

Healthcare Systems & Services

Telehealth: A quarter-trillion-dollar post-COVID-19 reality?

Telehealth has helped expand access to care at a time when the pandemic has severely restricted patients' ability to see their doctors. Actions taken by health-care leaders today will determine if the full potential of telehealth is realized after the crisis has passed.

by Oleg Bestsenyy, Greg Gilbert, Alex Harris, and Jennifer Rost



Telehealth: A quarter-trillion-dollar post-COVID-19 reality?

COVID-19 has caused a massive acceleration in the use of telehealth. Consumer adoption has skyrocketed, from 11 percent of US consumers using telehealth in 2019 to 46 percent of consumers now using telehealth to replace cancelled healthcare visits.¹ Providers have rapidly scaled offerings and are seeing 50 to 175 times^{2,3,4} the number of patients via telehealth than they did before. Pre-COVID-19, the total annual revenues of US telehealth players were an estimated \$3 billion, with the largest vendors focused in the “virtual urgent care” segment: helping consumers get on-demand instant telehealth visits with physicians (most likely, with a physician they have no relationship with).⁵ With the

acceleration of consumer and provider adoption of telehealth and extension of telehealth beyond virtual urgent care, up to **\$250 billion of current US healthcare spend could potentially be virtualized.**⁶

This shift is not inevitable. It will require new ways of working for a broad set of providers, step-change improvements in information exchange, and broadening access and integration of technology. The potential impact is improved convenience and access to care, better patient outcomes, and a more efficient healthcare system. Healthcare players may consider moves now that support such a shift and improve their future position.

¹ McKinsey COVID-19 Consumer Survey, April 27, 2020.

² Erickson M, “Stanford Medicine increases use of telehealth to help prevent spread of coronavirus,” Stanford Medicine, March 30, 2020, med.stanford.edu.

³ Palo Alto Medical Foundation, “Video visits and COVID-19 response,” Sutter Health, 2020, sutterhealth.org.

⁴ Beacon Health Options infographic. Beacon’s claims data suggest that compared to April 2019, telehealth sessions increased 5,130 percent in April 2020. (Note: data only include claims paid through May 8, 2020—additional claims for services rendered in April 2020 may be processed at a later date. Additionally, claims for telehealth services may not include a telehealth modifier, and are therefore not included in our telehealth usage calculations.)

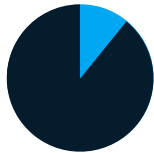
⁵ McKinsey scan of telehealth and digital care vendors. Vendor revenues only partially include physician billings (in situations where vendor only charges a monthly usage fee or a portion of the physician fee); total spend including all physician billings for virtual visits is likely to be higher than \$3 billion.

⁶ See technical appendix.

How has COVID-19 changed the outlook for telehealth?

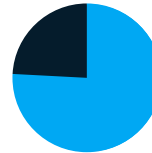
1 Consumer

Shift from:



11%
use of telehealth in 2019

To:



76%
now interested in using telehealth going forward

While the surge in telehealth has been driven by the immediate goal to avoid exposure to COVID-19, with more than 70 percent of in-person visits cancelled,¹ 76 percent of survey respondents indicated they were highly or moderately likely to use telehealth going forward,² and 74 percent of telehealth users reported high satisfaction.³

2 Provider

Health systems, independent practices, behavioral health providers, and others rapidly scaled telehealth offerings to fill the gap between need and cancelled in-person care, and are reporting

50–175x

the number of telehealth visits pre-COVID.⁴



In addition, **57%**

of providers view telehealth more favorably than they did before COVID-19 and

64%

are more comfortable using it.⁵

3 Regulatory

Types of services available for telehealth have greatly expanded, with the Centers for Medicare & Medicaid Services (CMS) temporarily approving more than

80 new services

and lifting restrictions on originating site, allowing Medicare Advantage plans to conduct risk assessments via telehealth, and adding other regulatory flexibilities to increase access to virtual care.⁶

¹ McKinsey COVID-19 Consumer Survey, April 27, 2020.

