

**H.R. 2068: EXPANSION OF QUALITY OR QUANTITY IN
TELEMEDICINE IN THE RURAL TRENCHES OF AMERICA?**

*Lindsey T. Goehring*¹

Technology changed the practice of medicine enabling telemedicine, the practice of medicine distantly through telecommunication systems. Telemedicine enables citizens living in rural communities throughout the United States to better access healthcare and medical services. House Bill 2068, introduced in April 2009, calls for further expansion of generalized and specialized telemedicine in rural communities for those who qualify for Medicare. In a litigious society, medical practitioners practicing telemedicine must always think of the possibility of lawsuits for medical malpractice. Medical professionals, once licensed, are guided in their work by medical standards of care, which are currently created and regulated by individual states. Since telemedicine is designed to carry the practice of medicine across state borders, there should be clear licensing laws and national standards of care for telemedicine which all medical practitioners can follow. Uniformity in licensing and medical standards of care not only provide a substantive safeguard to the physician so that he or she knows how to act, but will augment the quality of care that a patient receives from his or her practitioner.

I. INTRODUCTION

Telemedicine, as defined by the American Medical Association (“AMA”), is the “medical practice across distance via telecommunications and interactive video technology.”² This practice of medicine began several decades ago with telephone

¹ J.D. Candidate, University of North Carolina School of Law, 2011.

² Heather L. Daly, *Telemedicine: The Invisible Legal Barriers to the Health Care of the Future*, 9 ANN. HEALTH L. 73, 76 (2000) (citing Conduct on Medical Education and Hospitals and Council on Medical Service and the American Medical Association, Joint Report, 1994).

consultations and “fixed-camera video[s].”³ Telemedicine continues to advance with technology and today, physicians are capable of performing “remote surgery.”⁴ There are four variations of telemedicine: “(1) doctor-to-doctor exchanges; (2) remote clinical, diagnostic, and monitoring services; (3) direct provision of patient care; and (4) outsourcing hospital administration and claims management functions to other countries.”⁵ The advancement of telemedicine is important because it benefits rural communities in the United States and the world alike.⁶ Participants in the practice of telemedicine include physicians, both generalists and specialists along with nurses and other medical personnel.⁷ For the purposes of this Recent Development, the focus will be on the effect telemedicine has on physicians as well as rural communities in the U.S. and what can be done to improve the system.

Although telemedicine seems to be just what the doctor ordered, it does have crucial drawbacks. Today, telemedicine is not burdened by deficient technology, but rather by legal barriers.⁸

³ Daniel McCarthy, *The Virtual Health Economy: Telemedicine and the Supply of Primary Care Physicians in Rural America*, 21 AM. J. L. & MED. 111, 115 (1995). “Fixed-camera videos” as described in this article were used by Massachusetts General Hospital close to fifty years ago to transmit images from the hospital’s airport clinic to the hospital. The equipment was costly and cumbersome. *Id.*

⁴ Daly, *supra* note 2, at 70 (“[r]emote surgery” refers to “video game-type technology where a surgeon can control an instrument in another location to perform the surgery”).

⁵ Leah B. Mendelsohn, *A Piece of the Puzzle: Telemedicine as an Instrument to Facilitate the Improvement of Healthcare in Developing Countries?*, 18 EMORY INT’L L. REV. 151, 163 (2004). Each category of telemedicine has specific functions. The second and third categories have the most utility to the concept of primary and secondary care or specialized medicine. The direct provision of patient care is done through a remote setting where a physician is not located in the same town as the patient, and can range from consultations with a physician or cybersurgery. *Id.* at 163–64.

⁶ Daly, *supra* note 2, at 73.

⁷ Meghan Hamilton-Piercy, *Cybersurgery: Why the United States Should Embrace This Emerging Technology*, 7 J. HIGH TECH. L. 203, 210 (2007). This article addresses remote surgery. See McCarthy, *supra* note 3, at 111 (discussing primary care physicians).

⁸ Daly, *supra* note 2, at 74.

Telemedicine is plagued with unclear licensing laws as well as ambiguous liability regulations and standards of care.⁹ Critics of telemedicine also point out the impact that releasing confidential information and data over potentially unsecure mediums can have on privacy laws.¹⁰ Last but not least, there has been some concern over medical insurance and what coverage telemedicine might have.¹¹ Telemedicine and House Bill 2068 increase in quantity the access to health care in rural areas, making positive strides in benefiting those who ordinarily might have to forego quality healthcare. To further improve the quality of health care underserved areas receive through telemedicine, Congress needs to establish clear licensing laws and national standards of care for telemedicine that will guide the practice of telemedicine and help practitioners and medical personnel avoid malpractice claims.

