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THE DOCTOR WILL E-MAIL YOU NOW: PHYSICIANS' USE OF TELEMEDICINE TO TREAT PATIENTS OVER THE INTERNET

LISA RANNEFELD¹

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SYNOPSIS

This article examines the problems currently associated with the practice of telemedicine and suggests that the best solution for this particular field of medicine is a national standard of care. This article also suggests that the Food and Drug Administration's (FDA) current functions are easily expandable to the telemedicine context; therefore, the agency should regulate the implementation of such a standard in the telemedicine field. This article proposes that the FDA use medical practice guidelines in developing the applicable standard. Other agencies, such as the American Medical Association (AMA) and other website alliances, could also aid the FDA in implementing this standard because of their experience in setting such guidelines for the traditional medical context. Finally, this article suggests that in implementing the national standard of care, the FDA should increase the standard of care that telephysicians, as compared to traditional physicians, owe their patients because of the risks associated with treating patients in the absence of hands-on consultations. By implementing a national standard of care, problems currently associated with telemedicine will be resolved, and physicians and patients will have more confidence in telemedicine.

I. INTRODUCTION

Imagine obtaining a cure for your stomachache or performing a needle biopsy on your own tumor without ever seeing a physician in person.² Picture yourself sitting at your home computer typing in a web address, filling out a patient consultation sheet, and entering your credit card number. Imagine sending a "cyber doctor" an email regarding your symptoms and receiving a diagnosis either through live chat or corresponding email. Imagine a cyber doctor even telephoning a prescription into your local pharmacy. These situations are examples of how the technologically advanced use of "telemedicine" is a rapidly emerging concept that has the potential

Id.

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²Ruth Ellen Smalley, Comment, Will a Lawsuit a Day Keep the Cyberdocs Away? Modern Theories of Medical Malpractice as Applied to Cybermedicine, 7 RICH. J.L. & TECH. 29, at *19 (2001) (citing Associated Press, Technology Became Lifeline; South Pole Doctor's Care Frustrating, CHI. SUN TIMES, Oct. 22, 1999, at 4).

Last year telemedicine received more publicity than ever before when Dr. Jerri Neilsen, an American doctor stationed at the Amundsen-Scott South Pole Research Center, discovered a lump in her breast. Stranded during the . . . winter months, . . . Dr. Neilsen learned how to perform a needle biopsy on her tumor by video conferencing with experts in the United States.

to change the practice of medicine and the interaction between physicians and patients forever.³

"Telemedicine refers to the use of electronic communication and information technologies to deliver health care at a distance." Closely related to telemedicine is "cyber medicine," which involves the provision of medical advice and treatment over the Internet. For the purposes of this Article, telemedicine and cyber medicine will be collectively referred to as "telemedicine." Telemedicine allows "patients [to] communicate with physicians ('cyberdocs') through electronic mail ('email') or chat rooms, and cyber doctors then diagnose the patients' ailments and provide treatment advice." Another basic example of telemedicine in use today is "communications between health care providers and their patients [through] . . . audio-visual conferencing." Telemedical interactions between physicians and patients have progressed over the last forty years, and with time these procedures will become increasingly influential in the treatment of patients.

Forms of telemedicine communication began in 1960, when "NASA began utilizing telemetric technologies to transmit physiological data and monitor the health of astronauts in space." This technology generated the infrastructure for telemedicine, and in the "mid-1970s, NASA satellites were used in Alaska to provide a connection by which local nonphysician providers could access information and consult with a distant physician." Although these initial programs were only relatively successful, telemedicine truly emerged during the information and technology boom in the mid-1990s. As a result of this increase in technology, telemedicine has continually matured into a more efficient form of medical treatment than it was when it began.

³See Kip Poe, Telemedicine Liability: Texas and Other States Delve into the Uncertainties of Health Care Delivery Via Advanced Communications Technology, 20 Rev. Litig. 681, 682 (2001).

 $^{^{4}}Id.$

⁵Shira D. Weiner, Note, *Mouse-to-Mouse Resuscitation: Cybermedicine and the Need for Federal Regulation*, 23 CARDOZO L. REV. 1107, 1108 (2002) (citing Ranney V. Wiesemann, Note, *On-Line or On-Call? Legal and Ethical Challenges Emerging in Cybermedicine*, 43 St. LOUIS U. L.J. 1119, 1119 (1999)).

⁶*Id.* (citing Wiesemann, *supra* note 5, at 1119).

⁷Poe, *supra* note 3, at 682.

⁸See Gilbert Eric DeLeon, Comment, Telemedicine In Texas: Solving the Problems of Licensure, Privacy, and Reimbursement, 34 St. MARY'S L.J. 651, 656 (2003).

⁹Id. (citing Andy Miller, *Medicine's Video Age: New Technology Expected to Help Rural Hospitals, Reduce Patient Costs*, ATLANTA J. & CONST., Apr. 6, 1993, at E1).

¹⁰Id. (citing Patricia C. Kuszler, *Telemedicine and Integrated Health Care Delivery: Compounding Malpractice Liability*, 25 AM. J.L. & MED. 297, 299-301 (1999)).

¹¹Id. at 657 (citing Jeffrey C. Bauer, Rural America and the Digital Transformation of Health Care, 23 J. LEGAL MED. 73, 76 (2002)).

¹²See Weiner, supra note 5, at 1108.

Consequently, the advantages of telemedicine are extensive.¹³ Telemedical communication is an easy and cost-effective means of obtaining information about a disease or an illness as well as the types of treatments that are available to patients.¹⁴ Telemedicine allows health care providers of rural and elderly patients to "electronically monitor vital signs, verify medication compliance, and reinforce patient education."¹⁵ Rural and elderly patients, through the use of telemedicine, obtain advanced treatments and consultations with specialists without having to travel out of the area in which they live.¹⁶ Were it not for telemedicine, indispensable services would not be available to these particular groups of people. Furthermore, receiving medical information through the Internet provides patients the opportunity to become more active in their own health care because they are able to make more informed decisions, which in turn allows physicians more effectively to evaluate and to treat their patients.¹⁷ As more and more physicians realize the positive impact that telemedicine has had on the treatment of patients, the use of telemedicine in the medical community as a whole will substantially increase.¹⁸

Although studies "show that telemedicine is currently utilized by only twenty-five percent of the entire medical community[,] . . . the use of telemedicine is predicted to rise due to factors such as increasing consumerism, changing demographics, hardware price deflation, and increasing access to the Internet." Of all adults that use the Internet, studies indicate that seventy to ninety percent of them are using the Internet to find health-related information. Since 1996, when CyberDocs, Inc. first went on-line, "more than 20,000 healthcare sites have developed on the Internet." By the year 2010, industry experts anticipate that telemedicine will represent at least fifteen percent of all heath care expenditures in

 $^{^{13}}Id.$

¹⁴Id. (citing Aaron Zitner, Cybermedicine Seen as Unhealthy by Some, BOSTON GLOBE, Aug. 6, 1998, at C1).

