in real time through a single sign-on to one system—saving valuable minutes at a crucial point in patient care.



of healthy life lost
for every



a stroke patient spends waiting
for treatment after arriving in a
healthcare facility

At a minimum, here is the communication compatibility and related functionality a telehealth platform should have to support collaboration wherever care takes place or whenever patient data is generated in the emerging distributed care environment:

- Communications and data-sharing connectivity with all affiliated sites within the health system and locations within the sites
- Support for all commonly used devices, e.g., smartphones, laptops, tablets, desktop PCs
- Seamless transition from administrative workflows (calls, messaging, peer-to-peer chats) to virtual care delivery upon patient check-in for a virtual visit

Ideally the system would also connect with medical devices used for chronic condition monitoring, unaffiliated, out-of-network clinicians, and commonly used consumer fitness and healthcare devices and apps. Support for standard and leading protocols enables this type of communication. Such broad connectivity compatibility is necessary to support collaboration at all the touchpoints where patient care takes place.



Conclusion

Collaboration will become more important and harder to maintain in the current emerging distributed and hybrid in-person/virtual care models. Seamless multichannel, online-offline experiences are becoming common in retail shopping. Healthcare needs to continue to make progress in this model. Despite its many complexities, healthcare will achieve a state where virtual and in-person care will be delivered in an integrated environment. Terms like “telehealth” and “digital health” will fade as digital becomes an integral part of care delivery throughout the entire patient journey. That will only happen after today’s telehealth programs achieve broader reach to patients and deeper integration into health system workflows and record systems.

To enable connected care at scale, telehealth platforms and their communications channels need to be better integrated across all the locations where care occurs and all the systems and devices that are used to provide it. By pursuing this level of connectedness, organizations will improve the functionality and user experience of their telehealth program, help make it future-proof, and advance the organization in its pursuit of the Quadruple Aim. [Visit us on-line](#) to learn how Teladoc Health is helping make this a reality.

¹Centers for Medicare & Medicaid Services National Health Expenditure Data <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical#:~:text=U.S.%20health%20care%20spending%20grew,For%20additional%20information%2C%20see%20below>

²Spok “The State of Healthcare Communications 2021 Report”

³Johns Hopkins Medicine “Study Suggests Medical Errors Now Third Leading Cause of Death in the U.S.” May 3, 2016. Accessed online February 16, 2022: https://www.hopkinsmedicine.org/news/media/releases/study_suggests_medical_errors_now_third_leading_cause_of_death_in_the_us

⁴Holmgren, et al “Assessing the impact of the COVID-19 pandemic on clinician ambulatory electronic health record use” Journal of the American Medical Informatics Association, 00(0), 2021, 1–8. Accessed online February 14, 2022: <https://doi.org/10.1093/jamia/ocab268>

⁵Spok “The State of Healthcare Communications 2021 Report”

⁶Nguyen et al “A Review of Patient and Provider Satisfaction with Telemedicine” Curr Allergy Asthma Rep. 2020; 20(11): 72. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7505720/> Published online 2020 Sep 22. doi: 10.1007/s11882-020-00969-7

⁷PwC “Global Top Health Industry Issues 2021”

⁸Fierce Healthcare “Telehealth use is surging but patient satisfaction with the service has declined, new study finds” October 4, 2021. <https://www.fiercehealthcare.com/digital-health/telehealth-use-has-surged-among-patients-while-satisfaction-has-declined-new-study>

⁹Case provided by Microsoft. Study based off client testimonial

¹⁰American Heart Association “Even short delays in the ER may reduce the lifespan of stroke survivors” March 11, 2021. Accessed online February 14, 2022: <https://newsroom.heart.org/news/even-short-delays-in-the-er-may-reduce-the-lifespan-of-stroke-survivors?preview=7e03>

LEARN MORE: TeladocHealth.com | engage@teladochealth.com

About Teladoc Health: Teladoc Health is empowering all people everywhere to live healthier lives by transforming the healthcare experience. Recognized as the world leader in whole-person virtual care, Teladoc Health leverages clinical expertise, advanced technology and actionable data insights to meet the evolving needs of consumers and healthcare professionals.

Teladoc
HEALTH