Part II of this Recent Development introduces House Bill 2068 and gives an overview of the bill's purpose. Part III addresses the expansion of telemedicine to rural communities to incorporate primary and secondary care. Part IV of this Recent Development discusses medical licensing and the need for uniformity in medical licensing for use in telemedicine. Part V describes the standards of care used in the medical field and what a uniform, national standard of care for specialized telemedicine would look like. Part VI addresses whether the federal government would have the authority to regulate the medical standards of care if adopted. Part VII concludes the Recent Development, calling for clear licensing laws for telemedicine to cross state lines as well as national medical standards of care for telemedicine as this will increase the quality of care received by patients.

⁹ *Id.* at 75.

¹⁰ Nicolas P. Terry, *An eHealth Diptych: The Impact of Privacy Regulation on Medical Error and Malpractice Litigation*, 27 AM. J. L. & MED. 361, 361 (2001) (suggesting that patient privacy and reducing medical error will be at the forefront of healthcare reform this decade). *See also* Chari J. Young, *Telemedicine: Patient Privacy Rights of Electronic Medical Records*, 66 U.M.K.C. L. REV. 921 (1998) (discussing the importance of telemedicine but highlighting the issues telemedicine creates with regards to privacy rights for patients).

¹¹ Daly, *supra* note 2, at 99–100.

II. H.R. 2068—THE MEDICARE TELEHEALTH ENHANCEMENT ACT

On April 23, 2009, U.S. Representative Mike Thompson (CA-1) introduced the Medicare Telehealth Enhancement Act of 2009, referred to as House Bill 2068.¹² The purpose of the bill is “to improve the provision of telehealth¹³ services under the Medicare Program, [and] to provide grants for the development of telehealth networks.”¹⁴ House Bill 2068 amends Title XVIII (Medicare) of the Social Security Act of 1935 with regards to telehealth services.¹⁵ This bill reflects the expansion of generalized and specialized care in telemedicine to rural areas for those who qualify for Medicare.¹⁶ The provisions of House Bill 2068 primarily pertain to funding;¹⁷ therefore, House Bill 2068 might help to ease some anxiety over what coverage telemedicine will have in the world of health insurance.¹⁸ This bill, however, does little to dispel the concerns over the legal barriers to telemedicine, such as licensing laws and unclear standards of care, which can

¹² Medicare Telehealth Enhancement Act of 2009, H.R. 2068, 111th Cong. (2009) (the bill has been referred to the House Committee on Energy and Commerce as well as the House Committee on Ways and Means).

¹³ Telehealth and telemedicine are interchangeable for the purposes of this Recent Development.

¹⁴ H.R. 2068.

¹⁵ H.R. 2068. *See generally* www.medicare.gov (detailing the eligibility requirements for the Medicare program). Generally speaking, one can qualify for Medicare if one is sixty-five years or older, a United States citizen or a permanent resident and the individual has worked, or their spouse has worked for ten years in Medicare-covered employment. CENTERS FOR MEDICARE & MEDICAID SERVICES, MEDICARE AND YOU 2010, 12 (2009), *available at* www.medicare.gov/Publications/Pubs/pdf/10050.pdf. Not being at least sixty-five years of age does not preclude one from qualifying for Medicare if the individual has received Social Security or Railroad Retirement Board disability benefits for twenty-four months or if individual has End-Stage Renal disease, Lou Gehrig’s Disease, and can meet certain specifications. *Id.* at 17.

¹⁶ H.R. 2068.

¹⁷ *Id.*

¹⁸ *Id.*

affect medical malpractice and are necessary to help practitioners and medical personnel avoid litigation.¹⁹

House Bill 2068 calls for additional federal funding to expand telemedicine to rural areas in the country and specifically to those who qualify for Medicare.²⁰ This Recent Development will mention economic barriers that face telemedicine but will focus primarily on whether this bill properly addresses the geographical and legal barriers facing telemedicine.²¹ Technology has advanced to the point where primary care can be practiced over the internet and remote surgery can be performed from a distance, but the lack of uniform telemedicine regulations and standards of care make the remote practice of generalized and specialized care exceedingly risky.²²

III. STEP RIGHT UP—GREATER ACCESS TO HEALTH CARE IN RURAL U.S.

One of the most profound advantages of telemedicine is that it bridges the wide gap between health care in urban areas and that found in rural communities across the country.²³ Historically, many people living in rural or remote areas of the country have struggled to gain access to quality primary²⁴ and secondary health care.²⁵ Perhaps the biggest contributor to the disparity between

¹⁹ *Id.*

²⁰ *Id.* (The Bill focuses on Medicare, but does not specifically discuss how the provisions will affect Medicaid).