² McKinsey COVID-19 Consumer Survey, May 20, 2020.

³ McKinsey COVID-19 Consumer Survey, April 13, 2020.

⁴ Ibid

⁵ McKinsey COVID-19 Physician Survey, May 2020.

⁶ Medicare telemedicine health care provider fact sheet, March 17, 2020, cms.gov.

Telehealth has surged under COVID-19

Many of the dynamics highlighted in Exhibit 1 are likely to be in place for at least the next 12 to 18 months, as concerns about COVID-19 remain until a vaccine is widely available. During this period, consumers' preferences for care access will continue to evolve, and virtual health could become more deeply embedded into the care delivery system.

However, challenges remain. Our research indicates providers' concerns about telehealth include security, workflow integration, effectiveness compared with in-person visits, and the future for reimbursement.⁷ Similarly, there is a gap between consumers' interest in telehealth (76 percent) and actual usage (46 percent). Factors such as lack of awareness of telehealth offerings, education on types of care needs that could be met virtually, and understanding of insurance coverage are some of the drivers of this gap.⁸

What is the full potential for telehealth and virtual care?

We identified five models for virtual or virtually enabled non-acute care and analyzed the full potential of healthcare volume and spend that could be delivered this way. These models of virtual care have increasing requirements to engage broader and broader portions of the healthcare delivery system, going from offering one-off urgent visits, to building omnichannel care models that deliver a large portion of office visits virtually or near virtually, to embedding virtual services in home care models. They include:

1. **On-demand virtual urgent care** as an alternative to lower acuity emergency department (ED) visits, urgent care visits, and after-hours consultations. These care needs are the most common telehealth use cases today among payers. This allows a consumer

to remotely consult on demand with an unknown provider to address immediate concerns (such as an acute sinusitis) and avoid a trip to the ED or an urgent care center. Such usage could be further scaled to address a larger portion of low acuity visits previously seen in EDs.

2. **Virtual office visits** with an established provider for consults that do not require physical exams or concurrent procedures. Such visits can be primary care (such as chronic condition checks, colds, minor skin conditions), behavioral health (such as virtual psychotherapy sessions), and some specialty care (select follow-up visits such as virtual cardiac rehabilitation). An omnichannel care model that fully leverages virtual visits includes a mix of telehealth and in-person care with a consistent set of providers, improving patient convenience, access, and continuity of care. This model also enables clinicians to better manage patients with chronic conditions, with the support of remote patient monitoring, digital therapeutics, and digital coaching, in addition to virtual visits.
3. **Near-virtual office visits** extend the opportunity for patients to conveniently access care outside a provider's office, by combining virtual access to physician consults with "near home" sites for testing and immunizations, such as worksite clinics or retail clinics. For example, a virtual visit of a patient with flu or COVID-like symptoms could be followed up by a trip to a nearby retail clinic for a flu or COVID-19 test, with a subsequent follow-up virtual check-in with the primary care physician to consult on follow-on care.
4. **Virtual home health services** leverage virtual visits, remote monitoring, and digital patient engagement tools to enable some of these services to be delivered remotely, such as a portion of an evaluation, patient and care giver education, physical therapy,

⁷ McKinsey 2020 Virtual Health Survey.

