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COMMENT

Removing Barriers to Telehealth in Oklahoma: Increasing Access to Care and Improving Health Outcomes Across the State

I. Introduction

Imagine that today is July 1, 2014, and you live in north Tulsa, a statistically poor area of the city. You receive health coverage through Oklahoma's Medicaid program, SoonerCare, you have a terrible sore throat, and you don't have a car. You take off work and ride the bus to visit your primary care doctor, who examines your throat and is concerned about what she sees. She feels that your sore throat might be something serious, something beyond the scope of her training. So she refers you to an Ear, Nose, and Throat (ENT) specialist for a second diagnosis and treatment plan. The ENT specialist's office is in south Tulsa, eighteen miles away from your house and fifteen miles away from your primary care physician's office. Making the trip to the ENT specialist's office is more than just a hassle: it means missing more work—likely reducing your day's pay—and spending hours riding busses, waiting at the clinic, and talking with nurses just to eventually see a doctor. Wouldn't it be more convenient if you could just videoconference with the specialist from your primary care provider's office?

Enter telehealth. Though there are a variety of definitions, telehealth is essentially the delivery of health care and medical information through telecommunication technologies. And there are a variety of health care delivery methods that fall under the telehealth umbrella. The most common form of telehealth is telemedicine, which involves the use of videoconferencing equipment to "have a live, real-time interaction with a specialist, almost as if they are in the same room." There is also remote patient monitoring, which includes the compilation of health data from patients while they are in their homes or in intensive-care settings and the transmission of the collected data to a health care provider at a distant location. Another form of telehealth is store-and-forward imaging, which is used to transmit images, like MRI results, x-rays, and CT scans, from the

^{1.} *General Information: What Is Telehealth?*, UNIV. Mo. SCH. MED., http://medicine.missouri.edu/telehealth/general.html (last visited Mar. 24, 2016).

^{2.} Id.

^{3.} *Id*.

patient's location to the provider's location. Even mobile devices (phones, tablets, etc.) can be used to transfer information between patients and their providers—an innovation referred to as mHealth. All in all, technology has created many opportunities for health care to become more efficient and more available for patients.

And though it is useful to improve health outcomes, telehealth has not created new health services. It has merely established new methods of delivering existing services. In essence, telehealth bridges the distance between patients and providers by allowing patients to conveniently stay in their communities and get treated by a specialist at a distant site. This bridge is particularly useful for those living in underserved rural and urban communities because it creates access to specialized health care that otherwise may not be available. Moreover, telehealth reduces the amount of travel time and expenses of in-person health care, resulting in patients spending less time off work and being more likely to pursue specialized treatment.

These benefits are especially useful in Oklahoma because of the state's poor health status, ¹⁰ large number of individuals living in rural areas, ¹¹ and disproportionately low number of health care providers living and working in rural communities. ¹² This value was recognized years ago, and efforts to introduce telemedicine in Oklahoma began in 1993. ¹³ Since that time, statutes have been passed, telemedicine-specific entities have formed, regulations have been enacted, and many health providers have utilized existing technologies. As a result, there are over 500 active telemedicine sites across the state today. ¹⁴ This increase in access to health care has

- 4. MHealth, HIMSS, http://www.himss.org/mhealth (last visited Mar. 24, 2016).
- 5. General Information: What Is Telehealth?, supra note 1.
- 6. *Id*.
- 7. *Id*.
- 8. *Id*.
- 9. *Id*.
- 10. OKLA. St. Dep't of Health, 2014 State of the State's Health 5 (2014), http://www.ok.gov/health/pub/boh/state/SOSH%202014.pdf.
- 11. VAL SCHOTT, OKLA. ST. UNIV. CTR. FOR RURAL HEALTH, TELEMEDICINE & DISTANCE LEARNING IN RURAL OKLA. 3 (2010), http://integrisok.com/upload/docs/Telehealth/Val%20Shott_Telemedicine%20%20Distance%20Learning%20In%20Rural%20Oklahoma%202010.pdf.
 - 12. Id. at 5.
- 13. *Telemedicine History*, UNIV. OKLA. HEALTH SCI. CTR., http://www.ouhsc.edu/at/CenterforTelemedicine.asp (last visited Mar. 23, 2016).
- 14. OHIP Infrastructure Workforce Workgroup, 2014 OHIP Work Group Quarterly Report 1 (2014), http://www.ok.gov/health2/documents/OHIP-Workforce% 20

greatly benefited Oklahomans.¹⁵ But, like all states, Oklahoma is still trying to develop more efficient methods of providing telehealth services to its citizens in light of rapidly advancing technology.

For instance, until recently, SoonerCare restricted reimbursement for telemedicine services through rural-location requirements. 16 To receive coverage, a patient had to be in a county with fewer than 50,000 people and located at least twenty miles away from the doctor providing telemedicine services. 17 Thus, SoonerCare would cover a telemedical consultation between a patient in rural Okmulgee County (population: 39,187)¹⁸ and a specialist in south Tulsa County, twenty-five miles away. But SoonerCare would not cover a telemedical consultation between a patient in north Tulsa County (population: 639,242)¹⁹ and the same specialist in south Tulsa County, eighteen miles away, because Tulsa County is too populous and the patient and provider are too close together. This distinction unnecessarily limits access to care; both patients can benefit from telemedicine. Thankfully this sentiment was not unique, and on August 27, 2015, the Oklahoma Health Care Authority removed this and other barriers that prevented SoonerCare members from enjoying the use of telehealth services.

This Comment considers telehealth in Oklahoma, addresses former gaps in regulation, and discusses how the recent amendments will increase access to care and improve health outcomes across the state. Part II presents a brief background on telehealth, defining relevant terms, exploring its short history, considering the associated benefits and drawbacks, and addressing why the federal government and states can provide insight on Oklahoma's policies. Part III delivers an overview of the poor health status of Oklahoma, highlighting why telehealth can play a pivotal role in improving health outcomes, and provides a summary of the efforts of Oklahomans to build a telehealth network across the state. Part IV then discusses how

Quarterly %20 Report %20-%20 Provision %20 of %20 primary %20 care %20-%20 Goal %20 (1) %20-%20 2nd %20 Qtr %20 SFY 2014.pdf.

^{15.} See Brian E. Whitacre et al., The Economic Impact of Telemedicine Capability in a Rural Hospital 12-22, 32-33 (2007), http://ruralhealthworks.org/wpcontent/files/Telemedicine_EI_Study-Dec-2007.pdf.

^{16.} See OKLA. ADMIN. CODE § 317:30-3-27(c) (amended 2015).

^{17.} *Id.* § 317:30-3-27(b)(5), (c)(2), & (g)(4).

^{18.} *Population Estimates: Okmulgee County, Oklahoma*, U.S. CENSUS BUREAU (July 1, 2015), http://www.census.gov/quickfacts/table/PST045215/40143,00.

^{19.} *Population Estimates: Tulsa County, Oklahoma*, U.S. CENSUS BUREAU (July 1, 2015), http://www.census.gov/quickfacts/table/PST045215/40143,00.

Oklahoma removed various regulatory issues that served as barriers to telehealth in order to improve Oklahoma's health care system.

