TELEMEDICINE: ACCESS TO HEALTH CARE FOR PEOPLE WITH DISABILITIES†

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INTRODUCTION

About a year ago, I was having a conversation with my friend Karen about the transportation services within our remarkable city of Houston, Texas. Karen is blind, and her access to transportation, since she cannot drive or ride a bike, obviously differs substantially from my

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own. During our conversation, I mentioned the inevitable proliferation of self-driving cars, and how they would make getting around easier for all of us, whether or not we have disabilities. From the expression on her face, it was apparent that she had thought about this before. She quipped, “Do you want to bet that they’ll be accessible to those of us who are blind?” She had obviously read the same articles that I had, which described companies like Google and Tesla that envision future streets occupied exclusively by self-driving cars. For those of us with physical disabilities, self-driving cars embody independence because they potentially allow travel to anywhere by simply commanding a location on a car’s touch screen. Touch screens, on the other hand, are inaccessible to people with vision loss as they do not have any tactile indicators. Without the proper foresight, many of these technological marvels will undoubtedly utilize touch screens. Google, Tesla, and Karen all have the same vision, but each with different consequences. As I have already mentioned, for most, self-driving cars will mean greater independence, but for some, inaccessible self-driving cars will result in even less access to transportation, especially if the goal of replacing all traditional transportation is actually achieved. Imagine if the streets, highways, and freeways in Houston were made up solely of autonomous cars. The likely benefits will be lower transportation costs and less time spent in traffic. Furthermore, these vehicles will

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eliminate taxi fleets and maybe even other forms of public transportation. However, if these vehicles are designed in an inaccessible manner, then a portion of our population will have little to no access to meaningful transportation.

Karen’s sentiment exemplifies the growing concerns that people with disabilities face as our society becomes more and more reliant on technology. Our nation shifted from the industrial age to the information age over three decades ago. Technology has advanced exponentially, which is paralleled by our reliance on it. We send correspondence and pay bills online rather than through the mail. More and more people shop online rather than going to brick and mortar facilities. Companies like Uber and Lyft are reinventing demand responsive transportation and taking the place of taxis.

Over the years, disability rights advocates have spent a lot of time and energy fighting for accessible physical facilities for places of public accommodation. For example, video rental stores, such as Blockbuster, were accessible physical facilities for those with disabilities. Today, Blockbuster stores no longer exist, and Netflix and Redbox occupy the digital space that those physical facilities once held. As these technologies replace traditional institutions, their accessibility is

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imperative to ensure that people with disabilities are not excluded and segregated from this new virtual world.

ISSUE

This Article will focus on one of these emerging technologies—telemedicine. Telemedicine or telehealth\(^9\) refers to the provision of health care services through “the use of electronic information and telecommunication technologies.”\(^10\) In other words, a person can have access to his or her medical provider over a long distance by using software on a personal computer or a smart tablet. Like the previously described self-driving cars, telemedicine is yet another product of this evolving society where a traditional service—health care—is being provided through new means.

When examining the importance of making these emerging technologies accessible, it is significant to understand that emerging technologies not only supplement traditional services, but they alter the very nature of the services. Automated Teller Machines, better known as “ATMs,” illustrate how technology can alter the base service. People generally use ATMs to withdraw funds, which in turn means that fewer tellers need to be employed, which ultimately means that fewer tellers are available. To put it simply, ATMs have replaced bank tellers. If ATMs were to be inaccessible, then people with disabilities would have inferior access to banking services. Because telemedicine has the potential to forever alter how health care is provided, inaccessible telemedicine software may actually diminish the level of health care available to people with disabilities.

Since telemedicine offers a number of benefits compared to traditional means of delivering health care,\(^11\) its prevalence seems

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\(^9\) Telemedicine and telehealth are often used interchangeably. This article uses telemedicine for consistency’s sake.