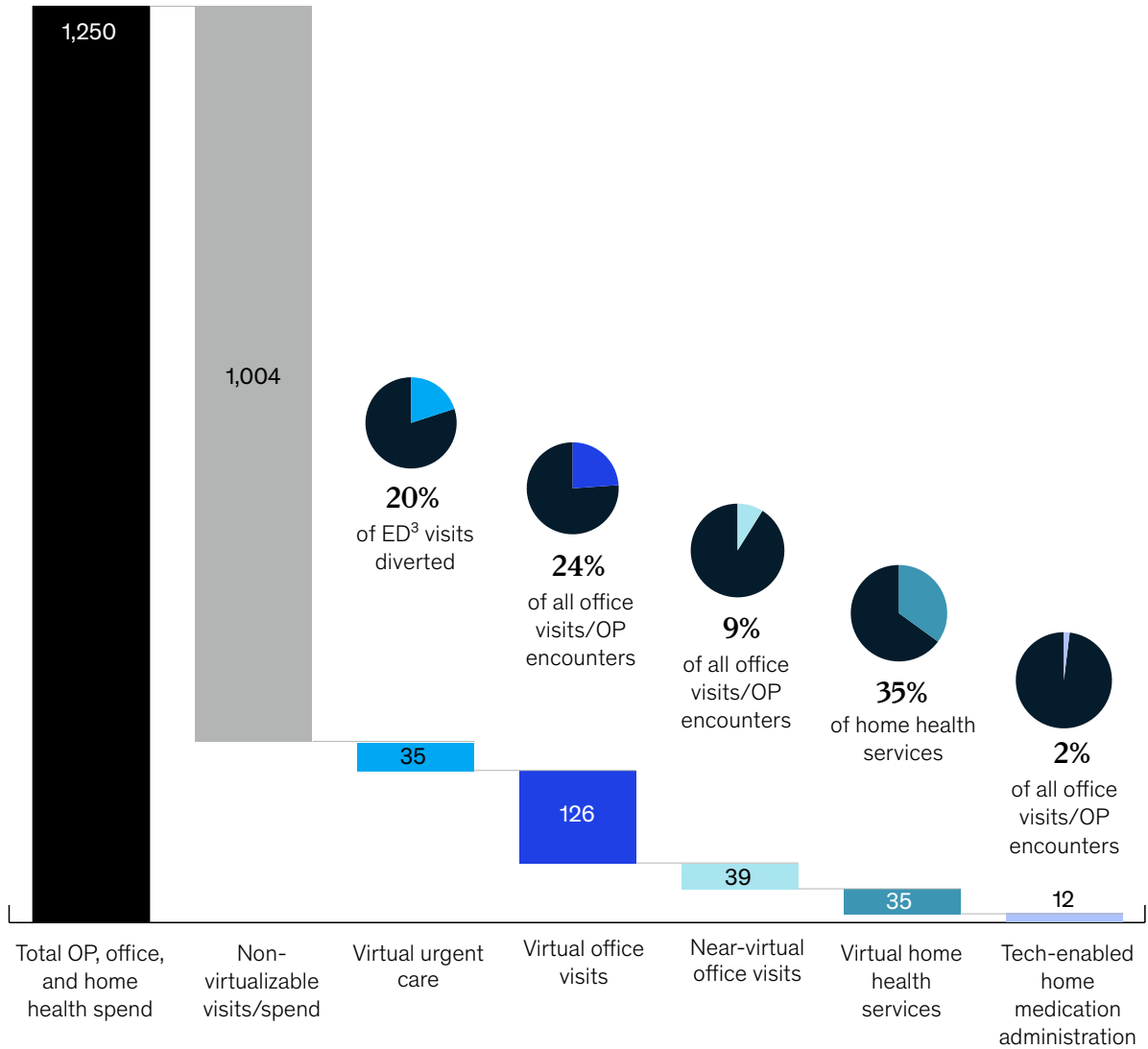
⁸ McKinsey COVID-19 Consumer Survey, April 27, 2020.

Exhibit 2

Approximately \$250 billion—or ~20%—of all Medicare, Medicaid, and Commercial OP, office, and home health spend, could potentially be virtualized.

Current OP¹ and office visits that can be virtually enabled

Commercial, Medicare, and Medicaid 2020 estimated,² billions of dollars



¹ Outpatient.

² Projected from 2018 commercial and Medicare spend, using National Health Expenditures.

³ Emergency department.