¹⁵Poe, *supra* note 3, at 686 (citing Bill Siwicki, *Home Care Market Offers Telemedicine Opportunities*, Health Data Mgmt., May 1996, at 52; Illene Warner, *Telemedicine in Home Health Care: The Current Status of Practice*, Home Health Care Mgmt. & Prac., Feb. 1998, at 62).

¹⁶*Id*. at 682.

¹⁷Weiner, supra note 5, at 1114.

¹⁸See id.; see also Smalley, supra note 2, at *17. As physicians become more comfortable in using telemedicine to treat patients, patients will also become more accepting of this form of treatment. See Weiner, supra note 5, at 1108.

¹⁹Smalley, *supra* note 2, at *17 (citing Wiesemann, *supra* note 5, at 1121).

²⁰Weiner, *supra* note 5, at 1109 (citing Kevin H. Nalty & David Osborn, *Leveraging E-Learning in the Medtech Industry*, MX MAG., Mar.-Apr. 2001, *available at* http://www.deviceline.com/mx/archive/01/03/0103mx064.html (last visited Feb. 1, 2005)).

²¹*Id.* at 1108-09 (citing Molly Tschida, *Ethics Online*, Mod. Physician, Dec. 1, 1999, *available at* http://www.modernphysician.com (last visited Feb. 1, 2005)). CyberDocs, Inc. is a web site that operates 24 hours a day and is run by board-certified American Emergency Medicine specialist. *Id.* at 1107. This was the "world's first interactive virtual doctor's office on the Internet."

the United States alone.²² Clearly, telemedicine is quickly becoming a trend in the practice of medicine today, and, as the benefits increase, telemedicine will continue to become a more conventional way to treat patients.²³

Nevertheless, the increased use of telemedicine brings forth new challenges for our legal system.²⁴ Courts and legislatures must begin examining questions regarding the applicable standard of care, formation of the physician-patient relationship, physician reimbursement, and venue in the telemedicine environment as compared to the manner in which these issues are dealt with in the traditional practice of medicine.²⁵ Unlike traditional medicine, telemedicine lacks uniform guidelines that physicians must follow when treating their patients.²⁶ In the absence of such standards, patients' substandard treatments can go unheeded.²⁷ The most effective way to manage the problems associated with telemedicine collectively is to implement a national standard of care that provides boundaries and guidelines that physicians in every state must follow in order to avoid medical liability.²⁸

This comment explains the need for consistent criteria in determining the existence of the physician-patient relationship, the different types of interactions that form this relationship, and an applicable standard of care in telemedicine. Part II addresses the five elements that a plaintiff must prove in order to establish a claim for medical negligence.²⁹ In order to highlight the elements of negligence that create the greatest obstacle for telemedicine, Part II emphasizes the formation of the physician-patient relationship and the applicable standard of care.³⁰ Part III addresses the major problems associated with the practice of telemedicine and establishes the need for a unique standardization for this type of care.³¹ Part IV focuses on the absence of a consistent standard of care applicable to telemedical negligence cases in Texas and proposes the adoption of a national standard of care for telemedicine.³² Part IV also suggests that the standard of care should be greater

²²Smalley, supra note 2, at *17 (citing Dateline: Telemedicine Will Grow 40 Percent Annually Over the Next 10 Years, Says Industry Expert (NBC television broadcast, Dec. 2, 1999)).

²³See id. (citing Wiesemann, supra note 5, at 1119).

²⁴See, e.g., Poe, supra note 3, at 686.

²⁵Id.; see Alissa R. Spielburg, Online without a Net: Physician-Patient Communication by Electronic Mail, 25 Am. J.L. & MED. 267, 289-291 (1999).

²⁶See infra Part III.A-E.

²⁷See infra Part III.A-E.

²⁸See infra Part IV.A-D.

²⁹See discussion *infra* Part II. These are the elements, as they apply to the medical field, needed to establish a general negligence cause of action.

³⁰See discussion infra Part II.

³¹See discussion *infra* Part III. These problems include: liability for equipment failure and malfunctions, venue, jurisdiction, reimbursement, licensure, and pharmacists' contribution to telemedicine.

³²See discussion infra Part IV.

than for patients treated telemedically than patients treated in the traditional medical

II. NEGLIGENCE ELEMENTS IN THE PRACTICE OF TRADITIONAL MEDICINE

Although some telemedicine issues are unrelated to traditional medicine, the two forms of practice overlap with regard to establishing a cause of action for medical negligence. In general, courts do not need to establish new medical negligence elements unique to telemedicine; rather, courts need to expand some of the traditional medical negligence elements (i.e., physician-patient relationship and standard or care) in terms of their rationale in telemedicine.

In order to establish a cause of action for medical negligence, a plaintiff must prove the following four elements: "(1) a legally cognizable duty requiring the physician to conform to a certain standard of care or conduct, (2) the applicable standard of care, (3) a breach of that standard, (4) injury, and (5) a reasonably close causal connection between the breach and the injury the plaintiff suffered."³⁴ Courts must address the question of duty before considering the applicable standard of care.³⁵ Furthermore, courts use these elements to determine medical liability in traditional medical malpractice cases; however, courts have not taken the opportunity to adjust these elements so as to improve their applicability to telemedicine.³⁶

A. Formation of the Physician-Patient Relationship

The establishment of a physician-patient relationship is included in the physician's duty to act according to the relevant standard of care.³⁷ establishment of this relationship is important in the telemedicine context because, as in traditional medicine, a physician must enter into this type of relationship before he or she has an obligation to adhere to the applicable standard of care.³⁸ The plaintiff can provide evidence of such a relationship by "proving that a consensual, contractual relationship, whether written or implied, exists between the doctor and the patient, thus causing a resulting duty of care towards the patient."³⁹ The plaintiff can establish the existence of a consensual relationship by proving "whether [the

³⁹Derek F. Meek, Comment, Telemedicine: How an Apple (or Another Computer) May Bring Your Doctor Closer, 29 CUMB. L. REV. 173, 186 (1998-1999) (citing Phyllis Forrester Granade, Medical Malpractice Issues Related to the Use of Telemedicine: An Analysis of the Ways in Which Telecommunications Affect the Principles of Medical Malpractice, 73 N.D. L. REV. 65, 66 (1997)).

³³See discussion infra Part IV.