\(^11\) These benefits include: Improved access to specialists, increased patient satisfaction with care, improved clinical outcomes, reduction in emergency room utilization, and cost savings. See Alexander Vo et. al., Benefits of Telemedicine in Remote Communities & Use of Mobile and Wireless Platforms in Healthcare, UTMB HEALTH, https://telehealth.utmb.edu/presentations
inevitable. Alas, the most influential factor for telemedicine’s acceptance may be that it lowers costs significantly for health care providers. For example, “implementation of a telemedicine program improved clinical as well as economic outcomes” for an intensive care unit where it was used to continually monitor consumers. Utilization of telemedicine improved mortality rates and lowered the length of stay, which “enabled the ICUs to accommodate more patients.” More patients meant more revenue, which “more than offset the cost” of the telemedicine program.

Furthermore, telemedicine can provide health care services to those who have limited access for one reason or another. For example, rural areas, by their nature, are widespread and removed, but the implementation of telemedicine for child psychiatry in a rural community in Kansas cost the patients and parents a fraction of providing the same services on site. Currently, medical care, especially specialized care, is inadequate in rural areas. Telemedicine may also be beneficial for the prison system where “[m]oving prisoners for health care consultations and for minor treatment have implications: it is a security risk, costly and disruptive.” State governments can utilize a more secure and efficient means of providing health care to those who are incarcerated, while decreasing


14 Id.
15 Id.
16 Ryan Spaulding et al., Cost Savings of Telemedicine Utilization for Child Psychiatry in a Rural Kansas Community, 16 TELEMEDICINE & E-HEALTH 867 (2010).
costs. Furthermore, telemedicine offers a number of advantages that benefit individuals with disabilities to a greater extent than those without disabilities. Telemedicine can bring health care to consumers directly on demand while eliminating physical barriers and eliminating transportation costs.

In summary, the argument for telemedicine’s adoption parallels those for other emerging technologies. If done properly, it can provide health care to those in remote areas, while proving cost effective to both health care providers and consumers. This Article, however, is not intended to advance telemedicine, but is intended to lay out a basic understanding and need for telemedicine’s accessibility.

TELEMEDICINE

As mentioned above, telemedicine is a new method of delivering health care services to consumers through modern telecommunication technologies. Its usefulness in traditionally underserved and isolated markets, such as rural areas, is obvious, but telemedicine may also become a common tool for medical care providers delivering services generally. The Affordable Care Act (“ACA”), if still applicable at this Article’s publication date, stresses preventive health care and lowered costs. As seen in the aforementioned studies, telemedicine is overtly useful in monitoring consumers and, thus, preventing avoidable medical complications, which in turn lowers health care costs.

However, there are barriers to telemedicine’s adoption. For one, telemedicine is dependent on broadband internet technologies. For those communities that do not have access to high speed internet, using telemedicine will be improbable. This includes both those that

19 Id.
20 Lacktman, supra note 10.
21 Vo et. al., supra note 11; Schadelbauer, supra note 17.
22 See Howard K. Koh & Kathleen G. Sebelius, Promoting Prevention Through the Affordable Care Act, 363 NEW ENG. J. MEDICINE 1296 (2010).
live in rural areas and those with lower incomes, including people with disabilities. Without the proper infrastructure in place, these services may not be able to reach the communities that could likely benefit from them the most.

Furthermore, regulatory barriers also exist. Consumers generally pay for medical care through reimbursement models, whether they are health insurance programs offered by private entities, usually through the employer, or those administered by the federal and state government—Medicare and Medicaid. Unfortunately, Medicare only covers telemedicine services in rural areas.

Consequently, those individuals with disabilities that are covered by Medicare may not have access to telemedicine merely because of where they live. Individual states can choose whether or not to cover telemedicine services under Medicaid. The Medicare Telehealth Parity Act and the Telehealth Enhancement Act are proposed legislation that seek to expand telemedicine coverage under Medicare. As of December 1, 2016, thirty-two states have legislation that permits the coverage of telemedicine services through Medicaid or private insurance companies. However, each state has its own licensing, certification, and regulatory requirements, making telemedicine available across state lines problematic, undermining the distance

24 Brian E. Whitacre, Denna Wheeler & Chad Landgraf, What Can the National Broadband Map Tell Us About the Health Care Connectivity Gap?, The 33 J. RURAL HEALTH 284, 284 (2016).