Source: Anonymized claims data representative of commercial, Medicare, and Medicaid utilization

occupational therapy, and speech therapy. Direct services, such as wound care and assistance with daily living routines, would still occur in person, but virtual home health services could enhance the patient's and caregiver's experience, extend the reach of home health providers, and improve connectivity with the broader care team. For example, a physical therapist could conduct virtual sessions with elderly patients at their home to improve their strength, balance, and endurance, and to advise them how to avoid physical hazards to reduce risk of falls.

5. Tech-enabled home medication administration allows patients to shift receiving some infusible and injectable drugs from the clinic to the home. This shift can happen by leveraging remote monitoring to help manage patients and monitor symptoms, providing self-service tools for patient education (for example, training for self-administration), and providing telehealth oversight of staff (for example, an oncologist overseeing a nurse delivering chemotherapy to a patient at home and monitoring for side effects). This would be coupled with home delivery of the therapeutics.

Our claims-based analysis suggests that approximately 20 percent of all emergency room visits could potentially be avoided via virtual urgent care offerings, 24 percent of healthcare office visits and outpatient volume could be delivered virtually, and an additional 9 percent “near-virtually.” Furthermore, up to 35 percent of regular home health attendant services could be virtualized, and 2 percent of all outpatient volume could be shifted to the home setting, with tech-enabled medication administration. Overall, these changes add up to \$250 billion in healthcare spend in 2020 that could be shifted to virtual or near-virtual care, or 20 percent of all office, outpatient, and home health spend across Medicare, Medicaid, and commercially insured populations.

Scaling telehealth does more than alleviate patient and provider concerns over the next 12 to 18 months until a COVID-19 vaccine is available. Telehealth can increase **access to necessary care** in areas with shortages, such as behavioral health, **improve the patient experience**, and **improve health outcomes**. Fundamentally, the integration of fully virtual and near-virtual health solutions brings care closer to home, increasing the convenience for patients to access care when they need it and the likelihood that they will take the right steps to manage their care. These solutions can also make healthcare more efficient; evidence prior to COVID-19 shows that telehealth solutions deployed for chronic populations can improve total cost of care by 2 to 3 percent.⁹ The actual opportunity is likely greater once stakeholders embed telehealth as the new normal (for example, driven by improved abilities to manage chronic patients, potential increases in provider productivity).

What actions should healthcare stakeholders take in the near term to shape this opportunity?

Actions payers could consider:

1. **Define a value-backed virtual health roadmap**, taking a data-driven view to prioritize interventions that will improve outcomes for priority populations, and develop strategies to digitally enable end-to-care care journeys.
2. **Optimize provider networks and accelerate value-based contracting to incentivize telehealth**. Define approaches (beyond the immediate COVID-19 response measures) to reimbursement and covered services, embed in contracting, and optimize networks and value-based models to include virtual health. Align incentives for using telehealth, particularly for chronic patients, with the shift to risk-based payment models.

⁹ McKinsey 2019 Digital Healthcare Value Opportunity Assessment.

What changes need to happen to realize the full potential of telehealth?

This value will not happen without concerted efforts by healthcare stakeholders, innovations in care models, adoption of new technologies, and supporting infrastructure.

1. **Scale the use of virtual urgent care.**

This change will require building out flexible provider networks to address the shortages and long wait times that consumers experienced during the initial escalation of telehealth demand. Sustaining and growing patient use also will likely require active, personalized patient engagement, by both providers and payers, to ensure a positive experience with telehealth. Integration with e-triage/symptom solutions (by either provider or payer) can make the patient experience even more seamless and can leverage artificial intelligence (AI) to guide patients to the most appropriate care. Finally, the ability to access patients' medical records and make post-encounter additions may be needed to enable care integration.