²¹ Daly, *supra* note 2 and accompanying text.

²² This is especially true if surgery is involved. What if the robot is slightly off in its placement? This could potentially negatively affect the outcome of the surgery. Hamilton-Piercy, *supra* note 7, at 207.

²³ McCarthy, *supra* note 3, at 116–18.

²⁴ *Id.* at 116 (primary care is the medical term that refers to general practice and basic medical care given to citizens).

²⁵ See, e.g., Daly, *supra* note 2, at 73. See also Sanford A. Kaplan, *Weighing the Cost of County's Medical Center*, N.Y. TIMES, Aug. 23, 1981, at 1. (“‘Secondary’ care refers to care in your local hospital. It . . . requires the support services of nurses, technicians, elaborate equipment and continued monitoring of the patient. It is the kind of care rendered every time an operation is performed . . .”).

rural and urban health care is the difference between the rural health economy and the urban health economy.²⁶

A. *Telemedicine and the Physician*

Certain economic as well as other intangible incentives for physicians explain why physicians tend to stay in cities instead of moving to rural communities to practice medicine.²⁷ The difference in income levels between rural and urban practices, the professional status, and the prestige they may acquire if they practice in urban centers with near-by large medical universities sway physicians in their decision to remain in urban areas.²⁸ Professional isolation²⁹ and few opportunities for continuing education in rural communities, as well as the desire to stay close to their families and places of origin, are also factors that influence physicians.³⁰ With increased technology and telemedicine, doctors are able to choose urban areas where they can be in the midst of medical universities and have greater amounts of prestige, in addition to greater earning potential while practicing in underserved communities from a distance.³¹ Likewise, some have chosen rural communities where they can communicate with other esteemed physicians, continue their education, and keep abreast of current medicine by using technology.³² Thus, despite whether the physician chooses to stay in an urban community or makes the move to a rural community, telemedicine has lessened the negative

²⁶ Daly, *supra* note 2, at 76–78.

²⁷ McCarthy, *supra* note 3, at 128.

²⁸ *Id.*

²⁹ *Id.* See also Christopher J. Caryl, *Malpractice and Other Legal Issues Preventing the Development of Telemedicine*, 12 J.L. & HEALTH 173, 176 (1997). “Professional isolation” is often felt by physicians practicing in rural areas where they have fewer friends in the field with whom to consult and from whom to garner support. *Id.*

³⁰ McCarthy, *supra* note 3, at 120. Students who enter medical school are disproportionately from urban communities over rural communities, and thus, prefer to stay in urban settings to practice medicine. *Id.*

³¹ *Id.*

³² *Id.* at 128.

effects on the physicians' choice and has decreased the rural communities' lack of generalists and specialists.³³

B. *Primary/General Care*

Primary health care is basic medical care, such as a visit to a family doctor, where a patient will go to receive attention for illnesses like influenza and where they can be prescribed medication.³⁴ The AMA suggests that there is an overall trend in a decrease of primary care physicians.³⁵ The AMA also contends that regions of the country with a greater supply of physicians may be able to accept new patients in the future, whereas in underserved areas where the supply of physicians is lower, the medical practices may have to close to new patients.³⁶ If the prediction of the AMA is accurate and rural medical practices close their doors to new patients due to fewer available physicians, patients who cannot afford or are unable to travel far distances to seek medical attention could suffer.³⁷ In general, telemedicine provides a source of hope for patients unable to get primary care. Through telephone consultations, and video consultations if the technology exists for rural patients, access to a primary care physician is not impossible for individuals living in underserved areas.³⁸ House Bill 2068 addresses telehealth care coverage for one of the most vulnerable categories in the U.S. population, the

³³ McCarthy, *supra* note 3, at 128.

³⁴ *Id.* at 111.

