

A new trajectory for telehealth

White paper

Connected health in a post-COVID-19 world



Some doors, once opened, can never be closed again.

Telehealth adoption has been a difficult door to open. Advocates for telecapabilities have been pushing hard for years to see these solutions leveraged in ways that could truly address the cost, quality and access challenges of our increasingly understaffed and overburdened healthcare delivery system.

Despite great potential to advance a convenient and cost-saving “care anywhere” ecosystem, telehealth adoption has been slow and limited to remote patient monitoring (RPM) devices and a small subset of reimbursable use cases.

There are plenty of competing interests at the table. Healthcare delivery has historically operated on the premise of physician-centric care and the assumption that quality care services could only be delivered in a face-to-face setting—the supposition that physician evaluation should always be hands-on. But sensor-driven and artificial intelligence (AI)-enabled remote patient monitoring devices have challenged that assumption. Interpretation of findings is still the domain of the physician, but telehealth solutions are helping redefine the scope of clinical practice, and helping untether patients and care teams from facility-dependent evaluation and care.

Beyond the impact on traditional clinical practice, telehealth has been a complicated proposition. State licensure laws have limited the geographical reach of the clinician. The Center for Medicare/Medicaid Services (CMS) has restricted reimbursement for telehealth visits to a small set of extenuating circumstances and brief physician check-ins. Other payers have incentivized telehealth utilization, but limited reimbursement for Medicare visits has stymied more widespread adoption. And the greatest barrier has been a lack of interoperability standards necessary for integrating telehealth solutions into existing information systems and clinical workflows.

Enter COVID-19.

It’s hard to imagine a less-welcome accelerator for innovation than a pandemic, yet the arrival of the novel coronavirus nudged healthcare through the doorway of telehealth adoption in a way no other catalyst likely could have.

In an instant, healthcare providers were pushed to the front line with a critical mission: Protect vulnerable patient populations. Extend care away from frontline hospitals and clinics. Support the rapid deployment of drive-up testing centers. Manage the consumption of personal protective equipment (PPE). The conversation has changed overnight. Long-term roadmaps have given way to rapid implementations.

Not since hurricane Katrina has the US healthcare system seen such a paradigm-shifting technology driver. The loss of thousands of paper health records during Katrina prompted the federal government to establish the Office of the National Coordinator for Health IT and to issue the mandate for a nationwide electronic health record (EHR) infrastructure—a moment in time that resulted in the HITECH Act, meaningful use requirements and the painful but necessary migration of our healthcare system toward EHRs and paperless digitization.

COVID-19 could prove an equally significant landmark for telehealth adoption.

Breaking down barriers to implementation

By itself, the need for virtual care encounters might not have triggered this sudden surge in the adoption of telehealth capabilities. As with hurricane Katrina, the response of the federal government has been critical.

Three significant decisions may have opened the door for increased telehealth solution adoption during the COVID-19 pandemic:

- **Expanded reimbursement**

In March of 2020, a national emergency was declared and restrictions around virtual care delivery were eased for Medicare beneficiaries and their providers. Accordingly, CMS expanded its reimbursement coverage to include routine office visits, mental health counseling and preventative health screenings, as well as the scope of providers who can bill for a telehealth visit.¹

- **Suspension of HIPAA penalties**

On March 30, 2020, the Health and Human Services (HHS) Office of Civil Rights (OCR) announced that it would not impose HIPAA compliance penalties on providers using an audio or video communication technology to provide telehealth to patients during COVID-19.² This has led to healthcare providers using technology for video chat—both enterprise-grade tools like BlueJeans, Cisco Webex,[®] and Zoom as well as consumer platforms such as FaceTime,[®] WhatsApp,[®] Facebook[®] Messenger, and Google Hangouts.[™]

- **Federal funding**

As part of the Coronavirus Aid, Relief and Economic Security (CARES) Act, the Federal Communications Commission (FCC) is providing \$200M in grant funds to cover COVID-19 telehealth deployment expenses. The program offers eligible healthcare providers immediate financial support for the telecommunications services and devices they need to provide connected care until the program's funds are exhausted or the pandemic has ended.³ Nonprofit and public eligible healthcare providers who hadn't planned or budgeted for these telehealth solutions in 2020 can apply for FCC funding.

