

ANNALS OF HEALTH LAW
ADVANCE DIRECTIVE

VOLUME 19

SPRING 2010

PAGES 203-214

***Improving Quality of Care Through Telemedicine:
The Need to Remove Reimbursement and
Licensure Barriers***

Jaime Bennett^{*}

I. INTRODUCTION

Technological and internet advancements continue to create opportunities for telemedicine to improve both access to care and, ultimately, quality of care for patients. Telemedicine can be traced as far back as the 1950s. Given that technology was not as advanced as it is today, the lack of interoperability among telemedicine devices, and the lack of technical know-how that many users had, frequently led to user dissatisfaction.¹ While telemedicine has come a long way since its inception, it has yet to reach its full potential to increase the quality of health care for Americans due to barriers, specifically in the areas of licensure and reimbursement.

The advancements in the field of radiology demonstrate the quality of care possible when doctors overcome their resistance to telemedicine and embrace new

^{*} Juris Doctor Candidate, Loyola University Chicago School of Law, Class of 2011. Ms. Bennett is a staff member of *Annals of Health Law*.

¹ DAVID BRANTLEY ET AL., U.S. DEP'T OF COMMERCE, INNOVATION, DEMAND AND INVESTMENT IN TELEHEALTH 25 (2004), *available at* http://www.atp.nist.gov/eao/innovation_demand_invest_telehealth_022004.pdf.

technology. Radiology is often considered the most successful field in telemedicine technology, largely because radiology professionals already have a technical background.² Specifically, the field of radiology developed “private teleradiology services,” and “x-rays, sonograms and other images have been consistently reimbursed by Medicare and other payers.”³ These advancements lead to more cost effective systems that are easier to use, which in turn results in a greater acceptance by the medical community.⁴

Despite such advancements, current applications of telemedicine remain relatively primitive.⁵ In fact, according to a 2004 report from the Technology Administration, “only a fraction of the potential for technology to increase access to, improve quality of, and reduce the cost of the nation’s healthcare has been realized to date.”⁶ Reasons for slow telemedicine advancements include cost, infrastructure, privacy concerns, and uncertainty about legal and regulatory issues.⁷ The increase in our retired population and longer life expectancies, however, coupled with cutbacks on health benefits are creating higher medical costs that telemedicine can help lower, while improving the quality of our healthcare system.⁸

² *Id.*

³ *Id.* at 25-26.

⁴ *See id.* at 26.

⁵ Roger Allan, *Telemedicine: A Shot In The Arm For Healthcare*, ELEC. DESIGN, June 29, 2006, <http://electronicdesign.com/Articles/ArticleID/12860/12860.html>.

⁶ BRANTLEY ET AL., *supra* note 1, at 9.

⁷ *See* Allan, *supra* note 5; *see also* THE CTR. FOR TELEMEDICINE LAW, OFFICE FOR THE ADVANCEMENT OF TELEHEALTH, TELEMEDICINE LICENSURE REPORT 3 (2003), *available at* <ftp://ftp.hrsa.gov/telehealth/licensure.pdf> [hereinafter LICENSURE REPORT].

⁸ Allan, *supra* note 5.

This article argues that telemedicine has the potential to improve our healthcare system, with a particular focus on improving quality. This article then claims that both licensing and reimbursement barriers hinder the growth of telemedicine. Finally, this article suggests that these barriers must be removed before widely implementing and improving telemedicine.

II. TELEMEDICINE'S POTENTIAL TO IMPROVE QUALITY OF CARE

Currently, federal and state governments, the military, universities, and the private sector are all researching and funding telemedicine. Private sources primarily fund most telemedicine research, which seeks to make telemedicine technology efficient and, more importantly, cost-effective.⁹ The internationally accepted definition of telemedicine is “the use of information technology to deliver medical services and information from one location to another.”¹⁰ Examples of telemedicine today range from simple uses, such as physicians researching diagnoses for obscure diseases, to complex uses, like the Korean company, Healthpia's, cell phones for diabetics that have glucose-monitoring devices embedded in them.¹¹

Another example of how telemedicine is able to improve quality of care is a device that patients can hold to their chests to record the electrical activity of their hearts, also known as an electrocardiogram, which can be sent directly to physicians.¹² CardioNet also developed a three-lead sensor that patients can wear

⁹ See BRANTLEY ET AL., *supra* note 1, at 50.

¹⁰ Mark A. Cwiek et al., *Telemedicine Licensure in the United States: The Need for a Cooperative Regional Approach*, 13 TELEMEDICINE & E-HEALTH 141, 141 (2007).

¹¹ See Allan, *supra* note 5.