³⁵ American Medical Association, *Healthcare Trends 2008*, (2008), available at <http://www.ama-assn.org/ama1/pub/upload/mm/409/2008-trends.pdf>. The decrease in primary care physicians can be attributed in part to a necessity to work longer hours leaving less time for family and educational programs. *Id.* at 58–59.

³⁶ *Id.* The supply of physicians in urban areas is often greater due to higher incomes, greater access to educational tools, proximity to family ties, prestige, and camaraderie between physicians. McCarthy, *supra* note 3, at 127–28.

³⁷ *Healthcare Trends 2008*, *supra* note 35.

³⁸ McCarthy, *supra* note 3, at 126–29.

elderly over the age of sixty-five and those with disabilities that qualify for Medicare, whose access to primary care is important.³⁹

C. *Secondary/Specialized Care*

Secondary health care includes remote patient management services and home care, hospital care where technical equipment and extensive monitoring of the patient are necessary as well as specialties in medicine, including cardiology or oncology.⁴⁰ Specialists often choose to live and practice in urban communities where communication with colleagues is easier, where incomes are higher, and where there is greater prestige in their field of medicine if they are close to a university.⁴¹ Technologies such as telecommunications, image uploads for diagnoses, and robots performing remote surgeries, would allow specialists who live in urban areas the ability to practice medicine in underserved communities as well.⁴² This increased technology would allow rural communities greater access to specialized medicine. House Bill 2068, which allows more resources to be spent on remote hospitals and home care for those who do not have access to a hospital, supports this idea as well.⁴³

³⁹ Medicare Telehealth Enhancement Act of 2009, H.R. 2068, 111th Cong. (2009).

⁴⁰ Daly, *supra* note 2, at 87. Cardiology is the specialized study of heart medicine. Oncology is the specialized study of cancer medicine. See H.R. 2068 § 105 (“The term ‘remote patient management services’ means the remote monitoring, evaluation, and management of an individual with a covered chronic health condition through the utilization of a system of technology that allows a remote interface to collect and transmit clinical data between the individual and a home health agency, in accordance with a plan of care established by a physician, for the purposes of clinical review or response by the home health agency.”).

⁴¹ McCarthy, *supra* note 3, at 127.

⁴² Daly, *supra* note 2, at 78–79.

⁴³ H.R. 2068. This is especially true for those who qualify for Medicare.

IV. UNIFORM LICENSING LAWS

In order to practice medicine, a physician must be licensed.⁴⁴ A physician must pass a national or state licensure examination to be eligible for a license which is issued by the state in which he or she seeks to practice.⁴⁵ Licensing requirements differ by state, but all state medical boards require some level of education in the field of practice, and passage of a medical examination, whether it is one given by the state or a national exam.⁴⁶ The process of obtaining a license is not easy and has become increasingly strict and challenging as State Medical Boards try to reduce the numbers of fraudulent practitioners.⁴⁷ Although a strict system appears reasonable to protect patients and practitioners from fraudulent claims of licensure, it negatively affects the practice of telemedicine as obtaining multiple licenses to practice in more than one state could be impractical.⁴⁸

There is no distinct license for the practice of telemedicine. Rather, each state licenses their medical personnel and some states are stricter than others, resulting in a lack of uniformity. Moreover, there are distinct state statutes that limit what an out-of-state practitioner can do with their work in another state. California for example, has a statute⁴⁹ that does not allow the out-of-state practitioner to “open an office, appoint a place to meet patients, receive calls from patients within the limits of this state, give orders, or have ultimate authority over the care or primary diagnosis of a patient who is located within [California].”⁵⁰ This California statute effectively diminishes telemedicine unless it is practiced solely within the state of California. In order for

⁴⁴ Becoming a Physician—Medical Licensure, *available at* www.ama-assn.org/ama/pub/education-careers/becoming-physician/medical-licensure.shtml.

⁴⁵ *Id.* (establishing the process for obtaining a medical license). This process can be tedious and costly. Obtaining a license in more than one state is difficult due to the time it takes to process a license.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Cal. Bus. & Prof. Code § 2060 (2004).

⁵⁰ *Id.*

telemedicine to function, there needs to be uniformity in licensing standards. Uniformity can be accomplished either through a national license for medical personnel, or through better cooperation and reciprocity between state medical boards.⁵¹ Even though the requirements for state licensure vary from state to state, there are some similarities and many states accept the same national testing that one must take to be a licensed practitioner.⁵² It follows then, that if a practitioner meets the qualifications of one state licensing board, they are not going to be wildly unqualified for another state's licensing board. Therefore, cooperation among states to allow for competent physicians who are fully licensed in another state to receive a medical license to practice telemedicine would be an efficient way to encourage the expansion of telemedicine.