2. **Scale the use of fully virtual office visits.**

This change would require going beyond on-demand visits with an unknown provider and embedding virtual health in the "brick and mortar" healthcare system. Telehealth solutions will likely need to be easier to embed in provider workflows and address security concerns, both of which have been raised by providers as limiting factors to telehealth adoption.¹ Capabilities are needed to allow for more seamless information exchange and sufficiently rich clinical data to be transferred among providers and between providers and patients (for

example, ensuring all providers caring for a complex patient have access to the clinical record and can update it based on virtual visits, plus leveraging AI and natural language processes to capture notes in easily sharable forms). In addition, retail diagnostic kits (for example, home pulse oximeters, blood pressure machines) must be widely available, so patients can take basic measurements at home and enable a broader set of care to be delivered virtually. Providers should have a clear end-to-end value proposition for integrating telehealth into their service delivery model (for example, incorporating the value from patient attraction and retention and operating model efficiency, in addition to reimbursement for visits). Payers should also have a clear view of potential outcomes and total cost of care impact (for example, by population and care journey) to inform decisions on provider engagement strategies and reimbursement.

3. **Integrate "near virtual" office visits into the care continuum.**

These near-virtual visits will have requirements similar to fully virtual office visits, and scale up the availability of "near-home" sites of care (for example, workplace and retail clinics). They would be integrated into provider networks and delivery system footprints, and optimize care protocols to guide patients to these sites. Even further data integration will likely be needed. This may include patient data shared across platforms outside of a single health system and patient tools (for

example, comprehensive personal health records applications, care navigation tools) that allow patients to manage their care across providers.

4. Virtualize home care services. This change would likely require increased access to and use of remote monitoring devices, tailored to specific clinical conditions (such as remote continuous glucose monitoring sensors for people with diabetes or remote heartbeat monitors and blood pressure monitors for people with cardiovascular conditions). Providers may be required to integrate use of such devices into care plans. Payers may need to offer reimbursement, and solutions may need to enable integrated access between, for example, primary care physicians, care managers, and at-home caregivers. These services could also require the deployment of supportive patient engagement tools (for example, digital coaching, care plan navigation tools), tailored to patients' needs and integrated with communication channels to providers, care managers, and others involved in their care.

5. **Tech-enabled home medication administration.**

This change will have requirements similar to virtualized home care services, as well as tailored digital tools to support monitoring and care delivery (for example, medication adherence tools), and virtual access to pharmacist consults.

¹ McKinsey 2020 Virtual Health Survey.

3. **Build virtual health into new product designs** to meet changing consumer preferences and demand for lower-cost plans. This new design may include virtual-first networks, digital front-door features (for example, e-triage), seamless “plug and play” capabilities to offer innovative digital solutions, and benefit coverage for at-home diagnostic kits.
4. **Integrate virtual health into the care delivery approach.** Given the significant disruptions to providers, payers are reassessing their role in care delivery—from ownership of care delivery assets, value-based contracting, or anything in between. Consider options in virtual health (for example, platforms, digital-first providers) as a critical element of this approach.
5. **Reinforce the technology and analytics foundation** that will be required to achieve the full potential of virtual health.

Actions health systems could consider:

1. **Accelerate development of an overall consumer-integrated “front door.”** Consider what the integrated product will initially cover beyond what currently exists and integrate with what may have been put in place in response to COVID-19 (for example, e-triage, scheduling, clinic visits, record access).
2. **Segment the patient populations (for example, with specific chronic disease) and specialties** whose remote interactions could be scaled with home-based diagnostics and equipment.
3. **Build the capabilities and incentives of the provider workforce to support virtual care** (for example, workflow design, centralized scheduling, and continuing education); align benefit structure to drive adoption in line with health system and/or physician practice economics.
4. **Measure the value of virtual care by quantifying clinical outcomes,** access improvement, and patient/provider satisfaction

to drive advocacy and contracting for continued expanded coverage. Include the potential value from telehealth when contracting with payers for risk models to manage chronic patients.

5. **Consider strategies and rationale to go beyond “telehealth”/clinic visit replacement** to drive growth in new markets and populations and scale other applications (for example, teleICU, post-acute care integration).