³⁴Wheeler v. Yettie Kersting Mem'l Hosp., 866 S.W.2d 32, 37 (Tex. App.—Houston [1st Dist.] 1993, no writ). This comment concentrates on the elements of duty of the physician to act according to a certain standard, including the formation of the physician-patient relationship, and the applicable standard of care.

³⁵St. John v. Pope, 901 S.W.2d 420, 424 (Tex. 1995).

³⁶See *infra* notes 39-79.

³⁷JAMES WALKER SMITH, HOSP. LIAB. §17A.05 (2004) (on file with author).

service] was *contracted* for with the express or implied consent of the patient or for his benefit.""⁴⁰ Because telemedical treatment is often devoid of direct physical contact between the physician and the patient, the plaintiff's burden of establishing the existence of a physician-patient relationship becomes more complicated as compared to the plaintiff's burden of proving this relationship in the traditional medicine context.⁴¹

The court in *Dougherty v. Gifford* noted that the absence of direct physical contact between the physician and patient during consultation or treatment does not preclude the formation of the physician-patient relationship.⁴² In *Dougherty*, the court held that a physician-patient relationship existed between the patient and a pathologist, with whom the patient's treating physician contracted to perform laboratory work, because the pathologist's work *benefited* the patient.⁴³ Nevertheless, Texas courts have consistently held that, in the absence of an agreement to treat the patient or an affirmative act on the part of the physician, there is no duty imposed on the physician.⁴⁴ Since telemedical treatments frequently occur in the absence of physical interaction, courts must determine whether these conditions create a physician-patient relationship.⁴⁵

With respect to telemedicine and the formation of the physician-patient relationship, various courts determine the liability of a telemedical physician according to the following factors: "the degree of contact the patient has with the consulting telephysician and the amount of independent judgment the treating physician uses in accepting or rejecting [the] advice." Even if the physician "simply speaks with the patient to book an appointment for a specific illness," the physician is subject to liability. In *Lopez v. Aziz*, the court stated that the key elements for the formation of a physician-patient relationship, drawn from cases analogous to telemedicine, are the following: (1) whether the physician agrees, directly or indirectly to see or counsel a patient; (2) whether there is an evaluation,

⁴⁰Lopez v. Aziz, 852 S.W.2d 303, 306 (Tex. App.—San Antonio 1993) (quoting Walters v. Rinker, 520 N.E.2d 468, 472 (Ind. Ct. App. 1988)). "Where [] healthcare services are rendered on behalf of the patient and are done for the patient's benefit, a consensual physician-patient relationship exists for the purposes of medical malpractice." *Id.* (quoting *Walters*, 520 N.E.2d at 472).

⁴¹See Meek, supra note 39, at 186.

⁴²Dougherty v. Gifford, 826 S.W.2d 668, 674-75 (Tex. App.—Texarkana 1992) (stating that the physician-patient relationship was not negated, even though the physician contracted for the services with another physician, because the services were to the benefit of the patient and the patient contracted with the physician with implied consent).

⁴³*Id.* at 675.

⁴⁴Wax v. Johnson, 42 S.W.3d 168, 172 (Tex. App.—Houston [1st Dist.] 2001, pet. denied); Ortiz v. Shah, 905 S.W.2d 609, 611 (Tex. App.—Houston [14th Dist.] 1995, writ denied) (concluding that no duty existed when a physician never saw the patient, talked to him, or gave advice to anyone in the emergency room about the patient).

⁴⁵See Meek, supra note 39, at 187.

 $^{^{46}}Id.$

⁴⁷*Id.* (citing Lyons v. Grether, 239 S.E.2d 103 (Va. 1977)).

however basic, of the patient's symptoms or complaints; and (3) whether the patient relies on the physician's opinion.⁴⁸ Although courts apply these standards in various telemedicine cases, there is a lack of uniformity across the country, and only the implementation of a national standard of care will fill this void.⁴⁹ Moreover, whether under federal or state regulations, the patient must establish the formation of the physician-patient relationship before the physician has a legal obligation to treat the patient according to the applicable standard of care.⁵⁰

B. Applicable Standard of Care

Once the physician-patient relationship exists, the physician then "owes the patient a duty to treat him or her with the skills of a trained, competent professional, and a breach of that duty may give rise to a malpractice action." Currently, this analysis is applicable in traditional medical negligence cases as well as in telemedicine cases.⁵² Under both practices, the standard of care for a physician is what an ordinary and prudent physician would do under the same or similar circumstances.⁵³ Furthermore, in traditional medical negligence cases, courts have based a physician's duty on the standard of care in his locality.⁵⁴ For example, according to the traditional application of the standard of care, courts require a surgeon to have the degree of skill possessed by other surgeons in the particular locality where they practice.⁵⁵ A standard of care based on locality is problematic for telephysicians because, when rural telephysicians treat patients in urban areas, the law is ambiguous about which standard of care the physician must follow—urban or rural.⁵⁶ When telemedicine procedures are identical to those used in the traditional practice of medicine, the applicable standard of care is not difficult to determine.⁵⁷ Even so, problems arise when telemedicine procedures are inferior or superior to traditional medical protocol because physicians are not clear on what standard of

⁴⁸See Lopez v. Aziz, 852 S.W.2d 303, 305-07 (Tex. App.—San Antonio 1993, no writ).

⁴⁹See supra notes 39-50; see infra Part IV.A-D.

⁵⁰Gross v. Burt, 149 S.W.3d. 213, 222 (Tex. App.—Fort Worth 2004).

⁵¹*Id.* (quoting Reynosa v. Huff, 21 S.W.3d 510, 513 (Tex. App.—San Antonio 2000).

⁵²See id. (noting that courts use this analysis in both situations because the elements of medical negligence are identical to the elements used in traditional medical negligence cases).

 $^{^{53}} Russ\ v.$ Titus Hosp. Dist., 128 S.W.3d 332, 340 (Tex. App.—Texarkana 2004, pet. denied).

⁵⁴Christopher J. Caryl, Note, *Malpractice and Other Legal Issues Preventing the Development of Telemedicine*, 12 J. L. & HEALTH 173, 197 (1998) (citing Tucker v. Meis, 487 S.E.2d 827, 828 (N.C. Ct. App. 1997)).

⁵⁵*Id.* (citing Murphy v. Dyer, 409 F.2d 747, 748 (2d Cir. 1969); Custodio v. Bauer, 251 Cal. App. 2d 303, 311 (1967); Evans v. Appert, 372 S.E.2d 94, 97 (N.C. Ct. App. 1988)).