V. NATIONAL STANDARDS OF CARE: QUALITY OF CARE

Once a practitioner or nurse is licensed to practice medicine, he or she is guided in their practice by medical standards of care. It is not clear what the standard of care is for telemedicine. House Bill 2068 does not clarify how medical personnel are to exercise their duties in care given to patients under new areas of coverage for telemedicine.⁵³ Standards of care and the adherence to them can be linked to quality of care given by a practitioner or medical personnel.⁵⁴ Quality of care in medicine can be defined as the “degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁵⁵ Additionally, “the quality of care considers whether the available healthcare services are at a sufficient level by examining the skill of the

⁵¹ THE CENTER FOR TELEMEDICINE LAW, TELEMEDICINE LICENSURE REPORT, 2 (2003).

⁵² *Becoming a Physician—Medical Licensure*, *supra* note 44.

⁵³ H.R. 2068, 111th Cong. (2009). New areas of Medicare coverage for telemedicine under this bill include remote patient care in the home and the addition of renal dialysis as an originating site.

⁵⁴ Mendelsohn, *supra* note 5, at 199.

⁵⁵ *Id.*

medical personnel, the quality of the equipment, and the adequacy of the drugs.”⁵⁶

To improve quality of care, medical standards of care must be strengthened.⁵⁷ In particular, uniform national standards of care need to be implemented.⁵⁸ Currently, the states have the authority to set medical standards to which their practitioners must comply.⁵⁹ The result is at least fifty statutes and a plethora of case law that differ in part and are similar in part.⁶⁰ For example, North Carolina courts have held that the standard of care for medical practitioners is determined by a combination of the statutory provision and common law.⁶¹ “The applicable standard . . . is . . . the exercise of ‘best judgment,’ ‘reasonable care and diligence’⁶² and compliance with the ‘standards of practice among members of the same health care profession with similar training and experience situated in the same or similar communities.’”⁶³ Overall, there are four varying standards in place across the country, not including hybrid laws such as the one found in North Carolina.⁶⁴ These standards of care are: “same locality,”⁶⁵ “same or similar locality,”⁶⁶ “entire state,”⁶⁷

⁵⁶ *Id.*

⁵⁷ *See id.*

⁵⁸ *See* The Center for Telemedicine Law, *supra* note 46 at 4. There should be more than one standard of care to cover the multitude of medical practices that telemedicine can cover. Telemedicine covers generalized care which can include a teleconference or video conference, or it can mean specialized care which has its own subcategories such as cardiology and oncology.

⁵⁹ Carmen E. Lewis, *My Computer, My Doctor: A Constitutional Call for Federal Regulation of Cybermedicine*, 32 AM. J.L. & MED. 585, 594 (2006).

⁶⁰ Jay M. Zitter, Annotation, *Standard of Care Owed to Patient by Medical Specialist as Determined by Local, “Like Community,” State, National, or Other Standards*, 18 A.L.R.4th 603 (2009).

⁶¹ *Swink v. Weintraub*, 672 S.E.2d 53, 59 (2009).

⁶² *Id.* *See* *Hunt v. Bradshaw*, 88 S.E.2d 762, 765 (N.C. 1955).

⁶³ *Swink*, 672 S.E.2d at 59 (quoting *Wall v. Stout*, 311 S.E.2d 571, 577 (1984)). The *Wall* opinion can be summarized by stating that N.C. Gen. Stat. § 90-21.12 (1975) didn’t abrogate the common law standard of care, but instead complimented the common law standard. *Swink*, 672 S.E.2d at 60. (See N.C. Gen. Stat. § 90-21.12 (1975)).

⁶⁴ Zitter, *supra* note 60, at 606–08.

⁶⁵ *Id.* at 608 (defining the “same locality” standard as when “a specialist has the duty to possess and exercise that degree of skill and care ordinarily

and “nationwide or nongeographic standards.”⁶⁸ In addition, many states hold a medical specialist to a higher standard than a general practitioner because specialists hold themselves out as experts in a particular field.⁶⁹

Having a statute that is specific to one state—like the hybrid law in North Carolina—is reasonable when the practitioner is licensed in that state and practices there with knowledge of the rules. This is problematic, however, for the practice of telemedicine where, by its nature, medicine is often practiced across state lines.⁷⁰ It is not feasible to have every practitioner wanting to practice telemedicine in the United States familiarize himself or herself with the laws of forty-nine other states. There

employed, under similar circumstances, by the members of his specialty in good standing, located in the same locality”). This could be problematic for practitioners who have been sued, depending upon where the hearing takes place. If the trial is held in another state, a doctor may have difficulty claiming they should be subject to the standard of care of another locality.