Actions investors and health services and technology firms could consider:

1. **Develop scenarios on how virtual health will evolve and when,** including how usage evolved post-COVID-19, based on expected consumer preferences, reimbursement, CMS, and other regulations.
2. **Assess impact across virtual health solution/service types,** developing a view of the opportunity for each solution/service type, including expected consumer/provider adoption, impact (for example, to outcomes, experience, affordability), and reimbursement.
3. **Develop potential options** and define investment strategies based on the expected virtual health future (for example, combinations of existing players/platforms, linkages between in-person and virtual care offerings) and create sustainable value.
4. **Identify the assets and capabilities to implement these options,** including specific assets or capabilities to best enable the play, and business models that will deliver attractive returns.
5. **Execute, execute, execute.** The next normal will rapidly take hold, and those that can best anticipate its impact will create disproportionate value. Don’t underestimate the potential of network effect.

The window to act is now. The current crisis has demonstrated the relevance of telehealth and created an opening to modernize the care delivery system. This modernization will be achieved by embedding telehealth in the care continuum at scale. A \$3 billion revenue market has the potential to grow to \$250

billion. The seeds for success will be sown in the next few months during the COVID-19 crisis. Healthcare systems that come out ahead will be those who act decisively, invest to build capabilities at scale, work hard to rewire the care delivery model, and deliver distinctive high-quality care to consumers.

Sidebar

Technical Appendix

Our analysis looked at 2018 claims data representative for Medicare, commercial, and Medicaid lines of business.

Emergency rooms and virtual care

We analyzed the emergency room visits and associated primary diagnoses. Using the NYU Wagner ED visit classification¹ research on various categories of the visits, we split the visits into those with non-emergent status (a big portion of which could be highly avoidable if proper self-triage and virtual urgent care tools could be available at people's disposal) versus those that are higher emergency in nature, and are unlikely to be avoided using virtual urgent care. We assigned probabilities of potential to divert each category of these visits via a virtual urgent care offering.

Outpatient hospital and office visits

We filtered for visits that have evaluation and management procedure codes and analyzed individual claims to determine whether other additional services and procedures occurred during the visit (for example, administration of infusible/injectable drugs, blood draws, immunizations, physical therapy). We categorized the opportunities:

- Virtual office visits: a visit included only evaluation and management and no other procedures
- Near-virtual office visits: a visit included blood draws/lab tests and administration of immunizations/vaccinations
- Tech-enabled home medication administration: the visit included administration of drugs in a clinic/outpatient setting (for example, administration of "J-code" infusible/injectable drugs). We included only a portion of the spend associated with these procedures, using our estimates of what portion of the procedure spend could be saved by shifting administration of these drugs from outpatient to home settings
- Other: all other visits

We conducted clinical reviews to further categorize the various kinds of procedures into high, medium, and low probability of being virtual.

Home health attendant services

We filtered for visits and services occurring in a home setting, and looked

at what types of services were rendered during such visits:

- Direct nursing and attendant services (such as wound care, assistance with daily living routines, administration of IV) which are much less likely to be delivered virtually—if at all
- Services that can potentially be delivered virtually (such as evaluation, general assessment, patient and caregiver education, physical therapy, occupational therapy and speech therapy)

For services that did not involve direct nursing or attendant services, we conducted clinical reviews to further categorize them into high, medium, and low ability to virtualize.

After conducting these analyses for each of the commercial, Medicare, and Medicaid data sets, we scaled and projected the spend and utilization to represent national 2020 spend figures, using CMS National Health Expenditure projections.²

¹"Faculty & research," NYU Wagner, wagner.nyu.edu.

²"NHE fact sheet," Centers for Medicare & Medicaid Services, last modified March 24, 2020, cms.gov.

Oleg Bestsenyy is an expert associate partner in McKinsey's New York office. **Greg Gilbert, Alex Harris, and Jennifer Rost** are partners in the Washington, DC, office.

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