¹² *Id.*

on their belt that records electrocardiograms¹³ The sensor is in constant communication with a monitor that the patients also carry with them, and if the sensor detects arrhythmia, which is abnormal electrical activity of the heart, it sends the electrocardiogram to the nearest CardioNet center.¹⁴ Microsoft has even come up with Bluetooth technology that can connect physiological monitors to phones.¹⁵

Proponents of telemedicine suggest that barriers to the widespread use of telemedicine prevent society from reaping the benefits of the increased quality of care that telemedicine stands to offer.¹⁶ Telemedicine is already “being provided at home, in prisons, at VA hospitals, in urban settings and in rural areas, in acute and long-term facilities, and by medical specialties and nurses,” but it could be much more widely used.¹⁷ Some indicate that one of the largest barriers is our legal and political approach to healthcare.¹⁸ Part of the problem lies in the lack of coordination among states with respect to licensure. Reimbursement, or lack thereof, is the other major area that poses problems for the integration of telemedicine into our healthcare system. The entire population stands to benefit from removal of these barriers or obstacles. The Technology Administration Report suggests that a more organized and well-coordinated approach by

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ See Susan E. Volkert, *Telemedicine: RX For The Future Of Health Care*, 6 MICH. TELECOMM. & TECH. L. REV. 147, 149 (2000), see also Cwiek et al., *supra* note 10.

¹⁷ See Volkert, *supra* note 16, at 153.

¹⁸ See generally *id.* at 149 (introducing reasons for hindrance of telemedicine in the United States); see also BRANTLEY ET AL., *supra* note 1, at 10.

government, academic, and private stakeholders is necessary to allow telemedicine to reach its full potential in our healthcare system.¹⁹

III. LICENSURE BARRIER

Licensure becomes a problem when a physician practices telemedicine from one state on a patient in another state.²⁰ Some states have attempted to overcome the licensure barriers that exist from state to state, but critics suggest that until a more uniform approach is taken, telemedicine will not reach its full potential. The outmoded licensure laws of the fifty state jurisdictions prohibit efficient implementation of telemedicine because they limit physicians' practice to specific state geographic boundaries.²¹ While some recommend national licensure laws, in 1889, the Supreme Court in *Dent v. State of West Virginia* recognized individual states' jurisdictional right to regulate medical practice.²² As a result, any proposed national licensure system will likely face resistance from lobbyists, physician organizations, and state licensure boards.²³

The location of the patient determines the applicable jurisdiction for regulatory purposes.²⁴ If physicians could easily and affordably obtain licensure in multiple states, this could dramatically affect the cost and quality of care. For example, a stroke patient living in Wisconsin could be treated by a physician in Illinois without ever having to travel, would be afforded convenience, and would

¹⁹ BRANTLEY ET AL., *supra* note 1, at 14.

²⁰ Cwiek et al., *supra* note 10, at 142.

²¹ *See id.* at 141.

²² *Id.* at 142, n.9.

²³ *Id.* at 143.

²⁴ N.Y. State Dep't of Health, Statements on Telemedicine Board for Professional Medical Conduct, <http://www.health.state.ny.us/professionals/doctors/conduct/telemedicine.htm> (last visited Feb. 24, 2010).

avoid travel costs if the physician were licensed in both states.²⁵ These are the types of innovations that telemedicine can offer if America develops a national or even regional licensure system, but it will not be easy to achieve since the current “system lends itself to a diverse set of approaches taken by states in the licensure of telemedicine.”²⁶

States currently vary in their approach to telemedicine licensure. Telemedicine licensures fall into one of four categories: 1) full licensure; 2) mutual recognition; 3) consultation exceptions; and 4) special licensure.²⁷ First, full licensure is when physicians need an unrestricted license in each state where they plan to interact on any level with patients.²⁸ According to the 2003 report from the Office for the Advancement of Telehealth, twenty-one states still required full licensure.²⁹ Second, mutual recognition is the recognition of licensure policies of one state by another state.³⁰ A state grants reciprocity if the physician’s state license requires the same standards as the state where the physician wishes to interact with patients.³¹ Third, consultation exceptions allow physicians from states to *occasionally* consult with patients in another state so long as the physician is not the patient’s primary physician.³² Finally, a special purpose license allows physicians to use equipment in states where they are not licensed, to transfer patients’ medical information across state lines if the

²⁵ See Allan, *supra* note 5.

²⁶ Cwiek et al., *supra* note 10, at 142.

²⁷ *Id.* at 143.

²⁸ *Id.*

²⁹ LICENSURE REPORT, *supra* note 7, at 7.

³⁰ Cwiek et al., *supra* note 10, at 143.