⁶⁶ *Id.* at 609. “Same or similar locality” means that “a specialist must possess and exercise that degree of skill and care which a specialist of ordinary prudence and skill, practicing in the same or a similar community, would have exercised in the same or similar circumstances.” *Id.* Like the “same locality” standard, the “same or similar locality” is problematic if the physician is in Los Angeles and the patient is in the countryside of another state. It cannot be said that an urban dwelling is of the “same or similar locality” as a rural dwelling.

⁶⁷ *Id.* at 611–15. “Entire state” means “the standard of care required of a specialist is that degree of care and skill possessed and exercised by specialists of good standing in the same specialty throughout the state.” *Id.* This is also problematic with the practice of telemedicine as it is common for a physician to be located in different state than the patient.

⁶⁸ *Id.* at 614. “Nationwide or nongeographic standards” do “not specifically limit the applicable community from which the relevant standard was to be derived, adopting such standards as ‘nationwide,’ ‘nongeographic,’ or ‘standards of similar specialists.’” *Id.*

⁶⁹ *Id.* at 616–17.

⁷⁰ There is an exception. Some states, North Carolina for example, have a “special purpose license” in which the state medical board can issue a limited license to be used for a specific purpose and it is limited in time. See N.C. Gen. Stat. § 90-12.2A (2009). Research does not suggest that this special purpose license is especially challenging to obtain, but it would be a nuisance to require those practitioners who desire to practice telemedicine regularly to seek this license every time they enter a state in which they are not fully licensed.

needs to be uniformity in medical standards amongst generalists and amongst specialists to enable them to practice telemedicine across state lines.

Likewise, a standard of similar locality and knowledge cannot likely be sustained when telemedicine, by design, bridges a gap which enables practitioners to remain in urban areas while the patient lives in a rural town. New York City cannot be analogous under the “same or similar locality”⁷¹ standard to New Bern, North Carolina because the size of the communities, the number of residents, and less empirically, the cultures of both locations are significantly different.⁷² For these reasons, the federal government should institute national standards of care to guide the practice of telemedicine.

With the practice of telemedicine, it is important that standards which might restrict a practitioner to same or similar geographical locations not be used. This is because telemedicine is commonly practiced across state lines and geographical divides and a practitioner and patient could reside in locations that are dissimilar, respectively, a city and small town.⁷³ It seems reasonable, therefore, that telemedicine practitioners to operate under a standard of “similar specialists.”⁷⁴ With this standard, there is common knowledge within an expertise and the customs of practice are likely to be similar.⁷⁵ While no standard of care is perfect, for practical purposes, the “similar specialists”⁷⁶ standard of care, which reflects the specialists’ expertise and the primary physicians’ general knowledge, seems to be the most logical.

⁷¹ Zitter, *supra* note 60, at 609–11.

⁷² The difference in culture could amount to a difference in the way a patient or medical personnel views quality of care.

⁷³ Daly, *supra* note 2, at 76–77.

⁷⁴ Zitter, *supra* note 60, at 614. Having the standard of care to reflect that of “similar specialists” is the most uniform and easy to adhere to of all of the other standards of care. This may also have to reflect the skills required for a nurse and a technician, each of course maintaining their own standards under “similar specialists.”

⁷⁵ *Id.* at 614–22.

⁷⁶ *Id.*

VI. FEDERAL AUTHORITY?

After establishing the need for clearer licensing laws and uniform national standards of care, the next question is whether or not the federal government has the authority to regulate the practice of medicine and thus, to create a national standard of care. At first glance, the answer appears to be no. The Tenth Amendment of the Constitution⁷⁷ grants states the power to regulate the practice of medicine.⁷⁸ This regulatory power rests in the states' medical licensing boards which establish the scope of medical practice to be adhered to in each individual state.⁷⁹ This grant, however, does *not* preclude the federal government from regulating telemedicine.⁸⁰

The Constitution grants Congress the plenary power to regulate interstate commerce through the Commerce Clause.⁸¹ The rationale behind this power is preventing one state from engaging in economic isolationism when dealing with another state.⁸² There

⁷⁷ U.S. CONST. amend. X. The Tenth Amendment states, “[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.” The Constitution doesn’t grant any branch of the federal government an inherent power to regulate the practice of medicine. Therefore, it follows that the right to regulate the practice of medicine is reserved for the states.