⁵⁶Id at 197-98

⁵⁷Poe, *supra* note 3, at 695 (citing Caryl, *supra* note 54, at 197).

care is acceptable to follow.⁵⁸ By implementing a national standard of care, telephysicians will know the particular standard of care they must provide to their patients, thereby decreasing the probability that these physicians will breach that standard.⁵⁹

C. Breach of the Standard of Care

In order to establish a prima facie case for medical negligence, a plaintiff must show that the physician failed to adhere to the applicable standard of care. A plaintiff may establish a breach has occurred "through evidence that the doctor failed to initiate diagnostic procedures and inform the plaintiff of the results of the procedures, failed to initiate treatment when the need for treatment was indicated, or failed to provide care or attention following therapy." Courts have a tendency to base this evidence on a continuum; on one end is simple negligence, and on the other end is the physician's intentional refusal to provide treatment. Regardless of the court's placement of the physician's conduct on the continuum, courts will find the physician negligent only where the breach results in an injury to the patient.

D. Injury

A plaintiff is entitled to recover damages for an injury caused by the physician's breach of the standard of care. ⁶⁴ A plaintiff may recover damages for such injuries in traditional medical negligence cases as well as in telemedicine cases. ⁶⁵ But, "the defendant may be made to respond for such injuries as resulted from the defendant's acts, [and] not for injuries attributable to a prior cause." ⁶⁶ In *Times Publishing Co. v. Ray*, the court stated:

It is a well settled rule that, where plaintiff in a personal injury case is suffering from a disability or infirmity not caused by the negligence of the defendant in the particulars alleged in the petition, the court should take care to charge clearly, fully, and affirmatively that the plaintiff is entitled

⁵⁸*Id.* (noting that the applicable standard of care is especially difficult to determine when the telemedical examination is devoid of touching of the patient by the telephysician) (citing Caryl, *supra* note 54, at 199).

⁵⁹See 20 Teresa K. Porter, Causes of Action § 5 (1st ed. 2004); see infra Part IV.C-D.

⁶⁰PORTER, supra note 59.

⁶¹*Id*.

 $^{^{62}}Id.$

⁶³See id.

⁶⁴TERRY O. TOTTENHAM, HEALTH LAW PRACTICE GUIDE § 9:13 (2005) (stating that "[t]he patient is not entitled to recover for breach of duty if he was not injured by the breach").

⁶⁵ See id.

⁶⁶42A TEX. Jur. 3D Healing Arts and Institutions § 250 (2005).

to recover only to the extent that his infirmity was increased or aggravated by defendant's negligence.⁶⁷

In effect, the court's holding in *Times Publishing Co.* ensures that the patient's injury be a direct result of the physician's breach of the standard of care. ⁶⁸

E. Reasonably Close Causal Connection Between the Breach and the Injury the Plaintiff Suffered

Courts call for plaintiffs to establish that the physician's breach and the plaintiff's injury are closely connected before determining the physician's medical liability.⁶⁹ Currently, courts apply this requirement to telemedical negligence cases in the same manner in which they apply the requirement to traditional medical negligence cases.⁷⁰ The plaintiff generally establishes this connection by indicating that "the injury would not have occurred but for [the physician's] conduct."71 After the plaintiff is able to prove that the injury is a result of the physician's conduct, the plaintiff must then show that the injury was reasonably foreseeable by the physician.⁷² In Wheat v. United States, the court found that a physician was negligent in his grossly inadequate medical treatment of a cancer patient because he failed to relay information to the patient or to her family about the necessary lifesaving cancer treatments.⁷³ The court decided that the plaintiff's injury had a close causal connection with the physician's breach of the standard of care, giving the court a valid reason to hold the physician negligent.⁷⁴ Although the elements of traditional medical negligence were found in Wheat, establishing the five elements of medical negligence can be an obstacle to patients. Not every injured patient is capable of establishing the five elements of medical negligence.⁷⁵ In addition to the inherent difficulty of establishing the medical negligence elements, telemedicine patients have found this burden to be even more complex because courts have not modified these elements to apply specifically to telemedicine.⁷⁶ Implementing a national standard of care would allow courts to apply these elements directly to

⁶⁹PORTER, supra note 59, at § 10.

⁶⁷Times Publ'g Co. v. Ray, 1 S.W.2d 471, 474 (Tex. App.—Eastland 1927), *aff'd*, 12 S.W.2d 165 (Tex. 1929).

⁶⁸See id.

⁷⁰See id.

⁷¹*Id.* (noting that the plaintiff does not have to establish with absolute certainty the causal link between the physician's conduct and the plaintiff's injury; the plaintiff will satisfy this element by establishing that the physician's conduct caused, by a reasonable degree of medical probability, the plaintiff's injury).

⁷²See id.

⁷³Wheat v. United States, 630 F. Supp. 699, 702 (W.D. Tex. 1986).

⁷⁴See id. at 703.

⁷⁵See id.

⁷⁶See supra notes 39-77.

telemedicine and also to address the other issues impeding the use of telemedicine in physicians' daily practice.⁷⁷

III. PROBLEMS ASSOCIATED WITH THE PRACTICE OF TELEMEDICINE

Many problems arise in the telemedicine environment because there is not an applicable, unique standard in place. These problems are due to new legal issues associated with telemedicine as well as situational inapplicability of traditional medical standards to telemedicine. This section addresses the issues "hampering the growth and utilization of telemedicine" and substantiates the need for a uniform standard.

A. Equipment

1. Description of Equipment Used in Telemedicine

The first issue effecting the potential growth of telemedicine relates to the equipment used in treating patients telemedically.80 The equipment that telephysicians use can be assimilated into one of three categories based on the equipment's complexity.⁸¹ "The first category is the transmission of one-way still images by either facsimile or computer."82 This type of transmission facilitates collaboration between physicians and other professionals on the treatment and diagnosis of patients.⁸³ "The second category of telemedicine is based upon the transmission of one-way video and audio."84 Telephysicians use these transmissions predominantly for educational purposes because they allow physicians in rural areas to stay informed of the latest medical advances and procedures used by physicians and hospitals in urban areas.⁸⁵ A "third category utilizes two-way video and audio systems [which allow] an interactive teleconference system [to] transmit the signals for electronic diagnostic equipment such as electronic stethoscopes, otoscopes, endoscopes, microscopes, electro and echo-cardiograms, and sonograms."86 Electronic stethoscopes and interactive video conferencing systems are connected to satellites or fiber optic technology, which allows physicians to see patients while

⁷⁷See infra Part IV.C-D.

⁷⁸Meek, *supra* note 39, at 180.

⁷⁹Id.

⁸⁰Poe, *supra* note 3, at 683.

⁸¹Kelly K. Gelein, Note, Are Online Consultations a Prescription for Trouble? The Unchartered Waters of Cybermedicine, 66 BROOK. L. REV. 209, 217 (2000) (citing Daniel McCarty, The Virtual Health Economy: Telemedicine and the Supply of Primary Care Physicians in Rural America, 21 Am. J.L. & Med. 111, 113 (1965)).