³¹ *Id.*

³² *Id.*

physician is board certified and has no disciplinary actions against him.³³ Special purpose licensure is the closest attempt at eliminating the current geographical barriers to telemedicine, but still requires additional licensure for physicians on a scaled-down level.³⁴ In 2003, eight states adopted variations of the model law authorizing a special purpose license.³⁵

The Federation of State Medical Boards and the National Council of State Boards of Nursing are the only organizations to “officially propose[] licensure models to address practice across state lines.”³⁶ The Office for the Advancement of Telehealth suggests that a more collaborative approach among states is necessary to incentivize physicians to practice telemedicine across state lines when necessary.³⁷ One solution would be to establish regional, rather than national, licensing standards for physicians.³⁸ It is possible to develop uniform state statutes through cooperative action with respect to medical licensure, such as demonstrated by the Uniform Commercial Code.³⁹ Therefore, states should examine their laws with regard to physician licensing and coordinate by setting standards together in an effort to address major areas that require telemedicine regulation, namely, credentialing, informed consent, and patient confidentiality.⁴⁰ If a regional credentialing system were in place, physicians would be encouraged

³³ *Id.*

³⁴ *Id.*

³⁵ LICENSURE REPORT, *supra* note 7, at 7.

³⁶ *Id.*

³⁷ *See id.* (explaining the different approaches that currently exist among states and the slow progress of regulatory reforms).

³⁸ Cwiek et al., *supra* note 10, at 144.

³⁹ *Id.* at 145.

⁴⁰ *See* Volkert, *supra* note 16, at 158-59.

to practice telemedicine especially in rural areas where it is difficult for patients to obtain care, thus increasing both access to and, ultimately, quality of care.

IV. REIMBURSEMENT BARRIER

The other major area where attempts have been made to eliminate barriers to telemedicine is for the reimbursement of telemedicine services. Not providing reimbursement for telemedicine services prevents further investments in telemedicine technologies and creates a disincentive for physicians to use it.⁴¹

“Traditionally, the three major health care insurers, Medicare, Medicaid, and private insurers, have not reimbursed providers for most telemedicine services.”⁴²

A study by Michigan State University’s Department of Telecommunications, however, found that the United States is inching towards more private reimbursement for telemedicine services, although the pace is slower than telemedicine proponents would like to see.⁴³ Ultimately, the lack of a uniform telemedicine reimbursement system may cause society, and those in the healthcare industry, to view traditional delivery methods as superior to telemedicine as a delivery method.⁴⁴

Historically, telemedicine was reimbursed only in rural areas where access to care was a problem for patients. Gradually, government grants promoted

⁴¹ BRANTLEY ET AL., *supra* note 1.

⁴² Kirsten Rabe Smolensky, *Telemedicine Reimbursement: Raising The Iron Triangle To A New Plateau*, 13 HEALTH MATRIX 371, 374 (2003).

⁴³ PAMELA WHITTEN & LAURIE BUIS, PRIVATE PAYER REIMBURSEMENT FOR TELEMEDICINE SERVICES IN THE UNITED STATES 2 (2006), available at http://www.americantelemed.org/files/public/policy/Private_Payer_Report.pdf (providing a picture of private payer reimbursement for telemedicine services in the United States and a follow-up to a survey conducted by the American Telemedicine Association and AMD Telemedicine in 2003).

⁴⁴ *Id.* at 8.

healthcare organizations to launch telemedicine programs, but when the grants ran out, the organizations often ended these programs.⁴⁵ Initially, few public or private payers would reimburse physicians for telemedicine costs, and it was not until the Balanced Budget Act of 1997 (BBA), that Congress required Medicare to reimburse for telemedicine.⁴⁶

During the first two years following the enactment of the BBA on January 1, 1999, Medicare reimbursed a total of \$20,000 for 301 claims resulting from telemedicine consultations.⁴⁷ This amount is relatively low and can be attributed to several factors that limit the BBA's reimbursement requirements. First, the BBA limited Medicaid reimbursement to patients in Health Professional Shortage Areas, which excluded many patients living in rural areas where there is access to primary care physicians or nurses, but not specialists, who are often more costly.⁴⁸ Second, the BBA imposed a fee-sharing requirement that was problematic for accounting and fee tracking, especially for rural physicians without the resources to track the fee splitting.⁴⁹ Finally, in rural areas, clinics often employ only nurses or health technicians, who were ineligible presenters according to the BBA.⁵⁰

The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 went into effect in October, 2001 and aimed to eliminate

⁴⁵ *Id.* at 7.

