

Part I: The Promise of Telehealth— A Cautionary Tale

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The rise of telehealth during COVID-19, its limitations, and its uncertain future

THE MASSIVE PANDEMIC-DRIVEN expansion of telehealth will have a consequential, enduring impact on the health care delivery system. However, telehealth's future role in health care delivery is deeply uncertain in terms of its appropriate use across the stages of patient care, among myriad disease types and discrete clinical care needs, and amid uncertainty in payment and provider operational models.

Overall, telehealth has increased patients' access to care, supplementing in-person visits for initial diagnosis and follow-up care. However, the pandemic-driven reliance on virtual visits has highlighted telehealth's risks, which include potential misdiagnoses and recommendations of inaccurate treatment plans, as well as data security and privacy concerns. Provider reimbursement uncertainty and required investments into virtual care solutions have also impacted the consistency with which care is provided.

While telehealth usage seems to have peaked in 2020, the latest data suggest that we are now in a more permanent shift to a mixed care model, with telehealth use at a 38-fold increase over pre-COVID-19 levels.¹

The unprecedented turn to telehealth holds much positive promise, but it is fraught with risk and challenges. While a return to the pre-COVID-19 care model is unlikely, a clear view of the way forward has not yet emerged.

OVERNIGHT "SUCCESS." Despite steady—albeit modest—growth in direct-to-patient telehealth prior to the pandemic, the more accepted and delivery system-friendly model for telehealth prior to COVID-19 had been physician-to-physician. This approach envisions telehealth expanding access, virtually, to highly specialized care (eg, a stroke patient presents at a rural hospital emergency department, and the local physician consults a stroke specialist via telehealth).

In the response to COVID-19, barriers to rapid adoption of direct-to-patient telehealth tumbled as providers, payers, policymakers, and technology vendors raced to enable robust use of virtual care to help prevent disease spread, while continuing needed care for patients. CMS led the way by adopting a telehealth-friendly

reimbursement approach, thus exerting pressure on private payers to similarly shift to enable greater telehealth use.

Health care claims data and polling confirm the explosive growth in telehealth. In 2020, Medicare reported that 1.3 million people per week were using telehealth during the height of the pandemic; this included nearly 50% of all primary care visits.²

As the pandemic has subsided, telehealth usage has leveled off to about 23%; patients and physicians find it safer to resume in-person visits.³ But the transformative impact remains. According to polling by Change Healthcare and Harris, 3 in 4 consumers believed telehealth is the future of medicine; 80% said COVID-19 has made telehealth an indispensable part of the health care system.⁴ However, there are reports that some payers are starting to roll back coverage, albeit not to pre-COVID-19 levels.⁵

What's Next for Telehealth and Care Delivery?

The future use of telehealth across the continuum of patient care—from diagnosis to active treatment, follow-up, and reevaluation—will have varied impacts on stakeholders, including payers, providers, pharmaceutical and device manufacturers, and employers (**Figure 1**).

Overall, the implications for providers, payers, manufacturers, and employers are mixed (**Figure 2**), just as they are for the patients. On one hand, there has been an observed increase in the number of patient-provider interactions enabled by telehealth.⁶ Conversely, claims data analysis from health care industry intelligence and analytics firm IQVIA indicate that providers using telehealth are spending less time with patients, which may result in fewer new brand prescriptions.⁷

Incorporating telehealth into a system that takes on the needs of patients with clinically complex, life-threatening, and/or chronic conditions is expected to increase, but with limitations. Proper diagnosis or follow-up for certain diseases may have varied success in a virtual environment. Let's consider a few common diagnoses and the impact of telehealth on the patient journey in each:

DIABETES. In diabetes care, multiple studies of telehealth usage indicate significant clinical benefits, such as improved glycemic control. Convenience, especially for patients with ambulatory issues and/or those living in remote areas, was also reported as a major benefit.⁸

The Advanced Comprehensive Diabetes Care program from the Department of Veterans Affairs combined frequent virtual visits



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FIGURE 1. Care Continuum Journey in the Time of Telehealth

DIAGNOSIS	TREATMENT	FOLLOW-UP	REEVALUATION
<p>A key challenge in chronic illnesses and specialty care is navigating the journey to diagnosis.</p> <p>Without vitals, labs, and other clinically necessary information, virtual visits alone are not adequate for diagnosis.</p> <p>Care that leads to the correct diagnosis sooner vs later has profound implications for treatment and disease management, and hence related prescribing and use (adherence) of drugs, overall cost of care, and patient outcomes.</p>	<p>During active treatment, patients and providers may prefer to use telehealth, whether for convenience, operational efficiency, or other clinical reasons.</p> <p>How this impacts managed care, including the development of clinically sound criteria for authorization and reimbursement schemes, is a major challenge currently confronting payers and self-insured employers.</p>	<p>Greater use of telehealth can create efficiencies in conducting routine follow-up care for some illnesses.</p> <p>With more experience in using telehealth platforms and enhancements to its ease of use, the potential impact on quality and quantity of care administered will be an important area of caution.</p>	<p>The current state of confusion regarding distinctions between monitoring, reevaluation, progress reports, and the requirements (and coding) for each is another area of potential complications in expanded usage of telehealth.</p> <p>Clear guidance will be needed as to when telehealth is permitted for a payable reevaluation, per specific disease types and patient statuses.</p>

