

The Prominent Role of Telehealth during the COVID-19 Pandemic

Elaine Ng, PharmD Candidate 2026¹

Jessica Singh, PharmD Candidate 2026¹

¹University of Findlay College of Pharmacy

Abstract

Telehealth is referred to as the remote interactions between health care providers and patients through a variety of audio or video platforms. Over the past years, it has become quite useful in clinical health care, professional health care education, and public health administration. There are multiple technologies that provide telehealth such as videoconferencing, streaming media, store-and-forward imaging, and other wireless communications. Telehealth includes remote clinical services with other non-clinical services such as health administration meetings, medical education, and health worker training.





In the past, American rural areas had a more profound need for telehealth due to limited medical specialties and extended travel times to clinics.¹ Remote methods of communication ensure that patients have access to special health care services that may not physically be accessible to them. This type of communication presents the importance of telehealth in modern health care.²

Companies, such as Teladoc® and MeMD®, provide a variety of medical services. Teladoc, one of the first telehealth providers in the United States, includes “pediatric services, nonemergency medical issues, dermatological conditions, mental health consultations for issues such as depression and addiction, and sexual health consultations.”³ Teladoc® has its own physicians that can send prescriptions to pharmacies and analyze lab results.³ Whereas, MeMD® follows a different approach. MeMD® allows users to explain their symptoms and a doctor assesses them within the same consultation.³ It also offers urgent care services and talk therapy sessions.³ Most telehealth service companies have similar goals of providing the best quality of health care through remote communications.

The Cruciality of Telehealth

The need for telehealth care increased vastly in 2020 as SARS-CoV-2, the virus that causes COVID-19, spread. COVID-19 is considered a public health emergency so it is essential that individuals

follow updated regulations. In-person communication between health care providers and patients needed to be limited due to COVID-19 restrictions such as social distancing. Telehealth technologies play an important role in ensuring these restrictions are followed while attempting to limit the spread of the virus. The public is encouraged to stay home during the pandemic, but this proves difficult for in-person doctor visits not pertaining to COVID-19. Telehealth assists in reducing the risk of “patients infecting others (particularly health care workers).”⁴

Another key benefit of remote health care communication is preserving personal protective equipment (PPE).⁵ Remote communications also decrease the risk of transmitting the SARS-CoV-2 virus to others if either the provider or patient carries it. In order to accommodate all patients’ circumstances, multiple methods of telehealth can be offered with each method varying vastly in terms of its procedures, policies, and guidelines.⁴

Methods of Telehealth

Different methods of telehealth have been employed over the recent years for many types of health care issues. These methods can be categorized into three main types of remote communication: synchronous, asynchronous, and patient monitoring.

Synchronous telehealth refers to “real-time telephone or live audio-video interaction” between health care providers and patients. This method involves devices





that are able to connect to communication networks.

Asynchronous telehealth methods include “store and forward” formatting, which implies messages, images, or data are submitted to online portals.⁵ These submissions are later evaluated and responded to by health care professionals. This type of communication typically occurs through secure networks.

The other main type of telehealth is remote patient monitoring. It allows patients to enter specific health data (weight, blood pressure, blood sugar, etc.) from one location to health care providers.⁵ Commonly, health care workers recommend this form of telehealth once a patient is released from care.⁵ Remote patient monitoring ensures the patient is maintaining routine care while recovering.⁵ All these telehealth methods play a significant role in limiting in-person clinic visits during the COVID-19 pandemic.

The History of Telehealth Before COVID-19

The outbreak of COVID-19 has significantly expanded the application and importance of remote health care systems. The expansion of telehealth and telemedicine have grown exponentially in recent years due to the rapidly improving telecommunications infrastructure, as 98% of Americans now live in areas with 4G LTE service with increased processing speeds across all devices.⁶ Because of the increase in quality and availability of internet usage and cloud-based consulting

services, the next generation of health care professionals are developing in a digital world in which the past inconveniences of technological efficiency are no longer concerns.⁶