II. Background and History of Telehealth

A. Defining "Telehealth"

Telehealth is a "collection of means or methods for enhancing health care, public health, and health education delivery and support using telecommunications technologies." While the term "telemedicine" has been more commonly used in the past, "telehealth" is a more comprehensive term used to denote the broad array of telecommunications applications in the health field today. Those applications cross most health-service disciplines, including dentistry, counseling, physical and occupational therapy, speech pathology, home health, and many others. Further, the practice of telehealth extends beyond traditional diagnostic and monitoring activities to include consumer and professional education; but it does not incorporate health information technology or health information exchanges. 22

In application, however, state and federal agencies differ on how they define telehealth. For example, California law defines telehealth as:

[T]he mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.²³

Meanwhile, the federal Health Resources and Services Administration defines telehealth as "the use of technology to deliver health care, health information or health education at a distance." These varying definitions

^{20.} A Framework for Defining Telehealth, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/sites/default/files/uploader/Telehealth%20Definintion%20Framework%20f or%20TRCs_0.pdf (last visited Mar. 23, 2016).

^{21.} *Id*.

^{22.} *Id*.

^{23.} CAL. BUS. & PROF. CODE § 2290.5 (2014).

^{24.} *Telehealth*, HEALTH RES. & SERV. ADMIN., http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Telehealth/whatistelehealth.html (last visited Mar. 23, 2016).

influence the policies and regulations surrounding how telehealth is used, and, as a result, these policies vary as much as the definitions themselves.

In spite of the varying definitions, telehealth typically encompasses four distinct domains: live video conferencing, store-and-forward imaging, remote patient monitoring, and mobile health (mHealth). Video conferencing involves live, two-way interactions between a patient and a health care provider through audio-visual telecommunications technologies. This has historically been the most common application of telehealth care and is often referred to as telemedicine.

Store-and-forward imaging refers to the transmission of pre-recorded health data through an electronic communications system to a health care provider, usually a specialist, who uses the information to evaluate a patient's case or deliver services. This information might include x-rays, MRIs, photos, and videos. In contrast to a real-time visit, store-and-forward services provide access to data after it has been collected and involve communication tools such as secure email. 30

Remote patient monitoring is the collection and electronic transfer of health data from an individual in one location to a health care provider in a different location for use in patient care.³¹ Monitoring systems can gather a wide range of medical data from the patient, such as vital signs, blood pressure, weight, blood-oxygen levels, blood sugar, electrocardiograms, and heart rate.³² This type of telehealth service is most useful for chronically ill patients because it allows a provider to continuously track the health data of patients after they have been released from the hospital.³³

^{25.} What Is Telehealth?, MID-ATLANTIC TELEHEALTH RES. CTR., http://www.matrc.org/what-is-telehealth (last visited Mar. 23, 2016) [hereinafter *Mid-Atlantic Telehealth Definition*].

^{26.} *Id*.

^{27.} Video Conferencing, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/whatis-telehealth/video-conferencing (last visited Mar. 23, 2016).

^{28.} Mid-Atlantic Telehealth Definition, supra note 25.

^{29.} Store and Forward, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/store-and-forward (last visited Mar. 23, 2016).

^{30.} What Is Telehealth?, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/whatis-telehealth (last visited Mar. 23, 2016) [hereinafter Connected Health Policy Telehealth Definition].

^{31.} Mid-Atlantic Telehealth Definition, supra note 25.

^{32.} Remote Patient Monitoring, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/remote-patient-monitoring (last visited Mar. 23, 2016).

^{33.} Connected Health Policy Telehealth Definition, supra note 30.

Mobile health (mHealth) is the health care and public health practice supported by mobile communication devices such as cell phones and tablets.³⁴ Examples of mHealth include text messages that encourage healthy behavior, secure videoconferencing for medical care, alerts about disease outbreaks, and the gamification of health to promote a healthy lifestyle.³⁵ mHealth is the least-developed form of telehealth because legislators and regulators want to ensure devices and programs are HIPPA compliant before removing restrictions. While telehealth is certainly a broad field with overlapping domains, it has not always been so expansive.

B. A Brief History of Telehealth

The genesis of telehealth can be traced back to the National Aeronautics and Space Administration (NASA).³⁶ In the 1960s, coinciding with the earliest Mercury and Gemini flights, NASA needed a way to monitor the physiological conditions of astronauts, so scientists created technologies that allowed long-distance transmissions of medical data through space.³⁷

Then, as telecom technology boomed in the late twentieth century, so did its use in the health care industry. In the 1970s, after the successful use of telemedicine in space, NASA partnered with the Indian Health Service and the Papago Indian Tribe in Arizona³⁸ to develop methods for the reservation's health care providers to communicate with specialists at a distant hospital.³⁹ Though there were a number of technical difficulties, evaluations still concluded that the delivery of care provided through telemedicine was comparable in quality to care provided through on-site consultations.⁴⁰ The success of the project led to the creation of similar programs in Alaska.⁴¹ Then, throughout the 1980s and 1990s, NASA improved long-range monitoring capabilities,⁴² allowing the government

^{34.} *Mobile Health*, CTR. FOR CONNECTED HEALTH POL'Y, http://cchpca.org/mobile-health (last visited Feb. 11, 2015).

^{35.} Mid-Atlantic Telehealth Definition, supra note 25.

^{36.} Charles R. Doarn et al., *Applications of Telemedicine in the United States Space Program*, 4 TELEMEDICINE J. 19, 19-21 (1998).

^{37.} Id.

^{38.} Id. at 22-23.

^{39.} Id. at 21-27.

^{40.} Michael Fuchs, *Provider Attitudes Toward STARPAHC: A Telemedicine Project on the Papago Reservation*, 17 MED. CARE 59, 64-66 (1979).

^{41.} Doarn et al., supra note 36, at 22.

^{42.} V. Garshnek, Applications of Space Communications Technology to Critical Human Needs: Rescue, Disaster Relief, and Remote Medical Assistance, 8 SPACE COMM. 311, 311-12 (1991).

and disaster-management organizations to use telemedicine in times of war⁴³ and natural disaster.⁴⁴ Indeed, the 1990s saw a large adoption of telemedicine by health systems. Eventually, the availability of highly sophisticated computer systems made telemedicine an "integral part of health care delivery...."

Today, the use of telemedicine has expanded and falls under the umbrella of telehealth. As of 2009, two-thirds of health care organizations used telehealth services and, of the remaining third, most planned to do so by 2010.

C. The Pros and Cons of Telehealth

The value of telehealth is clear for three reasons. First, telehealth increases access to health care. 47 Many individuals have a difficult time accessing in-person care because they are limited by time, distance, or transportation barriers. 48 Further, many communities face a shortage of health care providers, and patients may lack access to providers within their insurance networks. 49 But through telehealth, disparities in access to care are reduced and physician availability is enhanced. 50 Patients in rural areas can more easily attain specialty services, such as stroke, trauma, and intensive care treatment, without having to travel long distances outside of

^{43.} See, e.g., Dean E. Calcagni et al., Operation Joint Endeavor in Bosnia: Telemedicine Systems and Case Reports, 2 Telemedicine J. 211, 211-15 (1996) (discussing the early application of telemedicine by the United States military in Bosnia).

^{44.} *See, e.g.*, Doarn et al., *supra* note 36, at 23 (discussing the early use of satellite telemedicine to facilitate disaster relief in the wake of earthquakes in Mexico City and Armenia); Garshnek, *supra* note 42, at 314 (same).

