

## Internet Telemedicine is Forever Changing Traditional Medicine in the United States

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In March 2020, President Trump empowered the CMS to issue waivers to Medicare program requirements to support healthcare providers and patients during the pandemic. The expansion of Medicare telehealth allowing all beneficiaries to receive telehealth in any location, including their homes, was the first action taken by the CMS. Soon afterwards, Senator Ted Cruz introduced in Congress a new bill called the “Equal Access to Care Act,” which will open doors to interstate telemedicine. The CMS reported that prior to the COVID-19 pandemic, the average number of telehealth visits conducted by medical providers was 13,000. **Thanks to the regulatory barriers removed by the Trump Administration in relation to telemedicine, in the last week of April 2020, over 1.7 million beneficiaries received telemedicine services.**

### How is Medicare Affected?

Prior to 2020, Medicare compensation for telehealth services was very limited, namely “when the person receiving the service is in a designated rural area and when they leave their home to go to the clinic, hospital or other medical facilities for telehealth medicine.” Under the Trump Administration telehealth services are a welcome solution. This, coupled with CMS’s Fostering Innovation Strategic Initiative results in the last three years improving access to virtual care nationally. Starting in 2020, Medicare has paid clinicians for e-visits, which are non-face-to-face, patient-initiated communications through an online patient portal across the country, not just in rural areas.

Additionally, the CMS implemented changes enacted by Congress so that Medicare Advantage plans can offer telehealth benefits to 13.7 million Medicare Advantage enrollees. In attempts to improve access to virtual care, the CMS added 135 allowable services and removed barriers to double the number of services that beneficiaries could receive via telehealth. **From mid-March to mid-June 2020, over 9 million beneficiaries have received a telehealth service according to internal CMS analysis of Medicare fee-for-service claims data. This claims data indicates that beneficiaries are seeking medical care through telemedicine services which only 22 percent lived in rural areas and 30 percent of beneficiaries came from urban areas.**

To date, demographics of the CMS claims data indicate that 30 percent of female beneficiaries and 25 percent of male beneficiaries

have received telemedicine services during the COVID-19 pandemic. Surprisingly, two-thirds of beneficiaries in the CMS claims data point to seniors over age 65 as the recipients of these telehealth services. **Out of the total 9 million beneficiaries, 5.8 million beneficiaries received “evaluation and management” (a.k.a. office visits) as a form of telehealth visits. The safety of avoiding unnecessary exposure to the virus has created this rapid explosion in telehealth services to scale up the delivery of healthcare more efficiently than traditional office visits.**

The CMS reported that this new adjustment to telemedicine will impact future changes of access to care, health outcomes, Medicare spending, and impact on the health care delivery system itself. Exploring the industry’s response to telehealth, 95 percent of survey respondents believe the flexibilities and efficiencies afforded by telehealth should remain after the COVID-19 pandemic has ended. **As a response to these industry changes towards greater efficiency in the delivery of healthcare, President Trump issued Executive Order on Protecting and Improving Medicare for Our Nation’s Seniors (EO 13890 – October 2019). This executive order streamlines the CMS on matters of coverage, coding, and payment for innovative technology, including breakthrough medical devices.** For example, the Medicare Coverage of Innovative Technology (MCIT) would provide national Medicare coverage on the same day as the FDA market authorization for breakthrough devices and coverage would last four years, during which manufacturers will be encouraged to develop evidence showing that the treatments improve the health of Medicare patients.

According to the “21<sup>st</sup> Century Cures Act” enacted by the Trump administration, “a breakthrough device must provide for more effective treatment or diagnosis of a life-threatening or irreversibly debilitating human disease or condition and must also meet at least one part of a second criterion, such as being a ‘breakthrough technology’ or offering a treatment option when no other cleared or approved alternative exists,” reports the CMS Fact Sheet of August 31, 2020. **Furthermore, “for beneficiaries impacted by these diseases, MCIT will provide assurance that they will have access to the latest breakthrough medical devices to treat their condition, provided the devices have a Medicare benefit category.”**

When the four years of coverage by the MCIT will eventually end, “manufacturers would all have their coverage options available, such as a National Coverage Determination (NCD), one or more Local Coverage Determinations (LCD), and claim by claim decisions.” In other words, the NCD and LCD help determine whether Medicare will pay for an item or service because Medicare coverage is limited to items and services that are considered “reasonable and necessary” for the diagnosis or treatment of an illness or injury (and within the scope of a Medicare benefit category). As previously explained, the MCIT is a byproduct of the Trump executive order seeking to improve Medicare for seniors, and therefore streamlines Medicare payment for breakthrough technologies that provide more effective treatment or diagnosis of a life-threatening human disease.

The streamlined MCIT pathway would only be available for FDA-designated breakthrough devices, and device manufacturers must apply to the FDA for breakthrough status, and the FDA application is reviewed specifically to determine if it meets the breakthrough criteria. Once FDA-approved, the breakthrough device must fit within a statutory Medicare benefit category to be covered and receive Medicare payments.

