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PATIENT SAFETY NETWORK

Telehealth and Patient Safety During the COVID-19 Response

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Introduction

Telehealth typically involves the delivery of long-distance or remote healthcare via electronic communication and information technologies. Telehealth is often referred to or referenced as telemedicine (clinical services), but also includes a wider variety of healthcare services, including those provided by professionals other than physicians, such as nurses and pharmacists. It may include clinical care services, education for both patients and providers, and public health or healthcare administrative services.[1] Telehealth can be used as a tool to monitor, diagnose, treat, and counsel patients in circumstances where in-person care is not feasible, or when telehealth is more convenient or economical. Particularly in rural healthcare, advances in telehealth have spurred increased patient access to services in areas such as primary care, psychiatry, ophthalmology, dermatology, dentistry, audiology, cardiology, oncology, obstetrics, and even intensive care and emergency services. The evidence to support the role of telehealth is strong. Research has demonstrated that it promotes continuity of care, decreases costs, and improves patient self-management and overall outcomes, particularly in the management of discrete disease states.

With a robust telehealth infrastructure in place, patients may receive more timely diagnoses and treatment recommendations, more appropriate follow-up care, and a reduced likelihood of experiencing an adverse event as a result of delayed assessment and treatment. However, the overall safety of telehealth is less well studied. As hospitals and physicians' offices are exploring new and innovating uses for telehealth services, and as more technology comes onto the market, the community is learning more about what is effective and what is safe. As this evidence continues to evolve, telehealth is best used as a complement, rather than a substitution, for traditional in-person care.

The use of telehealth has been growing steadily as a patient-centered complement to care provided face-to-face, particularly among private insurers. Over the past decade, private insurers have greatly expanded telehealth coverage, recognizing its ability to provide affordable expanded access and care for patients.[2,3] Between 2014 to 2018, private insurance claims for all telehealth services increased by 624%.[4] In 2018, the Centers for Medicare & Medicaid Services (CMS) reported that telehealth visits per beneficiary increased 79 percent between 2014 and 2016. In 2016, telehealth accounted for $27 million in Medicare spending under the physician fee schedule (PFS). However, this still only accounted for a small fraction of the Medicare budget, at 0.4 percent of total Medicare PFS spending.[5] Historically, clinicians have been limited in the types of telehealth services eligible for Medicare payment. Eligible services typically required that the beneficiary live in a rural area and receive services from a clinician at a distant location. Additionally, beneficiaries would have to travel to a local medical facility to get telehealth services and generally would be unable to receive these services at home. However, recent action by the Federal Government has greatly expanded Medicare telehealth coverage.[6,7]

The Role of Telehealth in the COVID-19 Crisis

In March 2020, HHS issued a series of new rules and temporary waivers designed to assist the medical community in addressing the COVID-19 pandemic. This has included several provisions related to the use of telehealth, including the expansion of what services may be provided virtually.[8] Private insurers are also taking steps to support the use of telehealth, such as expanding lists of eligible services, waiving cost sharing, and providing monitoring devices to patients.[9] Through necessity and as a result of these emergency provisions, the use of telehealth technologies, and broader application of telehealth concepts outside of CMS technical standards, has rapidly increased. Its expanded use has served as a means of ensuring the safety of both patients and frontline providers, as well as conserving use of critical personal protective equipment (PPE) supplied.

Ensuring Patient Safety

Telehealth can be an effective way of limiting patient exposure to individuals who have- or may have-contracted the virus that causes COVID-19. One approach is to use telehealth in place of traditional in-person visits for care unrelated to COVID-19 that cannot be postponed, such as required monitoring of medications for chronic disease. This allows patients to receive care from the safety of their homes and avoid exposure to the virus during transit or at in-person appointments. Another approach is to use telehealth as a means of performing an initial evaluation and triage of patients with COVID-19 symptoms.

Such virtual triage processes can protect other patients by directing potentially infected individuals to the most appropriate location to seek care or testing and keep them out of primary care waiting rooms.

Ensuring Provider Safety

In addition to the more “traditional” uses of telehealth, the COVID-19 crisis has necessitated creative thinking about how telehealth technology can help protect providers. For example, approaches such as video conferencing and remote diagnostic tools can allow hospital and ambulatory care providers to employ telehealth best practices and patient evaluation techniques that avoid direct patient contact, while still treating the patient on-site. Telemedicine using remote monitoring technologies can facilitate treatment and even decrease the frequency of virtual and in-person patient encounters. Using these remote and virtual capabilities can reduce the number of providers that need to come into direct contact with a patient in the hospital and can conserve single-use PPE.