⁸²Id. (citing McCarty, supra note 81, at 113).

 $^{^{83}}Id$.

⁸⁴Id. (citing McCarty, supra note 81, at 113).

⁸⁵*Id*.

⁸⁶Id. at 217-18 (citing McCarty, *supra* note 81, at 113).

performing examinations.⁸⁷ "This form of telemedicine is considered the most advanced because it involves the use of interactive teleconferencing systems." Moreover, the most advanced telemedicine systems include controlled robotic surgical operations, in which robot operators in one location control robots performing surgeries in another locale. Performing surgeries in another locale. Performing surgeries in another locale are then transferred in various forms of visual images.

The most utilized means of telemedicine occur in static imaging or single-frame visual images. Coder or decoder units known as "codecs" must digitize and compress these static images in order to transfer these images over telephone cables. Because the Internet, telecommunications lines, and satellites deliver this medical information, these forms of telemedicine require integration and compatibility between a variety of hardware and software components. Inevitably, a process as technical as this will have problems and will increase the opportunity for medical negligence claims resulting from equipment failures and malfunctions.

2. Liability for Equipment Failures and Malfunctions

The equipment used in telemedicine is technologically advanced, but "health care providers will be under an obligation to properly use and maintain their electronic and other telemedicine equipment in order to avoid claims of negligence." Like any other medical tool, the use of technological equipment requires the skill and experience to use it adequately. Physicians who use telemedicine equipment "without adequate knowledge of its functions and requirements may be liable for any harm which results from their lack of knowledge." Although equipment failures are bound to occur, "health organizations should ensure that reasonable and customary

⁹⁵SMITH, *supra* note 37.

⁸⁷Weiner, supra note 5, at 1112 (citing Barbara Boxer, Telemedicine: Overcoming the Legal Issues Surrounding Telemedicine or Allowing Physicians to Charge for Phone Calls, 10 No. 5 HEALTH LAW 18 (1998)).

 $^{^{88}}$ Gelein, *supra* note 81, at 218.

⁸⁹Meek, *supra* note 39, at 173.

⁹⁰Caryl, *supra* note 54, at 174 (citing Ace Allen, M.D., *The Rise and Fall and Rise of Telemedicine*, Telemedicine Sourcebook 3, 3 (1996)).

⁹¹Id. (citing Allen, supra note 90, at 3).

⁹²Id. (citing Mary Colby, *Telemedicine is Poised to Revolutionize the Practice of Medicine*, TELEMEDICINE SOURCEBOOK 11, 11-12 (1996). "Fiber-optic cables . . . produce the best imaging for telemedicine applications." *Id*.

⁹³Poe, *supra* note 3, at 683 (citing Phyllis Forrester Granade, Telemedicine—Liability and Regulatory Issues (May 7, 1999) (unpublished manuscript, presented at the American Health Lawyers Association Health Information & Technology Conference)).

 $^{^{94}}See\ id.$

⁹⁶Poe, *supra* note 3, at 696.

⁹⁷Ann Davis Roberts, Comment, *Telemedicine: The Cure for Central California's Rural Health Care Crisis?*, 9 SAN JOAQUIN AGRIC. L. REV. 141 (1999).

safeguards and back-up systems are in place and operating effectively." Physicians should not attempt to perform procedures, which could harm patients if the equipment breaks down unless safer alternatives are immediately available. 99 Currently, the FDA must approve "certain telemedicine devices for marketing, ensure proper and adequate labeling, and regulate manufacturing specifications which guarantee quality control." Within the FDA is the Center for Devices and Radiological Health (CDRH), which has regulatory oversight on the commercialization of health care delivery technologies. 101 "The CDRH ensures that telemedicine systems are properly evaluated and maintained so they do not pose a substantial risk to patients." Although this regulation benefits telemedicine, it tends to guide telemedical equipment manufacturers while neglecting telephysicians who use this equipment. 103

In fact, no regulatory framework exists to guide physicians' actions. 104 It is unreasonable, however, to hold manufacturers strictly liable. 105 Even though the FDA regulates this equipment, a mistake can still occur "in the transfer of information, dissemination to a third party or loss of the information in the technological transfer." One suggestion to physicians is that if distortions or loss of information occur, the diagnosing physician should refrain from reaching a diagnosis, so as to avoid liability, because there is no reasonable way to measure the extent or degree of distortion. 107 Furthermore, when the physician is unaware of a distortion, and as a result a patient is injured by negligent treatment, then the equipment manufacturer is liable for having equipment that was unable to transfer the information correctly.¹⁰⁸ By implementing a bright line test holding manufacturers and physicians responsible for equipment failures and malfunctions, the federal government can reduce the uncertainty associated with using telemedical equipment. 109 After all, telemedicine is nothing without its equipment. 110 Not only do physicians use equipment to treat patients telemedically, but patients frequently use computers and the Internet to receive medical treatment and advice—ordering

⁹⁸Poe, *supra* note 3, at 696 (citing Kuszler, *supra* note 10, at 297).

⁹⁹Roberts, *supra* note 97, at 155-56.

 $^{^{100}}$ Susan E. Volkert, *Telemedicine: RX for the Future of Health Care*, 6 MICH. TELECOMM. & Tech. L. Rev. 147, 204 (2000).

¹⁰¹Id. at 205.

¹⁰²Id. at 205-06.

¹⁰³See id. at 206.

¹⁰⁴See id.

¹⁰⁵See id.

¹⁰⁶*Id.* at 182.

¹⁰⁷Caryl, *supra* note 54, at 200.

¹⁰⁸See id.

¹⁰⁹See infra Part IV.D.

¹¹⁰See infra Part IV.D.

prescriptions, self-diagnosing, or self-educating—because the Internet offers convenience, privacy, and lower prices. 111

B. Pharmacists' Role in the Practice of Telemedicine

"Internet pharmacies have become popular because of the attractive combination of lower prices, convenience, and greater privacy." Approximately "400 websites sell[] prescription drugs, [and] experts predict that online sales of pharmaceuticals will exceed six billion dollars" by 2005. Internet pharmacies take different approaches when filling prescriptions. Internet pharmaceutical websites and Internet pharmacies require physician consultations and previous prescriptions of the same medication before they will fill the current prescription, while others do not. Internet pharmacies can be divided into three categories: traditional pharmacies, prescribing-based site pharmacies, and rogue pharmacies.