⁴⁶ U.S. DEP'T OF HEALTH & HUMAN SERVS., 2001 TELEMEDICINE REPORT TO CONGRESS 17 (2001), available at <ftp://ftp.hrsa.gov/telehealth/report2001.pdf>.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

some of the requirements that were problematic under the BBA.⁵¹ Now, there are twenty state Medicaid programs, several state Blue Cross/Blue Shield plans, and some other private insurers that pay for at least some telemedicine services.⁵² State Medicaid programs, however, vary in what is covered, who is covered, billing, licensure, and store-and-forward versus live consultation coverage.⁵³ Store-and-forward is a term used to describe medical data that is recorded and stored by a device like a camera and forwarded through telecommunication to a different site for consultation by a physician.⁵⁴

According to the Centers for Medicare and Medicaid Services, “[w]hile telemedicine is not considered a distinct Medicaid service, any State wishing to cover/reimburse for telemedicine services should submit a State Plan Amendment to the Centers for Medicare and Medicaid Services for approval.”⁵⁵ Many states are waiting to review results from other state programs before pursuing telemedicine reimbursement.⁵⁶ Thus, as more states adopt reimbursement policies, they will encourage other states to follow their lead. While advancements in reimbursement for telemedicine services have been made both on the state and federal levels, these policies need to be made more clear so that

⁵¹ See *id.* at 19.

⁵² *Id.*

⁵³ See TELEHEALTH CONNECTIONS FOR CHILDREN & YOUTH, INST. FOR CHILD HEALTH POLICY, TELEMEDICINE FOR CSHCN: A STATE-BY-STATE COMPARISON OF MEDICAID REIMBURSEMENT POLICIES AND TITLE V ACTIVITIES 5 (2005), available at <http://www.ichp.ufl.edu/documents/Telemedicine%20in%20Medicaid%20and%20Title%20V%20Report.pdf> [hereinafter CSHCN REPORT].

⁵⁴ See *id.* at 34.

⁵⁵ Cts. for Medicare & Medicaid Servs., Overview: Telemedicine and Telehealth, <http://www.cms.hhs.gov/Telemedicine/> (last visited Apr. 1, 2010).

⁵⁶ See CSHCN REPORT, *supra* note 53, at 6.

physicians are more inclined to perform telemedicine, thereby improving the quality and access to care for many Americans.

V. THE FUTURE OF TELEMEDICINE

Telemedicine has gained many supporters, and its potential to improve access and quality of care for patients has attracted the attention of the government and the medical community. At the moment, there are several pending telemedicine bills in Congress.⁵⁷ As of October 15, 2009, the majority of the pending telemedicine bills dealt with applying telemedicine to medically underserved areas, and there was a lack of reimbursement-based bills.⁵⁸

A key to encouraging private payers to reimburse for telemedicine is to persuade Medicare to broaden its reimbursement policies.⁵⁹ As one author aptly stated, it is “[a] generally accepted maxim in health care: Where Medicare goes, the rest of the country follows.”⁶⁰ The Medicare Telehealth Enhancement Act, which was introduced in May 2009, proposed to expand Medicare reimbursement to those left currently without access.⁶¹ Congressmen are beginning to recognize the potential for telemedicine to lower costs and increase access.⁶² In fact, Democratic representative, Mike Thompson of California, noted that “[t]he Obama administration has indicated that telemedicine will be an important part of

⁵⁷ See generally AM.TELEMEDICINE ASS’N, PENDING TELEMEDICINE BILLS IN CONGRESS 2-5 (2009), <http://www.americantelemed.org/files/public/policy/Pending%20Bills.pdf> (list of pending telemedicine bills as of October 15, 2009).

⁵⁸ See *id.*

⁵⁹ See George Lauer, *Medicare Telemedicine Bill Could Change Landscape*, iHEALTHBEAT, May 8, 2009, <http://www.ihealthbeat.org/features/2009/medicare-telemedicine-bill-could-change-landscape.aspx>.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

their health care reform agenda” as an effort to expand access to the important technology.⁶³ The current administration demonstrated their support by including \$7.2 billion for broadband deployment, including telemedicine and educational systems in the American Recovery and Reinvestment Act.⁶⁴

VI. CONCLUSION

Due to technological advancements in telemedicine, there has been an increase in quality healthcare. Thus, if the major licensing and reimbursement barriers can be overcome, the result will be better quality of care for Americans. Though slow to evolve, there is an awareness of the problems that licensing and reimbursement pose to telemedicine, and attempts are being made to solve these problems. Cooperation and awareness among state legislatures about possible regional or national licensing approaches will lead to better solutions for patients that need access to physicians across state lines.

Additionally, if Medicare reimbursement for telemedicine is expanded, it is likely that private insurers will follow suit. Furthermore, the more data and research that is collected about telemedicine and its advantages to patients’ quality of care, the more likely private insurers are to reimburse for telemedicine services. The future looks promising for the growth of telemedicine and its ability to reduce costs to patients while also improving the quality of their care.

⁶³ *Id.*

⁶⁴ *Id.*