A continuing obstacle regarding the advancement of telehealth includes the reimbursement process, because the Centers for Medicare and Medicaid Services (CMS) guidelines are not standardized across all states.⁶ However, even before the onset of COVID-19 telehealth guidelines and policies were as advanced and widespread as they had ever been.⁷ The Center for Connected Health Policy released the guide “State Telehealth Medicaid Fee-For-Service Policy: A Historical Analysis of Telehealth: 2013 - 2019” in order to display the trends and growth of telehealth over the past few years.⁷ The key findings include that live video is now reimbursed by Medicaid across all states and D.C. compared to 6 states and D.C. in the Spring of 2013.⁸ Additionally, the number of states reimbursing for remote patient monitoring has tripled since 2013.⁸

Telehealth has been expanding the past 7 years as exemplified by increased adoption of reimbursement policies for varying forms of telehealth, and it appears to be continuing to grow in the time of COVID-19 with the addition of security measures and privacy reassurance.⁹ In times before COVID-19, in which telehealth was not a universally necessary form of health care, telehealth still continued to be widely adopted due to the convenience it offers when coupled with today’s technological advancements.⁸ However, with the current





pandemic creating the unexpected need to provide health care remotely, former guidelines and policies became inapplicable, and have needed to be modified.¹⁰

Current Guidelines for Telehealth

The unexpected onset of COVID-19 created a need for a widespread remote form of health care. Due to the sudden need to adjust to unconventional practices, many new but temporary policies and guidelines revolved around telehealth. Many of these policies specifically focused on reimbursement policies, cyber security, temporary expansion, and other flexibilities to further accommodate patients.¹¹

The Centers for Medicare & Medicaid Services (CMS) often directs reimbursement policies for various health care practices. Under the newly enacted Coronavirus Preparedness and Response Supplemental Appropriations Act and the 1135 Waiver, telehealth has been covered in a broader spectrum by Medicare and Medicaid Under the 1135 Waiver.¹² Medicare is valid for coverage in terms of office, hospital, and general medical visits that occur by telehealth in the U.S. including from patients' homes.¹² Furthermore, the HHS Office of Inspector General (OIG) will also allow for health care providers to reduce or waive cost-sharing for telehealth visits that are paid for by federal health care programs.¹² Therefore, the CMS concluded that for the duration of the COVID-19 Public Health Emergency, telehealth visits will be regarded the same as in-person medical visits with the same cost and rates.¹²

Beyond more leniency in coverage for telehealth, there is greater expansion in the qualifications of telehealth sites and methods in order to provide health care and services to more people.¹² Patients living in rural areas were significantly impacted by the needed distancing from COVID-19, therefore Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs) are temporarily considered distant telehealth sites to provide telehealth services to patients remotely.¹¹ Another significant development in a wider outreach includes the CMS's broadened consideration of what is deemed to be covered telehealth service by Medicare, which now includes emergency departments visits, therapy services, and home visits.¹¹ Federal health care programs such as Medicare, Medicaid, and the Children's Health Insurance Program (CHIP) have also become more receptive towards changes with cost-sharing.¹¹ The HHS Office of Inspector General (OIG) has been allowing health care providers to decide whether cost-sharing for virtual care can be reduced or waived.¹¹

Beyond Federal health programs, billing and reimbursement for telehealth services have been lowered as well.¹¹ Certain private insurance plans may reimburse patients for any telehealth service, with most companies covering at least a few telehealth services; however, it depends on the company to decide its policies.¹¹ Similarly, Medicaid does cover some forms of telehealth practices, but it differs from state to state, with no two states having the exact same reimbursement policies and guidelines.¹¹ Policies for reimbursement and





billing of telehealth care services have temporarily expanded due to COVID-19, with federal and state government making an effort to remove both territorial and payment barriers in hope to make remote health care accessible and affordable to all.¹¹ Overall, the lack of standard protocols in reimbursement guidelines between states poses the common issue of uneven coverage for all patients, and this brings to light several other conditions that may limit the advancement and permanence of telehealth.