26 Health Insurance Coverage of the Total Population, Kaiser Family Foundation, http://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D (last visited June 6, 2017).


barrier that telemedicine eliminates. Furthermore, this regulatory obstacle is amplified by the fact that the consumer’s location, not the treating physician’s, controls which state law applies. Essentially, the lack of a national regulatory framework for telemedicine can impede its utility. The Telemedicine for Medicare Act seeks to curb this barrier by permitting a medical professional to provide telemedicine services to Medicare consumers that are in a different state than the one the medical professional is licensed in. In addition, the varied nature of prescription regulations are yet another jurisdictional hurdle impeding telemedicine’s sweep. For example, while some states allow medical professionals to prescribe via long distance, others stipulate that prescriptions can only take place through face-to-face encounters.

While not overwhelmingly comprehensive, there are several legislative and regulatory efforts to foster telemedicine. One topic that is not addressed by the regulatory framework, however, is access for people with disabilities. This is not surprising since accessibility, especially for emerging technologies, is a common oversight of lawmakers. The most significant access barriers for telemedicine may concern users who are blind or deaf. People with visual disabilities access websites and other telecommunication technologies through


software that, in effect, translates the visual into audio.\textsuperscript{36} For those who are blind or have vision loss, the telemedicine programs may not be equipped to accommodate screen reader, magnification, or high contrast software. Individuals with hearing loss or who are deaf have the converse concern, where the speech or auditory cues must be made visual through captions, transcriptions, or the assistance of an American Sign Language (ASL) interpreter.\textsuperscript{37} Even so, the concern for hearing-impaired users is very much the same: that the telemedicine programs may not be ready to address those needs.

**ACCESS**

To understand the need for accessibility, a brief review of the various disability rights laws is key. Access is a civil right, and these civil rights laws are essential because market forces have not traditionally provided for access for people with disabilities.\textsuperscript{38} While there are nearly fifty-four million people with disabilities in the United States,\textsuperscript{39} the population of people with disabilities is nonhomogeneous, meaning that they suffer from a variety of different disabilities. For example, a person who is blind has different barriers than someone with missing limbs. Additionally, two people with vision loss may deal with the same barriers in different ways, where one may use braille to read materials and the other may use a screen reader. Overall, the diverse nature of the population makes it difficult, if not impossible, to quantify any economic benefits there may be to making facilities and goods and services accessible.

One of the first of these civil rights laws is the Architectural Barriers Act, which mandated that all facilities built, altered, or leased

\begin{itemize}
  \item \textsuperscript{39} 53 Million Adults in the US Live with a Disability, CTR. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/media/releases/2015/p0730-us-disability.html (last visited Jan. 31, 2017).
\end{itemize}
by federal funds be accessible to people with disabilities. In addition, the Rehabilitation Act of 1973 aims to eliminate disability-based discrimination in federal programs or programs administered by entities that receive federal assistance. Section 508 of the Rehabilitation Act mandates that electronic and information technologies be accessible when procured, developed, maintained, or used by federal agencies and departments. Members of the public as well as federal employees have a right to accessible technologies under Section 508. Furthermore, Section 255 of the Communications Act requires that certain telecommunications technologies and services be accessible to individuals with disabilities. However, the farthest reaching and well known of these civil rights laws is the Americans with Disabilities Act (ADA), and its purpose is to ensure that people with disabilities have equal access to employment, state and local government services, and public accommodations. Accordingly, the ADA furnishes the most persuasive means for accessible telemedicine services.

Titles II and III of the ADA mandate that medical providers communicate effectively with consumers and their companions. Generally, medical providers have a duty to furnish ASL interpreters to facilitate communications with individuals that are deaf or have hearing loss. Similarly, written materials must also be made accessible to individuals that are blind or have vision loss via alternative accessible means such as braille, audio, or digital formats. Telemedicine companies will undoubtedly contend that they are not medical providers but “technology companies,” and are therefore

excluded from the ADA’s coverage. Uber made an analogous argument when it faced a lawsuit from the National Federation for the Blind (NFB). In that case, the NFB alleged that Uber violated Title III of the ADA when Uber drivers refused to transport individuals with service dogs as well as a number of other discriminatory acts. Uber moved to dismiss on the basis that it does not fall under the scope of the ADA. The Department of Justice (DOJ) submitted a statement of interest in which it laid out the foundation for the ADA’s applicability to Uber as a private transportation provider. Ultimately, the court did not find Uber’s motion persuasive.