In just a few short weeks, this support from federal agencies has dismantled many barriers to telehealth solution adoption that have existed for years—barriers that will be difficult to resurrect in a post-COVID-19 world.

At Verizon, we've seen an unprecedented need for connected capabilities to sustain critical operations—voice and video conferencing solutions, phones and tablets, data security, video conferencing solutions, the integration of RPM devices, and the assurance of a reliable network that enables uninterrupted connectivity.

Our customers have had to rapidly deploy these solutions to support everything from drive-up COVID-19 testing centers to communication with patients in isolation and continuity of care for at-risk populations. Some are standing up solutions with integrated telehealth platforms and others are distributing secure, connected devices with simple web-conferencing tools.

For now, the focus has been on immediate needs rather than long-term roadmaps, but once the dust settles, there will be time to reassess and optimize.

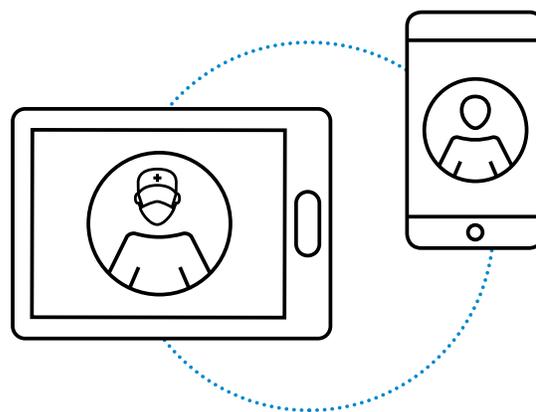
Beyond COVID-19

Life will eventually return to normal, but healthcare will probably never go back to business as usual. The COVID-19 pandemic has permanently altered the landscape for connected care.

All early indicators point to a post-COVID-19 ecosystem where telehealth will no longer be an ancillary outlier but rather an integrated part of mainstream patient care. While ramp-up of these solutions during the pandemic has been understandably reactive, those who have pushed through the pain points of deployment to quickly stand up virtual care options are now seeing the immediate benefits and the long-term potential of telemedicine. And patients who have experienced the safety and convenience of quick, video-enabled conversations with their physicians will expect that option moving forward.

The door is open and will not likely close again.

What does this mean for the future of an evolving care delivery system? What can we expect to see when the crisis has passed? And what needs to happen to see telehealth capabilities fully integrated into service delivery as a future-facing, sustainable model?



Telehealth needs these five accelerators to advance.

Advancing telehealth beyond the COVID-19 pandemic won't be without its challenges. Stakeholders need to leverage this moment in time and pivot purposefully toward addressing the remaining barriers and emerging opportunities for adoption.

Telehealth will need these critical accelerators:

1. **Expanded reimbursement**

It remains to be seen what CMS will do to support telehealth reimbursement after the pandemic, but returning to a limited set of use cases is unlikely. A comprehensive look at utilization, an updated coding set to support current and new use cases, and a forward-leaning commitment to telehealth as a care model will be critical. If Medicare will not reimburse, providers will be slow to adopt and future utilization will be limited. And where CMS leads, the payer space will follow.