^{45.} Patricia C. Kuszler, *Telemedicine and Integrated Health Care Delivery: Compounding Malpractice Liability*, 25 Am. J. L. & MED. 297, 302 (1999) (internal citations omitted).

^{46.} Melanie Matthews, *Two-Thirds of Healthcare Organizations Use Telehealth*, HEALTHCARE INTELLIGENCE NETWORK (Feb. 4, 2010), http://hin.com/blog/2010/02/04/two-thirds-of-healthcare-organizations-use-telehealth/.

^{47.} *Benefits of Telehealth/Telemedicine?*, SE. TELEHEALTH RES. CTR., http://www.setrc.us/index.php/what-is-telehealth/benefits-of-telehealth-telemedicine/ (last visited Mar. 23, 2016).

^{48.} AM. TELEMEDICINE ASS'N, ATA STATE POLICY TOOLKIT: IMPROVING ACCESS TO COVERED SERVICES FOR TELEMEDICINE 3, http://www.americantelemed.org/docs/default-source/policy/ata-state-policy-toolkit---coverage-and-reimbursement.pdf?sfvesn=4 (last visited Mar. 23, 2016).

^{49.} Id.

^{50.} Id.

their local communities.⁵¹ And school-based telehealth programs allow children to receive care without having to miss an extended amount of class and without parents having to take off work to take them to the doctor.⁵² Moreover, specialists and other health care providers are able to expand their reach through telehealth and treat patients that may not otherwise seek their services.⁵³ This alleviates stress caused by shortages of health care providers.⁵⁴

Second, telehealth improves health outcomes.⁵⁵ The convenience of speaking with a specialist without leaving one's community enables patients to be diagnosed earlier.⁵⁶ As a result, patients can also be treated earlier, which can contribute to improved health outcomes and less costly treatments.⁵⁷ For instance, patients who have received medical care through telehealth-supported intensive care units have experienced reduced mortality rates, reduced complications, and reduced hospital stays—i.e., improved health outcomes.⁵⁸

Third, telehealth lowers health care and other costs. ⁵⁹ When specialists coordinate with local health providers, disease management is improved. ⁶⁰ This results in fewer complications and hospitalizations, which, in turn, saves money. ⁶¹ Additionally, the use of telehealth in individuals' homes and in nursing homes reduces expensive transportation costs and unnecessary emergency room visits. ⁶²

While the benefits of telehealth strongly favor its use, there can be a few negative side effects. One drawback includes a possible breakdown in the relationship between health professionals and patients.⁶³ A variety of factors may contribute to a breakdown in the relationship, such as the inability to perform a full medical consultation, the different consultation

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51. Benefits of Telehealth/Telemedicine?, supra note 47.
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^{52.} Id.

^{53.} *Id*.

^{54.} Id.

^{55.} Id.

^{56.} *Id*.

^{57.} *Id*.

^{58.} *Id*.

^{59.} Id.

^{60.} *Id*.

^{61.} Id.

^{62.} *Id*.

^{63.} N M Hjelm, *Benefits and Drawbacks of Telemedicine*, 11 J. TELEMEDICINE & TELECARE 60, 66 (2005), http://telemedicina6.unifesp.br/set/curso/2006-06-19-pgsaude/Fundamental_BenefitsandDrawbacksofTelemedicine.pdf.

process, and the depersonalization of care.⁶⁴ Each factor could lead to patients' reduced confidence in doctors.⁶⁵

Additionally, an increase in the use of telehealth might lead to a breakdown in the relationship between health professionals. ⁶⁶ For instance, highly skilled health providers at an origination site (the site where the patient is physically located) may feel that their autonomy has been limited by having to defer to the judgment of a specialist at a distant location. ⁶⁷ Though these fears are justifiable, they pale in comparison to the abundant benefits of telehealth.

Because telehealth increases access to health care, improves health outcomes, and reduces costs, the benefits greatly outweigh any potential breakdown in provider-patient or provider-provider relationships. Accordingly, these benefits have led to a boom in the use of telehealth across the country. And, just as with any burgeoning industry, so too comes the government's desire to regulate it.

D. State Authority to Regulate Health Care

For over 100 years, health care in the United States has primarily been regulated by the states.⁶⁸ This authority is rooted in each state's general police power to further the health, safety, and welfare of its population, as reserved by the Tenth Amendment to the U.S. Constitution.⁶⁹ Yet, the states' power to regulate health care is not absolute. The federal government does have the authority to enact national standards that regulate certain aspects of health care (e.g., Medicare).⁷⁰ Moreover, the Commerce Clause of the Constitution restrains states' ability to inhibit interstate trade,⁷¹ and the practice of health care has been considered an interstate

^{64.} Id. at 66-67.

^{65.} *Id*.

^{66.} Id. at 68.

^{67.} Id.

^{68.} MARY K. WAKEFIELD, TELEHEALTH LICENSURE REPORT 7-9 (2010), http://www.hrsa.gov/healthit/telehealth/licenserpt10.pdf.

^{69.} Goldfarb v. Va. State Bar, 421 U.S. 773, 792 (1975); *see also* Ferguson v. Skrupa, 372 U.S. 726, 731 (1963); Dent v. West Virginia, 129 U.S. 114, 122 (1889).

^{70.} Licensure and Scope of Practice, Telehealth Res. Ctrs., http://www.telehealth resourcecenter.org/toolbox-module/licensure-and-scope-practice (last visited Mar. 23, 2014).

^{71.} WAKEFIELD, *supra* note 68, at 8 & n.5 ("The Commerce Clause of the Constitution grants Congress the power 'to regulate Commerce with foreign Nations, and among the several states, and with Indian Tribes.' Art. I, Sec. 8, cl. 3. 'Although the Clause thus speaks in terms of powers bestowed upon Congress, the Court has long recognized that it also limits the power of the states to erect barriers against interstate trade."")) (quoting Maine v. Taylor, 477 U.S. 131, 137 (1986)).

practice for the purpose of antitrust laws.⁷² Additionally, state laws that interfere with, or are contrary to, the laws of the federal government may be preempted under the Supremacy Clause of the Constitution.⁷³ Though the federal government can limit some aspects of states' ability to regulate health, most decisions regarding health care regulation are left to the states.⁷⁴

This system has essentially created fifty-two different laboratories to test regulatory frameworks: the fifty states, the District of Columbia, and Medicare regulations. And with the rapid growth of telehealth across the nation, there is much to be tested. Each state has developed its own telehealth networks, borrowing components from other states and Medicare, while also creating innovative policies to care for its own residents. By analyzing the successes and failures of Medicare and various states, and by considering Oklahoma's old regulatory framework, it is clear that Oklahoma's new telehealth regulations will best provide for the state's citizens in a much-needed effort to improve health outcomes.

III. Health and Telehealth in Oklahoma

A. The State of the State's Health

Oklahoma faces many health challenges. Compared to other states, it ranks forty-fourth in overall health status, 75 and its mortality statistics are particularly disturbing. The state has the "fourth highest rate of death from all causes in the nation," 23% higher than the national rate. 76 What is more, the mortality rate in Oklahoma dropped a mere 5% over the past twenty years compared to the nation's 20% drop over the same time period. 77 In comparison to the other forty-nine states, the specific leading causes of death in Oklahoma are harrowing: twelfth in death due to cancer, third in death due to heart disease, fourth in death due to stroke, first in death due to chronic lower respiratory disease, and fourth in death due to diabetes. 78

^{72.} Id. at 8 (citing Arizona v. Maricopa Cty. Med. Soc'y, 457 U.S. 332 (1982) as an example).