Website accessibility cases may be even more revealing as to how the ADA applies to telemedicine. There are essentially two viewpoints on whether or not online services ought to be accessible. The majority of district courts that have reviewed the issue have held that websites are not places of public accommodation and do not fall under the scope of the ADA, unless there is a “nexus” to the physical business. The National Federation of the Blind v. Target is one of the more illustrative holdings explaining this requirement. In that case, Target argued that “the ADA prohibits only discrimination occurring on the premises of a place of public accommodation, and that ‘discrimination’ is limited to the denial of physical entry to, or use of, a space.” The court disagreed with the defendant and reasoned that the website was covered by Title III of the ADA because it encompasses the services offered by the physical stores. While the court noted that “the purpose of the statute is broader than mere physical access,” it also declared that websites unconnected to physical stores do not fall within the ADA’s reach. At least one court, however, has held that websites ought to be accessible even without a “nexus”

50 Id.
52 Id.
55 Id.
to physical places. The court in *National Association of the Deaf v. Netflix* gave great deference to the statute’s legislative history, which indicates that the ADA was “intended to adapt to changes in technology.” The DOJ also takes the position that the ADA obliges private entities to have accessible websites.

The ADA was passed before the Internet was implemented, so it is not surprising that the statute is ambiguous on the issue. Although there is a judicial split regarding the circumstances under which the ADA should apply to online services, there is a general consensus that it does indeed apply. The Court in *National Federation of the Blind v. Scribd* articulated this sentiment perfectly:

> The Internet is central to every aspect of the 'economic and social mainstream of American life.' In such a society, excluding businesses that sell services through the Internet from the ADA would 'run afoul of the purposes of the ADA and would severely frustrate Congress’s intent that individuals with disabilities fully enjoy the goods, services, privileges, and advantages available indiscriminately to other members of the general public.'

However, the obligation to have accessible telemedicine services extends beyond communications with consumers and applies to employees as well. If these services are inaccessible, then medical providers with disabilities will be excluded from the field. Practically

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56 Id.

57 *Id.*


60 *Id.*
speaking, employers may also face liability for adopting inaccessible software. In Reyazuddin v. Montgomery County, the defendant implemented a new software system for its call center. The software was inaccessible to the plaintiff employee, who was blind. The court of appeals ultimately sided with the plaintiff, finding that the county ought to have made the software accessible.

CONCLUSION

To summarize, telemedicine is one of several emerging technologies that may alter our lives. Our society is becoming more and more reliant on technology. This reliance seems unavoidably apparent when one observes most of the population going about their daily lives with their eyes glued to their smartphones or other electronic screens. On one hand, technology can break down barriers and make the world more accessible for people with disabilities, but if these technologies are inaccessible, then they can have the opposite effect and further segregate those with disabilities. Telemedicine certainly has the potential to expand access to health care. By utilizing telemedicine, people with disabilities can receive many health services in or near their homes without being constrained or frustrated by limited transportation options and by physical facility barriers. However, without proper consideration of accessibility issues, telemedicine services will lead to even less access to health care for people with disabilities because it will alter the very nature of how medical services are delivered. Because there is little or no jurisprudence on how disability rights laws apply to telemedicine, case law is paramount. In this regard, the aforementioned line of cases for website accessibility may be viewed as indicative of requirements under the ADA. They may also signal how the courts will interpret the ADA when it is applied in cases involving telemedicine. In an environment where Congress has not acted expeditiously to clarify legislative intent as it relates to the ADA and telemedicine, rulemaking

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62 Id.
63 Id.
and enforcement agencies and courts will be left to ensure that people with disabilities are both not segregated and enjoy the same access as those without disabilities. Like other emerging technologies, telemedicine is a tool that can act as an equalizer for people with disabilities, but without the proper foresight and oversight, tools can be misused and cause more harm than good.