### How is Technology Affected?

Technology companies are taking notice too. According to App Annie, a global leader in app analytics and app market data, Amwell was the most popular telehealth app as early as 2014 and 2015 in the United States, based on combined iOS and Google Play downloads. The Amwell app is free to download and gives people the ability to see a doctor of their choosing by video, in less than three minutes on average after downloading. **A Harvard Medical School study found that the average total visit time for in-person medical visits was 121 minutes, including 37 minutes of travel time and 84 minutes in the clinic waiting to be treated plus filing paperwork. Of those 84 minutes in the clinic, less than 20 minutes were spent face-to-face with the doctor.**

The study claimed that translating time into money, the total productivity cost of 121 minutes was about \$43 lost to the individual. More surprising, these 121 minutes were in addition to the 19 day’s average wait for an in-person medical appointment. **According to the co-founder and CEO of Amwell, Dr. Roy Schoenberg, “In other industries we are seeing the transformative power and rapid adoption of on-demand services. Apps like Uber, Netflix, and TripAdvisor put consumers’ wants and needs first. Healthcare should work the same way... Amwell modernizes the delivery of healthcare by putting consumers at the center of their visit and placing the decision of when and where to see a doctor literally in the palm of their hand.”**

### The Future of Telemedicine

- According to a company press release, Amwell continues to be the top mobile app for telehealth because it provides:

- A convenient, integrated service: Consumers can download Amwell at no cost, for a face-to-face consultation with a board-certified physician. Physicians on Amwell have access to consumers’ health insurance information, medical images, and preferred pharmacy for immediate prescribing if needed.
- Immediate access to care: Other telehealth services have a “call back” function that requires consumers to wait to hear back from an operator before being connected to an available doctor. Amwell offers immediate access to available doctors online and the average waiting time is 2-3 minutes.
- Provider choice: Consumers can see which doctors are available and choose an available doctor based on their profile information, which includes their photo, name, and area of specialization.
- Video-based visits: Unlike telephone-based telehealth services, consumers using Amwell can participate in a two-way video visit with a doctor that is more conducive to evaluating more complex cases that require some physical or behavioral evaluation.
- HIPPA Compliant: Amwell is compliant with regulatory requirements like HIPPA that govern the secure transmission of patient health information online.

**According to Amwell, they have formed partnerships with over 40 health systems and hospitals, over 20 private insurance companies, 13 corporate employers and Fortune 500 companies, and 10 retailers like Walgreens and CVS Health. The latest news from the company is an August 2020 press release from Alphabet notifying the public that Google Cloud decided upon a long-term, multi-year partnership with Amwell, the current leader in telehealth platform. Consequently, Google Cloud will invest \$100 million in Amwell.**

In a recent article authored by Dr. Roy Schoenberg, the co-founder and CEO of Amwell, has focused on how telehealth momentum is fueling six future trends in medicine in 2020 and beyond. After working with more than 200 of the nation’s largest payers, health systems, employers, and retailers through Amwell, Dr. Schoenberg’s impressions are summarized herein:

1. Vulnerable populations will take center stage. Many healthcare providers are finding out that consumers in their 20s, 30s, and 40s are not the only group with the technical skills needed to telehealth. “The potential for virtual care lies in the ability to replace in-person visits with virtual visits for patients with serious diseases like cancer” writes Dr. Schoenberg. Claims data from the CMS pointed to 5.8 million beneficiaries that only used telemedicine for office visits between mid-March and mid-June 2020.
2. The blurring of lines across care settings. In 2019 alone, providers gained the ability to bill Medicare for telehealth services to diagnose and treat patients with symptoms of acute

stroke and end-stage renal disease (ESRD) regardless of geographic location. Additionally, advances in telehealth technologies have embedded the patient's electronic health records within the smartphone app or tablet app. These options will empower patients and incentivize healthcare providers and health plans to rethink how care is delivered.

3. "Digital First" approach will change health insurance and the health plans' relationship with providers. Dr. Schoenberg explains that many payers are viewing telehealth as an effective, and oftentimes preferred, first line of defense for a variety of ailments. Consequently, 2020 will see health plans collaborating with providers to broaden telehealth access.
4. Telehealth peripherals will become an industry. As telehealth utilization inches closer and closer to replacing in-person medical appointments, "peripheral" services and devices like biometric scales have saturated the market. As deeper device integration becomes the new normal, this integration will transfer electronic medical information into physician workflows.
5. Telehealth will translate into big business. In 2019, Amazon launched its own virtual care program for employees and their dependents, while CVS Health expanded its telehealth offerings to 26 states. Government is not falling far behind, as the FCC announced a \$100 million telehealth pilot program in July 2019. As of September 2020, there are more than 275 companies in the country running telehealth services, proving that telehealth is a new reality no longer confined to the academic setting.
6. New modes of care delivery and connectedness. Hospitals, home health agencies and skilled nursing facilities will look for new ways to adapt to the telehealth experience to devices that in the future will bring telehealth into the home. For the future, Dr. Schoenberg foresees the provider-patient interaction taking place across television screens and more patients homebound as they age.