^{73.} U.S. CONST. art. VI, cl. 2.

^{74.} WAKEFIELD, *supra* note 68, at 8 (citing McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316, 427 (1819); Cippolone v. Liggett Grp., 505 U.S. 504, 516 (1992)).

^{75.} OKLA. St. DEP'T OF HEALTH, *supra* note 10, at 3.

^{76.} Id. at 4.

^{77.} Id.

^{78.} Id.

Said simply by the Oklahoma State Department of Health, "Oklahoma is not keeping up with the rest of the nation." ⁷⁹

Oklahoma's poor health outcomes are the result of a variety of factors, yet three rise above the rest: unhealthy individual behavior, paucity of insurance coverage, and lack of geographic access to care. First among these factors is Oklahomans themselves. Certain behavioral risk factors, which "disproportionately overburden Oklahomans," contribute substantially to the state's high mortality rates. For example, Oklahoma ranks forty-fourth in physical activity, forty-eighth in fruit consumption, forty-fourth in vegetable consumption, and sixth in obesity. Add to that a 23% smoking rate among Oklahoma adults—4% above the national average—and you've painted a fairly unhealthy picture of Oklahoman life. **Section**

Next, compound that kind of personal health with the fact that 18% of Oklahomans are uninsured. 83 Though this rate has improved from nearly 22% in 2011, the lack of health care coverage still acts as a significant barrier for many Oklahomans. 84 Statistically, "[i]ndividuals without health insurance are less likely to receive preventative care and are more likely to delay treatment." 85 This leads to more expensive and aggressive treatment of late-stage ailments.

Finally, and most relevant to this Comment, many Oklahomans lack access to health care for geographic reasons. Oklahoma is a rural state. Only four of the state's seventy-seven counties are designated as urban, and only 45% of the state's citizens live within those four counties. Though less than half of Oklahoma's population lives in urban areas, 64% of the state's active primary care physicians work exclusively in urban areas, and only 3% work in both urban and rural settings. Thus, only 23% of active primary care physicians are fully dedicated to treating 55% of the population throughout seventy-three of the seventy-seven counties. In short, many Oklahomans live in rural areas where too few doctors are available to provide care.

^{79.} *Id*.

^{80.} Id.

^{81.} Id.

^{82.} *Id*.

^{83.} Id. at 45.

^{84.} Id.

^{85.} Id.

^{86.} SCHOTT, *supra* note 11, at 3.

^{87.} Id. at 5.

Although Oklahoma must surmount significant obstacles to improve the overall health status of the state, individuals and entities are earnestly working to do so. And though it will not entirely change the course of health care in Oklahoma, telehealth can play a large role. Oklahoma recognized this over two decades ago and has taken steps toward developing a prudent policy that balances patient safety and access to care by expanding access to telehealth services for people across the state.

B. The History of Telehealth in Oklahoma

Widespread use of telemedicine in Oklahoma began in 1993, with over forty-five rural hospitals, fifteen regional hospitals, and the University of Oklahoma Health Sciences Center utilizing telemedicine technology. 88 In 1997, as telemedicine's popularity grew and its benefits became evident, the state legislature passed the "Oklahoma Telemedicine Act." The Act defined telemedicine as "the practice of health care delivery, diagnosis, consultation, treatment, including but not limited to, the treatment and prevention of strokes, transfer of medical data, or exchange of medical education information by means of audio, video, or data communications." The Act further provided guidance on coverage of telemedicine services 90 and procedures regarding the informed consent of patients.

Just one year later, in 1998, the state passed legislation that designated responsibility for telemedicine across the Sooner State. The Oklahoma Legislature declared that "[w]ith available state or federal funds, the State Department of Health shall be the state entity responsible for telemedicine and development of a statewide Oklahoma telemedicine network." The State Department of Health would also be responsible for "the continued development and implementation of a statewide system for the delivery of medical and other health care services through a telehealth system."

In order to achieve these ends, the State Board of Health established a separate office within the State Department of Health, known as the Oklahoma Center for Telemedicine. 95 The Oklahoma Center for

^{88.} Telemedicine History, supra note 13.

^{89. 36} OKLA. STAT. § 6802 (2011).

^{90.} Id. § 6803.

^{91.} Id. § 6804.

^{92. 63} OKLA. STAT. § 1-2702 (2011).

^{93.} *Id*.

^{94.} *Id*.

^{95.} Id.

Telemedicine, run by the University of Oklahoma Health Sciences Center (OUHSC), has the power and duty to "[f]acilitate the development of Oklahoma's health information infrastructure, [d]evelop telemedicine solutions, [and] [r]esearch the effectiveness of telemedicine applications." ⁹⁶

To further address the health needs of Oklahomans through telemedicine, the legislature created the Oklahoma Rural Health Policy and Research Center at the Oklahoma State University College of Osteopathic Medicine (OSU Rural Health Center). The mission of the OSU Rural Health Center is to "(a) improve rural health care delivery in Oklahoma through the coordination of rural medical education, telemedicine, research, and health care policy, and (b) establish a process for . . . hospitals to request designation as a rural health care delivery system"

Together, the OUHSC Center for Telemedicine and the OSU Rural Health Center have collaborated to lead a host of entities to expand telemedicine's use in Oklahoma for training and supervising practitioners, and for increasing the availability of health providers to patients in rural areas. Those entities include the Oklahoma Health Care Authority, the Oklahoma Hospital Association, the Oklahoma Board of Medical Licensure, the Oklahoma Department of Mental Health and Substance Abuse Services, the Oklahoma Health Care Workforce Center, the Oklahoma Board of Nursing, the Oklahoma City/County Health Department, the Tulsa Health Department, and the Oklahoma Dental Association. This group has helped increase the number of active telemedicine sites in Oklahoma from 139 in 2010, to 177 in 2011, and to over 500 sites in 2012.

^{96.} Telemedicine History, supra note 13; see 63 OKLA. STAT. § 1-2702 ("The Center shall have the power and duty to: (a) assess the current status and needs of the telemedicine network and telehealth in the state, (b) utilize available state and federal funds to the maximum extent possible, (c) for the purposes of the continued development of telehealth services in the state, engage with any and all parties to encourage and assist communications between entities requiring telemedicine services and entities offering or providing telemedicine services, (d) resolve problems and otherwise improve the delivery of telemedicine services, (e) assist and facilitate the coordination efforts of hospitals and other health care facilities and providers in the development and delivery of telemedicine services, (f) explore ways to provide reimbursement to providers for telehealth services, (g) explore the feasibility of providing health education services through a telehealth system, (h) study issues of compatibility of technology, and (i) establish and maintain a website and a clearinghouse for grant information as provided by Section 1-2703 of this title.")

^{97. 70} OKLA. STAT. § 3424.1 (2011).

^{98.} *Id*

^{99.} OHIP INFRASTRUCTURE WORKFORCE WORKGROUP, supra note 14, at 4.

^{100.} Id. at 1.