Traditional Internet pharmacies use state-licensed pharmacists and require consumers to send them a valid prescription before these pharmacies will fill the prescription over the Internet. The prescribing-based site pharmacies allow patients to fill out general medical questionnaires, which include medications that the patients are currently taking, before the pharmacy's Internet physician makes a diagnosis and prescribes the appropriate medication. Rouge pharmacies allow customers to purchase medicine without any prescriptions and provide no diagnosis. The quality of prescription medication ordered over the Internet is

¹¹¹See Ludmilla Bussiki Silva Clifton, Comment, Internet Drug Sales: Is it Time to Welcome "Big Brother" Into Your Medicine Cabinet, 20 J. CONTEMP. HEALTH L. & POL'Y 541, 541 (2004).

¹¹²Id. (citing U.S. Gen. Accounting Office, Report to Cong. Office, Internet Pharmacies: Adding Disclosure Requirements Would Aid State and Federal Oversight (2000), available at GAO-01-69).

¹¹³Smalley, *supra* note 2, at *9 (citing Eric M. Peterson, *Doctoring Prescriptions: Federal Barriers to Combating Prescription Drug Fraud Against On-Line Pharmacies in Washington*, 75 WASH. L. REV. 1331, 1332-34 (2000)).

¹¹⁴Id. (citing Ross D. Silverman, Regulating Medical Practice in the Cyber Age: Issues and Challenges for State Medical Boards, 26 Am. J.L. & MED. 255, 266 (2000)).

¹¹⁵Id. at *12 (citing Silverman, supra note 114, at 266).

¹¹⁶Clifton, *supra* note 111, at 546 (citing Joanna M. Carlini, *Liability on the Internet: Prescription Drugs and the Virtual Pharmacies*, 22 WHITTIER L. REV. 157, 157 (2000)).

¹¹⁷Id. (citing Mary Pat Flaherty & Gilbert Gaul, U.S. Prescription Drug System Under Attack, WASH. POST, Oct. 19., 2003, at A1). "As a safety measure, the pharmacy may on a case-by-case basis check with the prescribing physician before mailing the requested order." Id.

¹¹⁸*Id*.

¹¹⁹Id. (citing Kristin Yoo, Self-Prescribing Medication: Regulating Prescription Drug Sales on the Internet, 20 J. MARSHALL J. COMPUTER & INFO. L. 57, 64 (2001)). This type of pharmacy presents the greatest danger to consumers in terms of receiving the medication they actually ordered over the Internet. Id.

questionable in all three types of pharmacies, but rouge pharmacies are the most susceptible to the risk of falling below the requisite standard of care. 120

According to the AMA, prescriptions issued over the Internet often fail to meet appropriate standards of care. ¹²¹ The AMA states that quality is sacrificed because:

[1] there are no examinations of the patient to determine if there is a medical problem and to determine a specific diagnosis; [2] there is no dialogue with the patient to discuss treatment alternatives and to determine the best course of treatment; [3] there is no attempt to establish a reliable medical history; [4] there is no provision of information about the benefits and risk of the prescribed medication; and [5] there is no follow-up to assess the therapeutic outcome. 122

This lack of information and interaction makes the pharmacists and physicians involved vulnerable to medical liability. 123

The correlation between Internet pharmacists and physicians who participate in telemedicine is that physicians who work in conjunction with these Internet pharmacies might be forming physician-patient relationships that could later result in medical liability. The formation of the physician-patient relationship is not a problem exclusive to the output of Internet prescriptions. In general, the establishment of this relationship is one of the key issues surrounding medical liability in telemedicine. Although there are drawbacks to the physician-patient relationship, one of the benefits of telemedicine is that physicians are able to form these relationships and treat and prescribe medications to patients across state lines. This lack of boundaries, however, causes problems with venue and jurisdiction when medical negligence claims arise.

C. Venue and Jurisdiction

Venue and jurisdiction problems are inevitable in telemedical practice because health care services are provided across county, state, and international boundaries. ¹²⁹ To determine in which jurisdiction the malpractice occurred, the parties must ascertain where the practice of medicine happened during the patient's treatment. ¹³⁰ Courts have jurisdiction over a case when a physician "sufficiently availed himself"

¹²¹Smalley, *supra* note 2, at *15 (citing Silverman, *supra* note 114, at 267).

¹²⁵See supra notes 39-52, 115-26.

 $^{^{120}}Id.$

 $^{^{122}}Id.$

¹²³See Clifton, supra note 111, at 541.

 $^{^{124}}Id.$

¹²⁶See supra notes 39-52, 115-26.

¹²⁷See Poe, supra note 3, at 699.

¹²⁸See id.; see supra notes 132-41.

¹²⁹See Poe, supra note 3, at 699.

 $^{^{130}}Id.$

in the patient's state of residence. ¹³¹ Furthermore, prohibiting a state "from asserting jurisdiction over a defendant unless the defendant has had 'minimum contacts' with the state" is a violation of due process. ¹³² A state, in order to establish jurisdiction, "must show a substantial connection 'between the defendant and the forum state necessary for a finding of minimum contacts that must come about by an action of the defendant purposefully directed toward the forum state." ¹³³ The more interaction a physician has with a patient, the more likely the physician has a sufficient number of minimum contacts with the patient's state; therefore, the state's long-arm statute would likely permit the state to assert jurisdiction over that physician. ¹³⁴ The establishment of minimum contacts in the telemedicine context remains unsettled in comparison to the traditional medicine context, and it will remain so until the federal government establishes a national standard for minimum contacts in telemedicine cases. ¹³⁵

In traditional medical negligence cases, when a patient travels to a physician's office for treatment, without being solicited, the patient expects that jurisdiction will arise in the physician's jurisdiction, not in that of the patient. This expectation, however, is not consistently analogous to telemedicine because courts do not construe telemedicine communications as "travel to receive professional service," which courts require to establish jurisdiction in the physician's county. Courts have yet to set a standard for determining jurisdiction and venue in telemedicine cases, and as a result, physicians' attorneys have the ability to find the jurisdiction that would provide the best outcome for their client. Physicians' ability to practice telemedicine across state lines is problematic for resolving these issues, and physicians' reimbursement for telemedical services is negatively impacted by the cross-border nature of telemedicine.

D. Reimbursement

Neither public nor private insurers have completely accepted telemedicine as a "cost-effective and reliable therapeutic modality that deserves reimbursement." ¹⁴⁰

¹³¹Id. (citing Meek, supra note 39, at 175).

¹³²*Id.* (citing World Wide Volkswagen Corp. v. Woodson, 444 U.S. 286, 291 (1980); Int'l Shoe Co. v. Wash., 326 U.S. 310, 316 (1945)).

¹³³Id. (quoting Asahi Metal Indus. Co. v. Super. Ct. of Cal., 480 U.S. 102, 112 (1987)).

¹³⁴See Granade, supra note 39, at 86.