### How Are Lawyers Affected?

For attorneys, the largest expense in any life care plan is the support care provided primarily by a Licensed Practical Nurse (LPN) for an average of 18 hours for a catastrophically injured patient at or over average cost of \$49 hourly. If telehealth becomes the normal order of LPN support and service, nurses can make use of technology to conduct telehealth sessions in their homes, at doctor's offices, in prisons, in clinics and hospitals. Wherever nursing is done in a telehealth setting, nurses can monitor a patient's overall condition, namely oxygen levels, heart rate, respiration, blood glucose, and more medical readings remotely. For emergencies, nurses from around the United States can participate in telephone triage set-ups. Routine pre-surgical and post-surgical care can be administered with telehealth nurse help. Telehealth nurses can also help continue to develop the best practices for specific circumstances as they arise.

It is unclear if a transition to telemedicine will decrease the annual revenues of specialized doctors. According to a new study based on data collected from 650 patients who used the Jeff Connect telemedicine platform at Philadelphia-based Jefferson Health. The cost at Jeff Connect was a flat fee of \$49 paid up front. The bulk of cost savings from telemedicine was generated in diverting patients from emergency departments. Each avoided emergency department visit generated a cost savings ranging from \$309 to more than \$1,500 per visit. Cost savings from other alternate care types were below \$114 average savings per visit with a group of 650 patients. The researchers stated "the net savings to a patient or payer per telemedicine visit of \$19 to \$121 represents a meaningful cost savings when compared to the \$49 cost of an on-demand visit. The primary source of the generated savings is from avoidance of the emergency department, as this is by far the most expensive of the alternative care options provided."

### The Future of Medical Care

The Trump Administration favors the medical efficiencies created to both providers and beneficiaries via telemedicine services, soon interstate telemedicine will be possible, and Medicare will streamline the access of medical breakthroughs for seniors. Technology companies like Google and Amazon have come to recognize that future industries will come from the wider acceptance of telemedicine services. Imagine companies like Amwell significantly reducing patient wait times from 121 minutes in a traditional setting to the current 2-3 minutes with telehealth technology. More than 275 companies in the United States have invested heavily in the future of telehealth, and the chances of this being a winner are huge.

WORKS CITED [1-9].

### References

1. Amwell (2016) "Amwell Is Again the Most Popular Telehealth App of the Year." *Amwell*.
2. CMS (2020) "Fact Sheet Proposed Medicare Coverage of Innovative Technology (CMS-3372-P)." *Centers for Medicare & Medicaid Services*. <https://www.cms.gov/newsroom/fact-sheets/proposed-medicare-coverage-innovative-technology-cms-3372-p>.
3. Health Leaders (2019) "Cost Savings for Telemedicine Estimated at \$19 to \$120 per Patient Visit." *Health Leaders Media*. [www.healthleadersmedia.com/clinical-care/cost-savings-telemedicine-estimated-19-120-patient-visit](http://www.healthleadersmedia.com/clinical-care/cost-savings-telemedicine-estimated-19-120-patient-visit).
4. mHealthIntelligence (2020) "CMS Eyes Expanded Coverage for Innovative Telemedicine Devices." *MHealthIntelligence*. <https://mhealthintelligence.com/news/cms-eyes-expanded-coverage-for-innovative-telemedicine-devices>
5. mHealthIntelligence (2020) "Telehealth Needs Payer Support for Continued Growth." *MHealthIntelligence*. <https://mhealthintelligence.com/news/telehealth-needs-payer-support-for-continued-growth>

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6. Rosenfeld, Samara (2019) “FCC Seeks Comment on Proposed \$100M Telehealth Pilot Program.” *Healthcare Analytic News*. <https://www.idigitalhealth.com/news/fcc-seeks-comment-on-proposed-100m-telehealth-pilot-program> .
  7. Schoenberg Roy (2020) “Telehealth Momentum Fueling 6 Trends in 2020.” *Healthcare Analytic News*. [www.idigitalhealth.com/news/telehealth-momentum-fueling-6-trends-2020](http://www.idigitalhealth.com/news/telehealth-momentum-fueling-6-trends-2020).
  8. United States, Congress, Cong. House, Cruz, Ted. *Equal Access to Care Act*, 116AD. 116th Congress, 2nd session, bill BAI20474.
  9. Verma Seema (2020) “Early Impact of CMS Expansion of Medicare Telehealth During COVID-19” *Health Affairs*. <https://www.healthaffairs.org/doi/10.1377/hblog20200715.454789/abs/>

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