This group and the State of Oklahoma have made tremendous strides in implementing sound infrastructure, developing effective policies, and quickly spreading the use of telemedicine across the state. Their efforts have already made an impact in rural communities. For instance, a study conducted in 2007 by the OSU Rural Health Center analyzed data from twenty-two telehealth care providers throughout Oklahoma ¹⁰¹ and considered four economic impact categories: (1) "[h]ospital cost savings from outsourcing telemedicine procedures," (2) "[t]ransportation savings to patients," (3) "[m]issed work income savings to . . . patients," and (4) "[l]aboratory testing/pharmacy work performed locally." The study concluded by estimating that "rural communities whose hospitals choose to implement telemedicine can expect to see an economic impact of between \$185,000 and \$1,800,000 each year from the use of telemedicine services." ¹⁰³

As demonstrated by the OSU Rural Health Center study, the economic impact of telehealth in Oklahoma is significant and encouraging. And though Oklahoma has seen success, telehealth leaders understand that the task of providing a strong telehealth network is not yet complete. Thankfully, the Oklahoma Health Care Authority took the next step in 2015 to aid these ongoing efforts by revising its regulations. ¹⁰⁴

IV. Removing Barriers to Telehealth in Oklahoma

Oklahoma's newly amended telehealth policy for Medicaid became effective on August 27, 2015. Before, Oklahoma's regulations contained barriers that prevented the state from gaining the fullest possible benefit from telehealth. While these restrictions served a purpose and made sense at the time, they were enacted when telemedicine was relatively new. In short, Oklahoma's regulatory structure had become outdated and needed revision.

By removing barriers, the amended regulations will encourage a greater use of telehealth, resulting in more expansive, efficient, and effective use of all services. This part highlights specific issues with Oklahoma's former telehealth restrictions, compares these restrictions to the laws of other states and to Medicare, and then discusses Oklahoma's amended regulations and their positive effects.

^{101.} WHITACRE ET AL., supra note 15, at 9.

^{102.} Id. at 12-18.

^{103.} Id. at 32-33.

^{104.} See Oklahoma Health Care Authority, 2015 OKREGTEXT 382561 (proposed Dec. 23, 2014) (to be codified at 75 OKLA. STAT. §§ 250.3(5), 308(E)).

A. Removing the "Rural Location" Limitation on Telehealth Services

Telemedicine was initially identified as a solution for rural patients, and coverage by many states and Medicare has been limited to patients in rural areas and geographic areas where there is a shortage of health professionals. ¹⁰⁵ But barriers to health care often exist across geographic boundaries and affect those in all corners of society. Oklahoma's new regulations recognize that reality and remove the artificial barriers that have traditionally restricted reimbursement for telehealth services to certain geographic areas so that citizens across the state may now experience the benefits of telehealth.

1. Oklahoma's Former Approach

The Oklahoma Telemedicine Act does not specify that telemedical services should be limited to rural areas. 106 But residents with SoonerCare (the state's Medicaid program) were originally only covered for telemedicine services "in rural areas or geographic areas where there [was] lack of medical specialty, psychiatric or behavioral health expertise "107 The Oklahoma Health Care Authority, which oversees SoonerCare, classified a "rural area" as a county with fewer than 50,000 people, ¹⁰⁸ but it did not clarify what constituted a "geographic area[] where there [was] a lack of' health providers. 109 Oklahoma law also provided that the origination site (the site where the patient is physically located) located in "a geographic area where there is a lack of medical/psychiatric/ behavioral health expertise"—had to be twenty miles apart from the distant site (the site where the health care provider is physically located), "with few exceptions." The Oklahoma Health Care Authority made these exceptions according to "geographic limitations and service constraints," 111 but no specific exceptions were publicly listed. That uncertainty could have made providers hesitant to provide telehealth care when they were unsure whether the Oklahoma Health Care Authority would reimburse them for their services. Thus, these ambiguous regulations needed to be changed to give guidance to providers, patients, and regulators.

^{105.} Mandy Bell et al., Geographic Restrictions for Medicare Telehealth Reimbursement 1 (2011).

^{106.} See 36 OKLA. STAT. § 6802 (2011).

^{107.} OKLA. ADMIN. CODE § 317:30-3-27(c)(2) (amended 2015).

^{108.} *Id.* § 317:30-3-27(b)(5).

^{109.} Id. § 317:30-3-27(c)(2).

^{110.} Id. § 317:30-3-27(g)(4).

^{111.} Id.

2. Medicare's Approach

The Centers for Medicare & Medicaid Services (CMS) also limit reimbursement for telehealth services by location. Specifically, CMS's reimbursement policy requires that the patient live in or utilize the telehealth system (1) in a county that is not included in a Metropolitan Statistical Area (MSA) and (2) in a federally designated geographic Health Professional Shortage Area (HPSA). An MSA is an urban area of at least 50,000 people and includes the counties containing the core urban area and all adjacent counties that "have a high degree of social and economic integration." HPSAs are determined by the Health Resources and Services Administration based on shortages of primary medical care providers in a geographic region. HPSAs play an important role in recognizing communities that are underserved by primary care, dental care, and mental health care.

These restrictions were included in the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 in an attempt to reduce the cost of telehealth. When the bill passed in 2000, the Congressional Budget Office predicted that telehealth would cost Medicare \$150,000,000 over five years. After six years, however, the actual cost of telehealth services provided had been only 2.6% of the predicted amount and had leveled off around a cost of \$2,000,000 per year. Consequently, rather than limiting costs to Medicare, these geographic barriers have unnecessarily limited access to care.

Members of the U.S. Congress have recognized the issues associated with these restrictions and are trying to remove them. The "Telehealth Enhancement Act of 2014"¹¹⁹ and its companion bill, the "Telehealth Enhancement Act of 2013,"¹²⁰ would waive statutory Medicare restrictions on telehealth services. Specifically, the bills would extend telehealth

^{112.} BELL ET AL., supra note 105, at 2.

^{113.} *Id*.

^{114.} *Id*.

^{115.} Id.

^{116.} Id.

^{117.} *Id*.

^{118.} *Id*.

^{119.} Telehealth Enhancement Act of 2014, S. 2662, 113th Cong. (2014), http://www.cochran.senate.gov/public/_cache/files/d9afe3ec-e753-4901-b21b-87392807485a/S.2662-Telehealth-Enhancement-Act.pdf.

 $^{120. \ \} Telehealth\ Enhancement\ Act\ of\ 2013,\ H.R.\ 3306,\ 113th\ Cong.\ (2014),\ https://www.congress.gov/bill/113th-congress/house-bill/3306/text.$

coverage to "critical access and sole-community hospitals," irrespective of rural or urban location. However, these acts, if passed, would only remove restrictions related to Medicare, leaving state-enacted restrictions untouched.

3. Other States' Approaches

Outside Oklahoma, forty-one states and the District of Columbia do not restrict the coverage of telehealth services based on distance limitations or geographic designations. And over the past year, some states with geographic restrictions on telehealth services have removed those barriers. In Nebraska, for instance, Medicaid previously covered telehealth services only if a similar service did not exist within thirty miles of the patient's residence. But in 2014, this restriction was removed, and the law now provides that "[t]he reimbursement rate for a telehealth consultation . . . shall not depend on the distance between the health care practitioner and the patient." Ohio also proposed a regulation earlier this year that would expand coverage of telehealth services and remove a five-mile distance restriction as a condition of payment. With nearly every state removing or trying to remove distance limitations and geographic designations for telehealth, it was best for Oklahoma to follow suit.