FIGURE 2. Key Implications of Telehealth Use Across the Patient Care Continuum

	DIAGNOSIS	TREATMENT	FOLLOW-UP	REEVALUATION
PROVIDERS	Engaging with payers to define clinical criteria for in-person vs virtual visits at diagnosis, initiation of care stage Impact on operations, workflows, revenue cycle (pending payment modeling) Potential impact on diagnostic accuracy	Protocols needed for incorporating use of telehealth during active treatment Opportunity for more effective monitoring and managing side effects – to enable early intervention and reduce acute, emergency care Operational planning, scheduling, staffing considerations Ability to conduct more follow-up as needed	Protocols for frequency of in-person vs virtual visits Incorporating additional virtual technology (eg, monitoring devices)	Clear definitions needed for payable reevaluation (vs follow-up and initiation of care)
PAYERS	Reimbursement approach is contingent on policy decisions regarding HIPAA, CMS guidelines Care management, payment, and authorization models are uncertain	Better management of side effects during active treatment of chronic illnesses can reduce emergency department visits and costs	Opportunity for greater compliance, adherence with strategic integration of telehealth, enabling access to providers and multidisciplinary teams Risk in unneeded care administered per ease of access	Risk of increased costs if unnecessary “new” treatment results
MANUFACTURERS	Incorporating telehealth in direct-to-consumer marketing and education model	Opportunity to partner with telehealth/digital health to drive new prescriptions Potential for greater adherence due to more patient/provider interaction; patient education opportunities Concerns that telehealth results in fewer new prescriptions written compared to in-person office visits	Improved adherence has profound revenue implications for pharma	Reevaluation done right can help reveal needed additional care, including medications
EMPLOYERS	Potential reduction in cost of care per patient; potential increase in overall healthcare costs due to greater use of healthcare due to easier, more convenient access	Uncertain impact on cost of care – potential for reduction per better care management Patient care improved overall and made more convenient could result in fewer sick days or time off for physician visits	Greater convenience via telehealth can reduce workplace disruption	–

with clinicians and patient self-monitoring and data reporting.⁹ Patient outcomes include a measurable, long-term reduction in glycated hemoglobin. The analysis of study data confirmed that: “...intensive telehealth interventions are conducive to implementation and produce sustained improvements in glycemic control among rural patients.”

Applying this approach to a broad, general patient base would require significant planning and implementation, revamping reimbursement and authorization guidelines, and further cost/benefit analysis.

MULTIPLE SCLEROSIS. In multiple sclerosis care, the pandemic created a special opportunity to test the effectiveness of telehealth, and to consider the challenges in remotely conducting neurologic exams and performing triage for new patients. The benefits of telehealth in providing greater convenience and access to care, particularly for aspects of follow-up care, are significant. However, according to a report from the National Institutes of Health, clinical advantages achieved using telehealth are unclear. For example, results varied in several studies of whether home-based telerehabilitation improved the timed 25-foot walk. Also, performing a complete neurological exam cannot be done remotely, as illustrated by one particular study in which authors wrote¹⁰:

“There is still no reliable way for the remote neurologist to evaluate tone, sensation, reflexes, and funduscopy via telehealth. This limitation poses a concern for potential misdiagnosis and mismanagement.”

Recognizing the benefits while acknowledging the need for more evidence-based research, the American Academy of Neurology recently asked federal lawmakers to approve a permanent expansion of telehealth, while noting the need to define reimbursement parity to avoid variability among states and insurers.¹¹

ONCOLOGY. In oncology care, patients and providers responded positively to telehealth during COVID-19, notwithstanding obstacles such as technology literacy, broadband availability, and other access problems. A survey of physicians at a large community-based oncology practice pointed to important potential benefits of telehealth in managing cancer care longitudinally and achieving value-based care objectives.¹² For example, reducing emergency department visits was a key quality measure in the Oncology Care Model, a flagship value-based care program from the CMS Innovation Center that concluded on June 30, 2022.

In the survey, conducted by Texas Oncology, “55% of respondents were using telemedicine to manage urgent patient issues, and 57% of those respondents believe an emergency department visit or hospitalization was avoided using telemedicine.”¹²

However, the impact of delayed screenings and other preventative diagnostics on cancer incidence, disease progression, patient outcomes, and total cost of care still remains to be seen.

Given the advantages, opportunities, and challenges in use of telehealth in patients with different complex conditions, questions remain:

- Will telehealth ultimately result in patients seeking and physicians delivering more care—more visits whether virtual or in person?
- Will this increase overall costs near term or, conversely, lead to better outcomes that reduce total costs?

Telehealth and the New Normal: Post-COVID-19 Implications

As an integrated, technology-enabled care option, telehealth is expected to continue at greater levels than before COVID-19. Given the pandemic experience, physicians and patients will expect to have greater opportunity to choose preferred and optimal methods of interaction.

Drivers of telehealth adoption include clinical appropriateness, convenience, access to care (eg, for rural patients), patient and provider acceptance, and favorable policy and reimbursement approaches.