2. Evolution of data security

OCR has lifted restrictions on telehealth conferencing tools for six months, but it remains to be seen whether there will be an extension beyond that point. Either way, a closer look at current definitions may be warranted to support expanded adoption of telehealth capabilities. Iterative standards are needed to address data security for these simple and cost-effective applications. Given the simplicity of recording video conversations within these platforms, it will be difficult for providers to store recordings for the requisite six years. As usage of these platforms expands for virtual care, a waiver of the retention requirements under the rule may be needed. Compliance controls around levels and types of encryption—including ownership of keys—and restrictions around data recording will be critical. The option for encryption levels should be disabled, for example, in any “healthcare” version of these platforms. Encryption should be hard set, and consumer tools should use end-to-end encryption without technology provider keys. Beyond that, there will be a need for better standards around integrated IoT devices and protocols for secure data exchange between all telehealth stakeholders—i.e., EHR systems, data warehouses, picture archiving and communication (PAC) systems, telehealth platforms, quality measures and performance reporting, billing and reimbursement, etc.

3. Cross-platform interoperability

In 2019, the American Telemedicine Association called for a collaborative commitment to interoperability from providers, payers and telehealth vendors. Rapid telehealth integrations during the pandemic have further reinforced the need for interoperability standards. Just as standardization and adoption models propelled lagging EHR adoption, strong interoperability frameworks can do the same for telehealth integration. This should include standardization around:

- a. Patient/member identification
- b. EHR/electronic medical record (EMR), payment and quality reporting systems integration
- c. Patient-generated and RPM device data
- d. Collaboration platforms, including secure texting, instant messaging, chat, video and voice
- e. Integrated clinical work flows, care coordination and scheduling

4. A broadened vision of “telehealth”

The earliest telemedicine use cases focused primarily on enabling care encounters between patients in underserved or rural areas and remote physicians and specialists. But if

COVID-19 has taught us anything, it’s that telehealth extends capabilities anywhere virtual care is needed—whether that’s offsite, on premises or in the room. Using telehealth-enabled tablets to communicate with patients in isolation is just one emerging example of “tele” applications that don’t involve a remote location.

5. Future state capabilities

Pre-COVID-19, operational focus was on addressing what happens inside the four walls of the organization. Soon that focus will shift toward flexibility—with networks, people and the tools/resources necessary to respond to any future challenges.

Business continuity plans will call for more than simply keeping the network up. Contingencies for staffing, sustainable supply chain, disaster recovery and virtual collaboration will now be major elements of continuity planning. More mobility, remotely and in building, will require application-driven conversations around networks and connectivity, where a diverse mix of software-defined and private networks will power high-performance applications.

And when it comes to patient experience, information systems must securely shake hands with collaborative tools that leverage voice, video, messaging and applications so all users—patients, providers and care teams—can click, connect and collaborate from anywhere and via any device.

In our new hands-free world, the evolution of no-touch devices will also be an essential future-state capability. These devices will continue to drive the innovation and adoption of contactless payment for point of sale, thin clients enhanced by 5G and edge computing, and natural language processing for more streamlined data input.

The healthcare sector may look back on the COVID-19 pandemic of 2020 as a turning point in history for patient care and an unanticipated catalyst for innovation. The timing couldn’t have been more critical. Imagine the future: truly secure, flexible and interoperable telehealth in a 5G-enabled world, paving the way for accelerated AI and real-time clinical precision. We can’t afford to step backwards nor miss the opportunity to gain new ground.

Let’s keep the door open.

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1 Press release: “President Trump Expands Telehealth Benefits for Medicare Beneficiaries During COVID-19 Outbreak,” CMS, March 17, 2020.

www.cms.gov/newsroom/press-releases/president-trump-expands-telehealth-benefits-medicare-beneficiaries-during-covid-19-outbreak

2 “Notification of Enforcement Discretion for Telehealth,” U.S. Department of Health and Human Services,

March 30, 2020. www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html

3 “COVID-19 Telehealth Program,” Federal Communications Commission, April 22, 2020. www.fcc.gov/covid-19-telehealth-program

4 “ATA Report Calls Integration a Necessity for Telehealth Adoption,” MHealthIntelligence, Aug 26, 2020.

mhealthintelligence.com/news/new-ata-report-makes-integration-a-necessity-for-telehealth-adoption