4. Oklahoma's Updated Approach

In August of 2015, the Oklahoma Health Care Authority eliminated the provisions that limited coverage of telemedical services based on population and the distance between the health care practitioner and the patient. Now SoonerCare patients can receive care from providers through telemedicine regardless of where they are located. This is beneficial because payer limitations on the location where services

^{121.} Susan D. Hall, *Telehealth Bill Would Extend Medicare Coverage to Underserved Areas*, FIERCEHEALTHIT (Aug. 1, 2014), http://www.fiercehealthit.com/story/telehealth-billwould-extend-medicare-coverage-underserved-areas/2014-08-01.

^{122.} LATOYA THOMAS & GARY CAPISTRANT, STATE TELEMEDICINE GAPS ANALYSIS: COVERAGE & REIMBURSEMENT 14 (2014), http://www.americantelemed.org/docs/default-source/policy/50-state-telemedicine-gaps-analysis---coverage-and-reimbursement.pdf?s fvrsn=6.

^{123.} Id. at 13.

^{124. 471} Neb. Admin. Code § 1-006.03 (2014).

^{125.} Neb. Rev. Stat. § 71-8506 (2014).

^{126.} THOMAS & CAPISTRANT, supra note 122, at 13.

^{127.} See OKLA. ADMIN. CODE § 317:30-3-27 (2015).

^{128.} See id.

delivered by telemedicine occur—outside Metropolitan Statistical Areas—greatly restrain the use of telemedicine for individuals in need. Providers working within their scope of practice already have the ability to choose the most appropriate method of delivering health services to patients treated in the provider's offices. It follows that the range of autonomy extended to providers should include the ability to use telehealth as a means of providing care, regardless of the patient's location. Further, patients should have the ability to be cared for in a way that is convenient for them. Removing restrictions based on geography eliminates confusion over whether a provider will be reimbursed for services provided and increases access to care for indigent patients in urban and almost-rural locations. With these changes, Oklahoma has taken a step in the right direction.

B. Removing Restrictions on the "Origination of Care" Setting

In addition to removing limitations based on the geographic location of the patient, Oklahoma also has removed limitations on the type of facility that could serve as the origination-of-care site. The typical approach to telehealth coverage under Medicaid requires that the patient be treated from a specific type of health facility, e.g., a physician's office or hospital. However, sites where people primarily spend their time, such as homes and offices, are often explicitly excluded from coverage. But with recent advances in technology (e.g., cloud processing and high-speed wireless networks), patients can access telehealth services wherever they may be.

1. Oklahoma's Former Approach

The Oklahoma Telemedicine Act does not mention any limitations on the location of an origination site. Despite this flexibility in the law, the Oklahoma Health Care Authority promulgated strict regulations concerning origination sites, limiting authorized facilities to the office of a physician or practitioner, a hospital, a school, an outpatient behavioral health clinic, a Critical Access Hospital (CAH), a Rural Health Clinic, a Federally Qualified Health Center, an Indian Health Service facility, a Tribal health

^{129.} The setting where the patient is located at the time the telehealth service is provided is referred to as the origination site, and the site where the provider is located is referred to as the distant site. *Id.* at 9.

^{130.} *Id*.

^{131.} Id.

^{132.} Id.

^{133.} See 36 Okla. Stat. § 6802 (2014).

facility, or an Urban Indian clinic.¹³⁴ It should be noted that a person's home does not appear on that list. Telehealth services were limited to these locations in an attempt to ensure that "the telecommunication service [will]... be secure and adequate to protect the confidentiality and integrity of the telemedicine information transmitted."¹³⁵ It is appropriate that Oklahoma is concerned about confidentiality and security, but these priorities can still be maintained outside of the few listed patient settings. Instead, Oklahoma had unnecessarily limited the capabilities of telemedicine through its restrictions on the type of origination site.

2. Medicare's Approach

Like SoonerCare's former regulations, current federal law requires that a patient be located in one of a specific list of origination sites for Medicare reimbursement. The current facilities eligible to serve as origination sites include the offices of physicians or practitioners, hospitals, CAH, Rural Health Clinics, Federally Qualified Health Centers, hospital-based or CAH-based renal dialysis centers, Skilled Nursing Facilities, and Community Mental Health Centers. ¹³⁶

Although the number of origination sites authorized by law is limited, Congress is trying to change this. The Medicare Telehealth Parity Act of 2014 primarily seeks to expand the number of eligible facilities that serve as origination sites by removing geographic restrictions. ¹³⁷ Additionally, the bill proposes the addition of individuals' homes as eligible origination sites. ¹³⁸ The inclusion of just one more telehealth site—the home—opens the door for the utilization of more telehealth capabilities, such as remote patient monitoring, and, accordingly, better health care services.

3. Other States' Approaches

Though Medicare currently limits eligible origination sites, many states offer a broad range of available locations. Apart from Oklahoma, twenty-three states and the District of Columbia do not specify a patient location as

^{134.} OKLA. ADMIN. CODE § 317:30-3-27(c)(4) (amended 2015).

^{135.} *Id.* § 317:30-3-27(f)(1).

^{136.} DEP'T OF HEALTH & HUMAN SERVS., TELEHEALTH SERVICES 2 (2014), https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/down loads/TelehealthSrvcsfctsht.pdf.

^{137.} CTR. FOR CONNECTED HEALTH POL'Y, FACT SHEET: HR 5380 – MEDICARE TELEHEALTH PARITY ACT OF 2014 1-2 (2014), http://cchpca.org/sites/default/files/resources/HR%205380%20THOMPSON%202014.pdf [hereinafter FACT SHEET: HR 5380].

^{138.} Id. at 2.

a condition of reimbursement for telehealth services. 139 For instance. California law states, "For the purposes of payment for covered treatment or services provided through telehealth, the department [that oversees the state's Medicaid program] shall not limit the type of setting where services are provided for the patient or by the health care provider." Similarly, Oregon law lists a series of origination sites, but it does not limit coverage for a patient's treatment to those sites. Oregon's law defines an origination site as "the physical location of the patient receiving a telemedical health service," including but not limited to a hospital, a Rural Health Clinic, a Federally Qualified Health Center, a physician's office, a Community Mental Health Center, a Skilled Nursing Facility, a renal dialysis center, or any other site where public health services are provided. 141 Removing a list of origination sites, and even creating a more expansive list of origination sites, increases the opportunities for individuals to receive health care through telehealth and allows health care providers to more efficiently receive medical information from patients.

4. Oklahoma's Updated Approach

In August of 2015, the Oklahoma Health Care Authority eliminated its exclusive list of permitted origination-site locations and provided general characteristics of an appropriate telemedicine site. Today, an eligible telemedicine site is one that has the "appropriate administrative, physical and technical safeguards" that ensure the confidentiality, integrity, security, and comfort of the telemedicine consultation. This alteration is useful because one of the many advantages of telehealth is having the ability to provide health care services to patients wherever they may be. As long as the provider satisfies quality, privacy, and technology standards for health services, the physical location of the patient and the provider should not matter. Removing the origination-site location requirement for reimbursement under SoonerCare properly gives discretion to the health care provider, who, as a licensed professional, is ultimately responsible for the care of the patient.

C. Removing the Ban on Remote Patient Monitoring

By removing limitations on origination sites, patients can benefit from telehealth services while at home through video conferencing with a health

^{139.} THOMAS & CAPISTRANT, supra note 122, at 10.