¹³⁵See Meek, supra note 39, at 188; see infra Part IV.D.

¹³⁶See Meek, supra note 39, at 188 (citing McGee v. Riekhof, 442 F. Supp. 1276 (D. Mont. 1978)). "A client or patient . . . ought to expect that he will have to travel again if he thereafter complains that the services sought by him in the foreign jurisdiction were therein rendered improperly." *Id.*

 $^{^{137}}Id.$

¹³⁸See id. at 189.

¹³⁹Speilberg, supra note 25, at 290; see supra notes 132-41.

¹⁴⁰Id. (stating that this is consistent with traditional medical practice in which neither telephone calls nor letters are reimbursed).

Furthermore, insurers are more likely to compensate telemedicine services that are intrastate rather than interstate because states' premiums differ from state to state. ¹⁴¹ As a result, insurers do not always insure physicians who practice telemedicine in a state in which they are not licensed because, in doing so, insurers are better able to avoid lawsuits arising in unanticipated jurisdictions. ¹⁴² In response, Congress passed § 4026 of the Balanced Budget Act of 1997 (BBA), which Congress later amended with the Medicare, Medicaid, and State Childrens' Health Insurance Program (SCHIP) Benefits Improvement and Protection Act of 2000, in order to encourage reimbursement. ¹⁴³ These regulations, however, only apply to public insurers, and many private insurers choose not to comply with these federal regulations. ¹⁴⁴

The BBA required Medicare reimbursement of telemedicine services. ¹⁴⁵ Because many private insurers base reimbursement criteria on Medicare and Medicaid, many insurers began covering telemedicine services. ¹⁴⁶ There were some restrictions imposed by the BBA, which hindered reimbursement of various telemedicine services. ¹⁴⁷ For example, the BBA allowed for reimbursement to Health Professional Shortage Areas (HPSA) patients only, not specialists providing medical care to rural communities with sufficient primary resources (i.e., sufficient number of primary care providers). ¹⁴⁸ Furthermore, the BBA required the prescribing physician's presence during consultations. ¹⁴⁹ As a result, Medicare only reimbursed \$20,000 for 301 claims within the first two years of the implementation of the BBA. ¹⁵⁰

Because the BBA lacked effectiveness, Congress amended it in 2001 with the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000. Texas also passed legislation that expanded telemedicine coverage to

¹⁴³DeLeon, *supra* note 8, at 682 (citing Balanced Budget Act of 1997, Pub. L. No. 105-33, § 4206, 111 Stat. 251, 377 (1997) (codified as amended in sections of 42 U.S.C.)).

¹⁴⁵Id. at 680. The reimbursement rate for "telecommunications are set at 75% of in-person reimbursement rates." Id.

¹⁴⁶Id. at 681. (citing Kristen R. Jakobsen, Note, Space-Age Medicine, Stone-Age Government: How Medicare Reimbursement of Telemedicine Services is Depriving the Elderly of Quality Medical Treatment, 8 ELDER L.J. 151, 166-67 (2000)).

¹⁴⁸*Id.* (noting that the restriction is not dependent on the amount of specialty resources in these rural communities). In general, rural HPSAs lack sufficient primary care providers or other specialty services, but telemedicine providers in these areas are not reimbursed under § 4026, so telephysicians are not likely to treat patients in these areas. Dena S. Puskin, *Telemedicine: Follow the Money*, 6 ONLINE J. OF ISSUES IN NURSING 3, 4-6 (Sept. 30, 2001), at http://www.nursingworld.org/ojin/topic16/tpc16_1.htm.

¹⁴¹Caryl, *supra* note 54, at 202.

 $^{^{142}}Id.$

 $^{^{144}}Id$.

¹⁴⁷*Id*. at 681.

¹⁴⁹DeLeon, supra note 8, at 681.

¹⁵⁰*Id.* at 682.

¹⁵¹Id. (stating that this expanded reimbursement to patients within a HPSA and within any county "not included in a Metropolitan Statistical Area[,]" as well as eliminated the requirement that the prescribing physician be present during the telemedicine consultation).

Medicaid patients, which in effect eliminated many of the problems associated with the BBA. ¹⁵² Five states, including Texas, prohibit private health benefit plans from excluding telemedicine coverage solely because the physician does not provide a face-to-face consultation to the patient. ¹⁵³ By enacting this regulation, the Texas legislature secured reimbursement for "telemedicine services . . . now and in the future." ¹⁵⁴ Even though Texas adopted this regulation, physicians who practice telemedically outside of the State of Texas are not guaranteed insurance coverage. ¹⁵⁵ Moreover, insurers do not cover all telemedicine services, and they are not reimbursing the services covered adequately enough to encourage physicians to practice telemedicine. ¹⁵⁶ Individual state regulation of reimbursement cannot be completely effective because of the cross-border nature of telemedicine. ¹⁵⁷ A national standard of care regulating reimbursement will be the most effective type of regulation for this area of medical practice. ¹⁵⁸ This cross-border nature not only effects reimbursement, but it also creates problems in physician licensure. ¹⁵⁹

E. Licensure

For the interstate practice of medicine, physicians are unclear whether they must obtain licenses to practice in the state where patients are located or in the state in which they are practicing. States generally adopt one of four approaches: (1) out-of-state practitioners cannot provide care if they do not have a full license to practice within the state; (2) "limited" licenses for telemedicine; (3) statutes that promote telemedicine for specific types of care; and (4) out-of-state providers can render care, provided it is rendered through in-state providers and provided the in-state providers control patient care. ¹⁶¹ The first approach only allows in-state physicians to practice telemedicine on patients within that state. ¹⁶² Second, the "limited licenses" approach allows out-of-state physicians to practice telemedicine only if they have a license specifically for practicing telemedicine in that particular state. ¹⁶³ The third approach

¹⁵²*Id.* at 683. "Texas's statute requires the Texas Health and Human Services Commission to ensure Medicaid reimbursement for telemedicine services initiated or provided by a physician and to establish unique billing codes and fee schedules. *Id.* (citing Tex. Gov'T CODE ANN. § 531.0217(b)-(c) (Vernon 2003)).

¹⁵³Id. (citing TEX. INS. CODE ANN. art. 21.53F, § 3(a) (Vernon 2003)).

 $^{^{154}}Id$

¹⁵⁵See id. at 680-84.

¹⁵⁶See id.

¹⁵⁷See id.; see infra Part IV.D.

¹⁵⁸DeLeon, supra note 8, at 680-84; see infra Part IV.D.

¹⁵⁹James B. Rosenblum, A Telemedicine Primer, 45 PRAC. LAW. 23, 26 (1999).

¹⁶⁰See id.