More experience and study of telehealth usage outside of the recent public health emergency are needed to clarify its long-term impact and effectiveness. For now, discernable positive implications are:

- **BETTER CARE MANAGEMENT.** Virtual visits clearly are better than no visits. That is, patients with transportation issues or other challenges in accessing care (eg, ambulatory issues, work schedules, travel issues) are more likely to be seen as needed if telehealth is an option—and therefore are more likely to stay on course with treatment.

- **PATIENT COMPLIANCE AND MONITORING.** Telehealth-enabled visits with integrated care teams—physicians, advanced practice providers, nurses, pharmacists, and social workers—can reinforce patient education, assist in better symptom detection and management of adverse effects, and support better medication adherence. This can enhance providers' ability to meet value-based care performance goals, drive revenue for pharma, and improve patient outcomes.

Also, as greater adoption of remote health monitoring occurs, complementing virtual physician visits, aggregate data will provide valuable insights to inform future investments into research and development.

- **PROVIDER EFFICIENCY.** Telehealth offers potential for providers to operate more efficiently, possibly increasing the number of patient visits (blending virtual and in-person) to schedules, reducing no-shows and rescheduling, and improving patient experience and patient satisfaction.
- **AWARENESS AND EDUCATION OPPORTUNITY.** Increased acceptance of technology by patients and providers offers opportunities for pharmaceutical manufacturers to engage with patients and physicians to strengthen relationships and provide patient education and understanding of medications. Improving adherence also is a major potential benefit.

The most current thought leadership on telehealth points to significant benefits and promise. But telehealth is not a panacea for all that ails the health care system. Challenges that remain are significant and may not be overcome with increased access to physicians via telehealth platforms.

CLINICAL CARE IMPLICATIONS. Large-scale research into clinical outcomes from telehealth usage is limited. It is a complex challenge to develop evidence-based criteria and protocols, and to create and implement guidelines for appropriate use of telehealth, integrated with in-person visits and across multiple disease types and stages. On behalf of their patients and other stakeholders, providers will need to guard against “bright shiny object” syndrome in telehealth, as a *New York Times* columnist, a former emergency department physician, Elisabeth Rosenthal, MD, recently warned:

“COVID-19 let virtual medicine out of the bottle. Now it's time to tame it. If we don't, there is a danger that it will stealthily become a mainstay of our medical care. Deploying it too widely or too quickly risks poorer care, inequities and even more outrageous charges in a system already infamous for big bills.”¹³

TECHNOLOGY ISSUES. Gaps in broadband access, a barrier to entry for use of telehealth, will not be filled immediately. Tech savviness and access to devices for patient populations who trend older for some diseases (eg, cancer) or have lower incomes will continue to be a challenge.

Virtual visits alone—absent complementary tracking and monitoring technologies—can limit the benefits of telehealth while also missing the opportunity to produce data, at scale, that will inform continued improvement and optimization of care. How to develop, apply, and fund these technologies is critical to delivering the greatest value from telehealth.

UNKNOWN ECONOMIC IMPACT. The impact of greater use of telehealth on the cost of care is unclear. While convenient access to clinical teams can mean *better* care overall, it also could result in *more* care. Efficiencies in clinical operations may be offset by increasing care consumption and changing expectations among patients-as-consumers.

NEW RULES MATTER. The policy/regulatory and reimbursement scheme surrounding telehealth is in flux as policymakers and stakeholders emerge from the pandemic. Which stakeholders win or lose the many discrete and arcane rulemaking battles to come will have profound impact on telehealth adoption. Already, some states are rescinding executive orders and other policies, causing new complications in care delivery, particularly in cases where patients get care from physicians in more than 1 state. This hints of the greater complexities on the horizon in the state-by-state patchwork policy environment.

Deciding what stays, goes, or evolves is a daunting, complex challenge facing policymakers, patient advocates, payers, and all stakeholders. The future of key measures implemented on a temporary basis by federal and state governments and payers during COVID-19 will be key:

- Waiving HIPAA requirements to allow use of FaceTime and Skype for virtual patient visits
- Relaxing controlled substances' prescribing requirements (no in-person visit required)
- Opening telehealth to all geographies, not just rural areas, and allowing use of smartphones and virtual visits from patients' homes
- Reducing or eliminating cost sharing for telehealth care
- Allowing telehealth for certain dialysis patient visits (Medicare)
- Regulating service parity and payment parity (per states)

Conclusions

The health care delivery system is characterized by overpowering institutional, regulatory, and business model biases against change. But with the pandemic, circumstances beyond the grasp of usual controls forced a dramatic acceleration in telehealth usage.

A new patient/health care consumer experience paradigm has begun, along with a quantum leap in acceptance and understanding among patients, providers, policymakers, and payers that flowed from the increased usage.

Opportunities and benefits—such as better medication adherence, convenience for location- or mobility-challenged patients, and greater access to needed care—are notable. Overcoming access and

technology challenges, understanding and mitigating risks in clinical care, and achieving consensus among health care stakeholders on a comprehensive approach going forward will be front and center in the coming months and years. ♦

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