^{140.} CAL. WELF. & INST. CODE § 14132.72 (West 2012).

^{141.} OR. REV. STAT. ANN. § 743A.058 (West 2010).

^{142.} OKLA. Admin. Code $\S 317:30-3-27(b)(3) (2015)$.

provider and through remote patient monitoring. Remote patient monitoring involves the use of "digital technologies to collect medical and other forms of health data from individuals in one location and electronically transmit that information securely to health care providers in a different location for assessment and recommendations." Remote patient monitoring plans are customized to fit the patient's needs and can collect a broad range of health data from the origination site, e.g., vital signs, blood oxygen levels, blood sugar, blood pressure, weight, heart rate, and electrocardiograms. 144

Remote patient monitoring is most often used to care for individuals with a high level of medical need, such as the elderly and the chronically ill. 145 Remote-monitoring systems enable such patients and their health care providers to "closely monitor medical conditions and, if need be, intervene." 146 These techniques help keep people healthy, allow older and chronically ill individuals to live at home longer, and reduce the number of hospitalizations, readmissions, and lengths of stay in hospitals—all of which help improve quality of life and curb the cost of care. 147

1. Oklahoma's Former Approach

Previously, remote patient monitoring was not an option for individuals on SoonerCare; several provisions served as barriers. Not only was the home an unacceptable origination site, 148 but home health services and care-coordination services were also explicitly listed as non-covered services for telehealth. 149 In addition, all telemedicine encounters required a telepresenter: a "certified or licensed attendant to *present* the member at the origination site to the rendering provider located at the distant site." These regulations, however, were out of sync with in-person reimbursement regulations, where SoonerCare reimburses for home health services that are provided to individuals in person by a certified home health service provider. 151

^{143.} Remote Patient Monitoring, supra note 32.

^{144.} Id

 $^{145. \ \}textit{Remote Patient Monitoring (RPM)}, \ \texttt{TECHTARGET}, \ \texttt{http://searchhealthit.techtarget.} \\ \texttt{com/definition/remote-patient-monitoring-RPM (last visited Mar. 23, 2016)}.$

^{146.} *Id*.

^{147.} Remote Patient Monitoring, supra note 32.

^{148.} See OKLA. ADMIN. CODE § 317:30-3-27(c)(4) (amended 2015).

^{149.} Id. § 317:30-3-27(d)(7) & (11).

^{150.} Id. § 317:30-3-27(a) (emphasis added).

^{151.} Id. § 317:30-5-547; see also id. §§ 317:30-5-390, :30-5-546.

2. Medicare's Approach

Currently, Medicare does not reimburse health care providers for home health services provided through telehealth.¹⁵² But the proposed Medicare Telehealth Parity Act of 2014 would place remote-patient-management services for certain chronic health conditions within the scope of Medicare coverage.¹⁵³ These conditions include congestive heart failure, chronic obstructive pulmonary disease, and diabetes.¹⁵⁴ Additionally, services include in-home, technology-based professional consultations, patient monitoring, clinical observation, patient training services, and continuous assessment.¹⁵⁵ The passage of this bill would increase health coverage for the elderly, who greatly benefit from home health programs, and could significantly reduce the likelihood of readmission by heading off minor problems before they become critical.

3. Other States' Approaches

To address the increasing Medicaid costs for chronically ill patients, eleven states—other than Oklahoma—provide Medicaid coverage for remote patient monitoring. These states include Alabama, Alaska, Colorado, Kansas, Minnesota, New York, Pennsylvania, South Carolina, South Dakota, Texas, and Washington. Through their remote patient monitoring programs, these states have experienced lower readmission rates and greater cost savings.

In 2007, New York enacted legislation covering home telehealth services (video conferencing and remote patient monitoring). Home telehealth services are covered by the state's Medicaid program when provided by a certified home health agency, long-term health care program, or AIDS home care programs. A patient's eligibility is determined by conditions or clinical circumstances including, but not limited to, "congestive heart

^{152. 42} U.S.C. § 1395fff(e) (2014); CTRS. FOR MEDICARE & MEDICAID SERVS., MEDICARE BENEFIT POLICY MANUAL ch. 7, pt. 110 (2014), http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c07.pdf.

^{153.} FACT SHEET: HR 5380, *supra* note 137, at 4-5.

^{154.} Id.

^{155.} Id. at 5.

^{156.} AM. TELEMEDICINE ASS'N, STATE MEDICAID BEST PRACTICE: REMOTE PATIENT MONITORING AND HOME VIDEO VISITS 2 (2013), http://www.americantelemed.org/docs/default-source/policy/state-medicaid-best-practice---remote-patient-monitoring-and-home-video-visits.pdf?sfvrsn=6.

^{157.} Id. at 6.

^{158.} Id.

failure, diabetes, chronic pulmonary obstructive disease, wound care, polypharmacy, mental or behavioral problems limiting self-management, and technology dependent care such as continuous oxygen, ventilator care, total parenteral nutrition or enteral feeding." Covered services include monitoring of patient vital signs, patient education, medication management, equipment management, review of patient trends and changes in patient condition, and other activities deemed necessary and appropriate according to the plan of care. ¹⁶⁰

New York's home telehealth system demonstrates successful results. Home Care, Inc., in Oneonta, NY, provides care through remote patient monitoring to 900 patients annually and saw a "7% decrease in hospital readmissions and annual savings of \$466,200." ¹⁶¹ Brookhaven Memorial Hospital Home Health Agency, in Patchogue, NY, oversaw remote patient monitoring for 181 Chronic Obstructive Pulmonary Disease patients per year and experienced a "19% reduction in hospital readmissions and annual savings of \$254,486." ¹⁶² It also saw a 26% reduction in hospital readmissions and annual savings of \$177,008 for ninety-two pneumonia patients enrolled annually. ¹⁶³ And the New York City-based Metropolitan Jewish Health System Home Care saw a 4% decrease in hospital readmissions and annual savings of \$88,800 for 300 patients in a year. ¹⁶⁴ These significant results show that remote patient monitoring lowers readmission rates and saves money.

4. Oklahoma's Updated Approach

In August of 2015, the Oklahoma Health Care Authority removed the provisions that excluded home health and care-coordination services from reimbursement and that required the presence of a telepresenter. Now, the state's elderly and chronically ill can benefit from remote patient monitoring services. These telehealth services will significantly improve the quality of life of patients by providing care in the comfort of their own homes. And, as shown by New York, better chronic-care management through remote patient monitoring keeps costs down. If patients and providers can better manage health conditions (such as congestive heart

^{159.} *Id.* (quoting N.Y. Pub. HEALTH LAW § 3614 (McKinney 2014)).

^{160.} *Id*.

^{161.} Id. at 9.

^{162.} Id.

^{163.} Id.

^{164.} Id.

^{165.} See Okla. Admin. Code § 317:30-3-27 (2015).

failure, chronic obstructive pulmonary disease, and diabetes) outside the hospital, costly major medical episodes are less likely to occur.