The Future of Telehealth

The COVID-19 pandemic has had a great impact on the delivery of health care, in which telehealth reimbursement has been covered by health care providers and payers to help limit exposure to the coronavirus.¹⁰ However, the question of whether telehealth will become a standard form of health care and whether temporary mandates will become permanent is up to debate.¹⁰

Because of the sudden and unprecedented deregulation of telehealth, it is still unclear how the current and future of health care services will be impacted. The question comes down to whether the benefits of telehealth will exceed the current concerns regarding quality of care and security. Some health care providers and experts question how essential medical examinations such as lab work, scans and imaging, or physical exams will be incorporated into telehealth and how the quality of care and patient understanding of their health will be impacted, or the negative impacts if certain medical practices are adopted deficiently.⁹

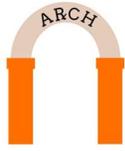
Furthermore, it is unclear whether current society is willing to adopt telehealth as a central form of health care after the pandemic ends, as cultural acceptance of virtual visits rather than in-person visits has been an unprecedented matter.⁵ The concern of technological accessibility and security also arises.⁹ Access to the internet and technology is not universal, and familiarity with telecommunications pose barriers to telehealth.⁹

Additionally, there is no standard protocol nor policy for interstate licensure, as Medicare and Medicaid policies for reimbursement differ greatly across all states.⁹

Conclusion

Telehealth has become a crucial part of the healthcare system since the beginning of the COVID-19 pandemic in the United States. Different methods to provide telehealth care to patients allows patients to communicate with their healthcare providers conveniently. Although telehealth technology provides many benefits, the lack of standardized guidelines in security and coverage plans poses a concern of equitable health care for all patients. The sudden onset of the COVID-19 pandemic has led to an unparalleled uptake of telehealth with temporary conditions in which the outcomes have not yet been observed.⁹ While telehealth services include benefits, such as limiting the spread of COVID-19 and preserving PPE, they still remain subject to further review and study.





References

- 1) What is telehealth? How is telehealth different from telemedicine? [Internet]. HealthIT.gov. 2019 [cited 2021Feb1]. Available from: <https://www.healthit.gov/faq/what-telehealth-how-telehealth-different-telemedicine>
- 2) Why is telehealth important for rural providers? [Internet]. HealthIT.gov. 2019 [cited 2021Feb1]. Available from: <https://www.healthit.gov/faq/why-telehealth-important-rural-providers>
- 3) Roland J, Potter D. 10 Best Telemedicine Companies [Internet]. Healthline. 2020 [cited 2021Feb1]. Available from: <https://www.healthline.com/health/best-telemedicine-companies>
- 4) Hoffman DA. Increasing Access to Care: Telehealth during COVID-19. Journal of Law and the Biosciences. 2020; 7(1): 1-15.
- 5) Using Telehealth to Expand Access to Essential Health Services during the COVID-19 Pandemic [Internet]. Centers for Disease Control and Prevention. Centers for Disease Control and Prevention. 2020 [cited 2021Feb1]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html>
- 6) Telehealth set for 'tsunami of growth,' says Frost & Sullivan [Internet]. Healthcare IT News. 2020 [cited 2021Feb1]. Available from: <https://www.healthcareitnews.com/news/telehealth-set-tsunami-growth-says-frost-sullivan>
- 7) Center for Connected Health Policy. State telehealth medicaid fee-for-service policy [Internet]. CCHPCA. 2020 [cited 2021Feb1]. Available from: <https://www.cchpca.org/sites/default/files/2020-01/Historical%20State%20Telehealth%20Medicaid%20Fee%20For%20Service%20Policy%20Report%20FINAL.pdf>
- 8) History of Telehealth [Internet]. AccessMedicine. 2018. [cited 2021Feb1]. Available from: <https://accessmedicine.mhmedical.com/content.aspx?bookid=2217&ionid=187794434>
- 9) Royce T. Will telehealth services become the norm following COVID-19 pandemic? [Internet]. UNC Lineberger. 2020 [cited 2021Feb1]. Available from: <https://unclineberger.org/news/will-telehealth-services-become-the-norm-following-covid-19-pandemic/>
- 10) Strazewski L. Telehealth's post-pandemic future: Where do we go from here? [Internet]. American Medical Association. 2020 [cited 2021Feb1]. Available from: <https://www.ama-assn.org/practice-management/digital/telehealth-s-post-pandemic-future-where-do-we-go-here>
- 11) Assistant Secretary for Public Affairs (ASPA). Telehealth: Delivering Care Safely During COVID-19 [Internet]. US Department of Health and Human Services. 2020 [cited 2021Feb1]. Available from: <https://www.hhs.gov/coronavirus/telehealth/index.html>
- 12) Fact sheet Medicare Telemedicine Health Care Provider Fact Sheet [Internet]. CMS. 2020 [cited 2021Feb1]. Available from: <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>