While telehealth is providing powerful approaches for protecting patients and providers during the COVID-19 outbreak, its increased and evolving use raises other potential patient safety concerns. First, providers need to understand the limitations of delivering care remotely and the implications on their diagnostic capabilities, particularly among providers who have limited prior telehealth experience. Secondly, strategies need to be in place for connecting with patients and caregivers who are less technologically enabled, have multiple comorbid conditions, do not have access to broadband, and/or have low health or digital health literacy. In addition, providers will need to ensure reasonable accommodations are in place for patients who are deaf, hard-of-hearing, or are blind or have low vision. They will also need to be responsive to linguistic minorities who may have limited English proficiency. Finally, in the effort to maximize use of telehealth services and minimize the risk of patient exposure to the virus, remote evaluations allow providers to recommend more judicious use of ancillary services, recognizing that there is a continued need to ensure patients are able to receive all necessary services when appropriate (e.g., labs, x-rays, procedures).

Alleviating Patient Safety Concerns

Rapidly accelerating telehealth capabilities may be necessary for many institutions as the healthcare community tackles the COVID-19 epidemic. However, there are critical precautions that can be taken to minimize the risk to patient safety.

Resources to Support Expansion of Telehealth Capabilities During COVID-19:

Centers for Medicare & Medicaid Services

Establishing Escalation Protocols

- Coronavirus Waivers and Flexibilities

American Telemedicine Association

- Practice Guidelines Archive

National Consortium of Telehealth Resource Centers

- COVID-19 Telehealth Resources - Building a Telehealth Program
- Etiquette Checklist

Centers for Disease Control and Prevention

- Telehealth and Telemedicine Publications and Resources

Institutions should establish escalation protocols that dictate when a patient receiving telehealth services should be transitioned to urgent in-person follow-up care, or even to receiving emergency services. Follow-up care can continue to occur remotely, but consideration should be made for conditions in which the patient may require in-person services, particularly in more vulnerable populations. Escalation protocols should be identified, developed, and applied in the context of a given practice and should cover the range of scenarios that a practice may encounter, including the need for a higher level of care, such as an emergency visit, or the need for diagnostic studies. The protocols should align with existing clinical workflows and take into consideration the level of comfort and familiarity physicians have with practicing telehealth. These types of guidance documents help to ensure that patients are receiving telehealth and in-person care in a consistent way, that the capabilities and limitations of telehealth are communicated effectively, and can ease the adjustment for providers with minimal prior experience performing telehealth. All clinical staff within a given institution should be aware of these guidance documents and of when to use them.

Encourage Pre-Charting of Upcoming Patient Visits

Providers should be encouraged to conduct a detailed review of their upcoming patient appointments and determine if any can be appropriately converted to telehealth appointments. This may require additional communication and outreach to the patient by nurses or medical assistants to review and update information regarding the patient's medical history, validate that the reason for their visit is complete, accurate, and identifies the need for any necessary ancillary services (i.e. lab work, imaging), and ensure that the patient understands what to expect if they will be participating in a telehealth visit. It may be necessary, in some cases, to arrange for patients to obtain remote monitoring devices in advance of more complex virtual assessments. Where ever possible, maintain in-person pediatric visits for vaccinations so children remain on schedule.

Quality Assurance Plan

As with in-person visits, a quality assurance plan should be in place for telehealth visits. Medical staff should hold patient safety huddles to discuss cases with both positive and negative patient safety outcomes. It is important for institutions to maintain good patient safety culture and ensure that providers have the opportunity to learn from what went right and what went wrong in telehealth cases.

Provider Tutorials of Telehealth Basics

Telehealth tutorials can provide awareness of basic telehealth communication best practices. Understanding such fundamentals, like regulating speech pattern or positioning the video camera, lighting, and location can make the experience more user-friendly for the patient and facilitate a smooth and effective visit.

Conclusion

If implemented appropriately, telehealth can be an incredibly effective approach to ensuring patient and provider safety during this unprecedented outbreak. This unique opportunity to implement innovative and creative approaches to patient care will have long-lasting impacts for the future of telehealth. As providers and patients become more familiar with the technical aspects of telehealth, and as patients' understanding of both the benefits and limitations of telehealth increases, telehealth will become a part of standard practice for delivering safe, high-quality healthcare.

Authors

In his professional role, Dr. Willis has engaged in special projects as a special guest researcher with the National Institutes for Health (NIH) and as a guest researcher at the Agency for Healthcare Research and Quality (AHRQ). Dr. Sikka is the Founder and Chief Medical Officer of SonoStik, LLC and advises Emergency Medical Innovations, LLC.

Neal Sikka, MD
Associate Professor, Attending Physician
Chief, Innovative Practice and Telehealth Section, Department of Emergency Medicine
Medical Faculty Associates
The George Washington University
Washington, DC

Joel Willis, DO, PA, MA, MPhiL
American Board of Family Medicine Health Policy Fellow
Medical Faculty Associates
The George Washington University
Washington, DC

Eleanor Fitall, MPH
Research Associate, IMPAQ Health
IMPAQ International
Washington, DC

Kendall K. Hall, MD, MS
Managing Director, IMPAQ Health
IMPAQ International
Columbia, MD

Bryan Gale, MA
Senior Research Analyst, IMPAQ Health
IMPAQ International
Columbia, MD

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