D. Removing Barriers to Physical, Occupational, Audiology, and Speech Therapy Services

In many states, there are provider-eligibility limitations for Medicaid reimbursement for specific telehealth services. Most commonly, Medicaid programs mirror current Medicare limitations and require that telehealth services be provided by physicians, nurse practitioners, physician assistants, psychologists, clinical social workers, or dietitians. Though these practitioners provide care for a great number of individuals, there is still a shortage of several health services. Notable professionals not included on reimbursement-eligibility lists often include physical therapists, speech pathologists, audiologists, and occupational therapists. Services rendered by these providers through telehealth can be referred to as telerehabilitation services. And despite their exclusion, those services are in high demand, are often not available in rural communities, and are all capable of provision through telehealth. 166 The Oklahoma Health Care Authority has recently added physical, occupational, audiology, and speech therapists to the list of eligible telehealth providers and has removed the explicit exclusions of such therapists' services.

1. Oklahoma's Former Approach

Though Oklahoma's SoonerCare program reimbursed telehealth providers for many services, it inappropriately excluded a number of useful providers and services that would have benefitted patients. With regard to providers, the Oklahoma Health Care Authority stated that authorized distant-site specialty providers were limited to physicians, advanced registered nurse practitioners, physician assistants, genetic counselors, dieticians, and licensed behavioral health professionals. ¹⁶⁷ The definition of "licensed behavioral health professionals" added social workers, professional counselors, marriage and family therapists, behavioral practitioners, and alcohol and drug counselors to the list of eligible providers. ¹⁶⁸ Notably, physical therapists, occupational therapists, audiologists, and speech pathologists were not included as eligible providers. In fact, the Oklahoma Health Care Authority explicitly excluded

^{166.} Mary Hughes et al., Nat'l Rural Health Ass'n, Telehealth Reimbursement 3 (2010).

^{167.} OKLA. ADMIN. CODE § 317:30-3-27(c)(5) (amended 2015).

^{168.} Id. § 317:30-5-280.

these providers' services: "Non-covered services include . . . audiologist services . . . and . . . physical, speech, or occupational therapy services." ¹⁶⁹ Even though these health care services were not reimbursed when provided via telehealth, they were reimbursed when provided in-person. ¹⁷⁰ Thus, reimbursement parity did not formerly exist in Oklahoma, though it does now.

2. Medicare's Approach

Currently, Medicare reimburses a short list of health care practitioners for services provided through telehealth. This list only includes physicians, physician assistants, clinical nurse specialists, clinical social workers, nurse practitioners, nurse midwives, and clinical psychologists. ¹⁷¹ Congress, however, is working to increase the list of eligible providers and services. The Medicare Telehealth Parity Act of 2014 proposes to amend the definition of "practitioner" by adding licensed audiologists, licensed physical therapists, licensed occupational therapists, and licensed speech language pathologists to the list of health care professionals within six months after the enactment of the bill. ¹⁷² Moreover, the number of services that are reimbursable will expand to include speech-language pathology services and audiology services, among others that the Secretary of Health and Human Services may deem necessary. ¹⁷³

3. Other States' Approaches

Though the Medicaid programs of forty-four states reimburse health providers for some type of telehealth, just nine states reimburse providers for telerehabilitation services: Alabama, Kentucky, Minnesota, New Mexico, Nevada, Ohio, South Carolina, Virginia, and Wyoming. ¹⁷⁴ For instance, in New Mexico, the Medicaid regulations require that telehealth-provided services covered are the same as in-person services. ¹⁷⁵ The state's list of eligible providers includes physical therapists, occupational therapists, and speech pathologists. ¹⁷⁶ And to further illustrate, Kentucky

^{169.} Id. § 317:30-3-27(d).

^{170.} See id. §§ 317:30-5-296, :30-5-676, :30-5-291.

^{171.} FACT SHEET: HR 5380, supra note 137, at 3.

^{172.} Id. at 3-4.

^{173.} *Id*.

^{174.} AM. TELEMEDICINE ASS'N, STATE MEDICAID BEST PRACTICE: TELEREHABILITATION 1 (2014), http://www.americantelemed.org/docs/default-source/policy/state-medicaid-best-practice---telerehabilitation.pdf?sfvrsn=6.

^{175.} Id. at 3.

^{176.} Id.

expanded the number of providers and services covered by Medicaid to also include occupational therapy, physical therapy, and speech therapy. ¹⁷⁷ These services can be provided when the patient is in his home, a nursing facility, a physician's office, or a hospital. ¹⁷⁸

In addition, Medicaid plans in Virginia and Ohio permit children to receive speech therapy services from specialists through telemedicine. ¹⁷⁹ When telerehabilitation is used in this way, health professionals who work at local schools are able to meet the therapeutic needs of children, especially those in underserved communities. ¹⁸⁰ This "service delivery model improves access to skilled professionals with minimum disruption to the child's classroom environment" or the parent's workday. ¹⁸¹ Telerehabilitation also benefits therapists because it facilitates the efficient provision of services by "distributing scarce expertise in a cost-effective means as a result of decreased travel time." ¹⁸²

4. Oklahoma's Updated Approach

In August of 2015, the Oklahoma Health Care Authority eliminated its regulations that explicitly listed non-covered services and that limited which specialty providers were authorized to treat patients. Now audiologists, physical therapists, speech pathologists, occupational therapists, and other specialists are eligible telehealth providers. Health they are already covered for in-person visits. This is valuable because telerehabilitation has the ability to provide services to individuals of all ages and across a continuum of care. For example, an adult living in an underserved community can receive physical therapy through telehealth, and a child with a communication disorder can receive speech pathology

^{177.} Id. at 2-3.

^{178.} *Id*.

^{179.} Id. at 1.

^{180.} *Id*.

^{181.} Id. (citing Alison McCullough, Viability and Effectiveness of Teletherapy for Pre-School Children with Special Needs, 32 Int'l J. Language & Comm. Disorders 321 (2001); D.A.D. Rose et al., Videoconferencing for Speech and Language Therapy in Schools, 18 BT Tech. J. 101 (2000); Alyssa Banotai, Teletherapy in the Schools, Advance For Speech & Hearing, http://speech-language-pathology-audiology.advanceweb.com/Article/Teletherapy-in-the-Schools.aspx (last visited Mar. 23, 2016)).

¹⁸² *Id*

^{183.} OKLA. ADMIN. CODE § 317:30-3-27 (2015).

^{184.} Id.

^{185.} Id.

services without leaving school. The updated telemedicine regulations remove the access barrier to specialized clinics and rehabilitation facilities.

V. Conclusion

As an innovative health care tool, telehealth is valuable because it increases access to care, especially in underserved rural and urban locations; makes delivery of care more cost-effective; and distributes limited health provider resources more efficiently. Many patients with limited access to health care providers can be diagnosed and treated more quickly through telehealth than they would be otherwise, resulting in less costly treatments and improved health outcomes due to early detection and prevention. Telehealth services will address a great, unmet need for health care by individuals who have limited access to traditional health care settings.

In Oklahoma, former regulatory barriers to the spread of telehealth have been eliminated. First, the Oklahoma Health Care Authority removed provisions that limited coverage of telemedical services based on the distance between the health care practitioner and the patient. Second, SoonerCare now covers encounters between licensed health practitioners and patients regardless of the setting of the patients. Third, the Oklahoma Health Care Authority eliminated the provision that excluded home health services from reimbursement so that the state's elderly and chronically ill can benefit from remote patient monitoring services. And finally, SoonerCare lifted its ban on audiology, physical, occupational, and speech therapy services provided through telehealth and now reimburses therapists at the same rate as in-person care. These actions will add to the many past and ongoing efforts of those diligently working to increase the size of and improve the effectiveness of Oklahoma's telehealth network.

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