⁷⁸ Lewis, *supra* note 59, at 594. This journal article discusses the practice “cybermedicine” rather than telemedicine. Cybermedicine and telemedicine are not identical, but they are occasionally used interchangeably and their functions overlap. Cybermedicine is defined as “the science of applying Internet and global networking technologies to medicine and public health, of studying the impact and implications of the Internet, and of evaluating opportunities and the challenges for health care.” *Id.* at 585, citing Gunther Esenbach, *Shopping Around the Internet Today and Tomorrow: Towards the Millennium of Cybermedicine*, 319 BRIT. MED. J. 1294, 1928 (1999). Taken together, these two methods of practicing of medicine through the use of technology merge into “e-health.” *Id.*

⁷⁹ *Id.* at 594.

⁸⁰ *See id.* at 600 (stating that the Constitution provides the federal government with the power to preempt state regulation of cybermedicine).

⁸¹ *Id.* at 600–01. (citing U.S. Const. art. I, § 8, cl. 3).

⁸² *Id.* at 601. “Economic isolationism” is when a State enacts legislation that “favor[s] in-state economic interests at the expense of out-of-staters.” PHH Real Estate Services v. Miss. Real Estate Comm’n, 1997 U.S. Dist. LEXIS 24060, at

are instances of telemedicine that would keep the use of telemedicine wholly inside one state, such as a heart specialist operating out of East Carolina University in Greenville, North Carolina, consulting with an elderly patient in rural Tarboro, North Carolina. However, one of the major concepts behind telemedicine is the idea that through technology, medicine will be connected nationally and even globally.⁸³ For this reason, the expansion of telemedicine will likely take medical practice across state lines.⁸⁴ Therefore, telemedicine could fall under the umbrella of interstate commerce, and the federal government would have the authority to regulate the practice.

The ability of Congress to regulate telemedicine through the Commerce Clause does not completely replace the states' authority to license and establish standards to which local doctors must adhere.⁸⁵ Practice of telemedicine wholly within one state would trigger the exclusive application of laws from within that state. It is when the practice of telemedicine reaches across borders that uniform, nationally recognized standards are necessary.

VII. CONCLUSION

The benefits of telemedicine to those living in underserved communities across the country are immense. In some cases, this marriage of technology and medicine could be the difference between life and death. Telemedicine reaches into the corners of

17.) In addition to its Commerce Clause powers, Congress also has power to regulate through the Dormant Commerce Clause. The Dormant Commerce Clause functions similarly to the concept of economic isolationism in that the key question "is whether the practical effect of the regulation is to control conduct beyond the boundaries of the state." Lewis, *supra* note 59, at 602 (citing *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989)). Whenever a state tries to control commerce outside of their boundaries, the Federal government is able to regulate the activity. Since telemedicine often crosses state lines, a state statute that tried to regulate the medical commerce between states with the effect of benefitting that state but hurting another would likely be preempted by Congress through the Dormant Commerce Clause power.

⁸³ Daly, *supra* note 2, at 76.

⁸⁴ *Id.* at 77.

⁸⁵ Lewis, *supra* note 59, at 600.

11 N.C. J.L. & TECH. 99, 114
H.R. 2068: Telehealthcare in Rural America

our country and enables those who would otherwise have to forego medical help to receive primary and specialty care. However, technology is advancing faster than the law. Neither statutory law nor case law provides definitive answers as to how telemedicine should be practiced. In addition, current state licensure laws inhibit the practice of telemedicine. Without guidelines and standards of care that are nationally uniform, physicians and medical personnel practicing telemedicine put themselves at an increased risk for liability because the stakes are high due to the fact that the physicians are not present with the patients and cannot physically examine them. Future federal legislation needs to address these concerns so that medical personnel can know that they are providing adequate care from a different state or locality. House Bill 2068 appropriately calls for an expansion of telemedicine to better benefit those who would not ordinarily have access to medical care in rural communities. Telemedicine undoubtedly increases the quantity of health care available to citizens in rural communities. With tighter regulations and licensure laws, House Bill 2068 or future bills can assure that citizens receive a better quality of care.