¹⁶¹*Id.* (noting that the first approach is the most restrictive and the last approach is the least restrictive).

¹⁶² See id.

¹⁶³See id.

allows physicians to provide telemedical treatments for specified illnesses set out by the state's legislature in the statute. The fourth approach allows out-of-state physicians to advise in-state physicians as long as the in-state physicians are the patient's primary physicians. Although these approaches are the most common, some state legislatures adopt different provisions. The fourth approach allows out-of-state physicians are the patient's primary physicians.

Texas has adopted an approach that allows "telemedicine providers to forgo licensure in limited physician-to-physician situations." Texas permits:

[o]ut of state specialists who provide only episodic consultations to a person licensed in this state [to be] exempt from the licensure requirement . . . [when] the two physicians are licensed in the same medical specialty; the consultation is affiliated with a Texas secondary or medical school; if the medical assistance via telemedicine is donated for any purpose . . . ; or when the out-of-state physician is located in a state whose borders are contiguous with Texas and orders home health therapy to be conducted by a Texas licensed agency. ¹⁶⁸

Despite this approach in Texas, many health insurance providers across the nation do not reimburse physicians who treat patients in distant locations. The lack of medical liability coverage causes problems in telemedicine because most of the services rendered are in distant locations. Practically speaking, physicians are not going to practice telemedically in distant states if they are not going to be reimbursed by their medical insurers. Without extending insurance coverage to these types of telemedical services, the continued growth of telemedicine will be negatively affected. Proceedings of the services of telemedical services, the continued growth of telemedicine will be negatively affected.

As can be seen, the problematic areas of telemedicine—such as: (1) equipment, (2) Internet pharmacists, (3) venue and jurisdiction, (4) reimbursement, and (5) licensure—overlap, but the regulations applied in the traditional medical practice do not effectively overlap into the practice of telemedicine. The federal government can best address these five problem areas by implementing national standards and regulations unique to telemedicine.

 165 See id.

 ^{168}Id

¹⁶⁴See id.

¹⁶⁶See DeLeon, supra note 8, at 673.

 $^{^{167}}$ *Id*.

¹⁶⁹Rosenblum, *supra* note 159, at 26.

 $^{^{170}}$ See id.

¹⁷¹See id.

¹⁷²See id.

¹⁷³See supra notes 83-176.

IV. NATIONAL STANDARD OF CARE

Typically, individual states regulate the practice of medicine through licensing boards that restrict how and where a physician can practice. ¹⁷⁴ Each individual state has the responsibility to evaluate a physician's professional conduct and to react when the physician falls below the standard. 175 Under such regulations, when a physician practices across state lines, the visiting state requires the physician to have a medical license in that state, or the physician's conduct goes unregulated by the patient's state laws. 176 State regulations, in regard to telemedicine, are inadequate because patients who are misdiagnosed or mistreated are often left with no remedy for any of the damages the physician caused.¹⁷⁷ Furthermore, "[s]tate laws that currently exist with respect to physician regulation are . . . similarly inadequate to tackle the field of [tele]medicine." Through telemedicine services, physicians can also use the Internet to treat patients in states with fewer regulations, allowing physicians the opportunity to practice in states with lower standards of care. 179 Internet limitations are not relevant in the practice of telemedicine because physicians are not required to limit their practice to states in which the physicians have a license to practice; physicians and patients are able to access the Internet at anytime. 180

Allowing states to regulate the physician's conduct does not allow for expansion of telemedicine because most physicians are uncomfortable practicing in states where they are not licensed. Until the federal government implements a national standard of care, state regulations regarding licensure will continue to hinder the growth of telemedicine. Until then, physicians will continue to avoid treating patients in states where they do not have a medical license in order to prevent patient lawsuits. Physicians who avoid these types of medical services harm patients, especially those in rural areas, because specialized physicians are not bringing their valuable knowledge and experience to areas where such services are critically needed. Unfortunately, liability may also spill over to the hospitals in which these

¹⁷⁴Weiner, supra note 5, at 1130.

¹⁷⁵*Id*.

¹⁷⁶Id. at 1131.

¹⁷⁷See id. at 1133.

¹⁷⁸Id. at 1134 (citing Sean P. Haney, *Pharmaceutical Dispensing in the "Wild West":* Advancing Health Care and Protecting Consumers Through the Regulation of Online Pharmacies, 42 Wm. & MARY L. REV. 575, 591-92 (2000)).

¹⁷⁹See id. at 1142.

¹⁸⁰See id. at 1132.

¹⁸¹See Joy Elizabeth Matak, Note, Telemedicine: Medical Treatment Via Telecommunications Will Save Lives, but Can Congress Answer the Call?: Federal Preemption of State Licensure Requirements Under Congressional Commerce Clause Authority & Spending Power, 22 Vt. L. Rev. 231, 240-42 (1997).

¹⁸²See id.

¹⁸³See id.

¹⁸⁴See id.

unlicensed telephysicians work.¹⁸⁵ State regulations are problematic, and Texas laws are no exception.¹⁸⁶ Although Texas is a progressive state in the area of telemedicine, Texas has yet to adapt its laws to conform specifically to telemedicine, and as a result, the case law contains inconsistencies.¹⁸⁷

A. Inconsistency of Telemedicine Laws in Texas

As previously stated, the two elements of medical negligence that pose the greatest obstacle for telemedicine are the formation of the physician-patient relationship and the applicable standard of care. Regarding the formation of the physician-patient relationship, Texas courts utilize several standards from traditional medical practices in determining telemedicine cases. 189

In Texas, the "creation of the physician-patient relationship does not require the formalities of a contract." 190 "The fact that a physician does not deal directly with a patient does not . . . preclude the existence of a . . . relationship." Furthermore, in Fenley v. Hospice in the Pines, the court held that a physician-patient relationship existed, even though the volunteer medical director did not see the patient, because the director signed documents allowing Hospice reimbursement. 192 The Supreme Court of Texas, determined that the director took an active role in the care and treatment of the patient, therefore "assum[ing] overall responsibility for the medical component of care." Additionally, in *Hand v. Tavera*, the court held that a physician-patient relationship existed "when the health-care plan's insured show[ed] up at a participating hospital emergency room, and the plan's doctor on call [was] consulted about treatment or admission." On the other hand, Fought v. Solce states that the mere fact that a physician is on-call does not establish the required relationship. 195 In Fought, the court held that the physician did not have a physicianpatient relationship with Fought when he examined him at the emergency room. ¹⁹⁶ A physician diagnosed Fought's injury, and then consulted with a specialist, Dr. Solce. concerning further treatment. 197 Dr. Solce was on-call, but he refused to examine

¹⁸⁵Id. at 241.

¹⁸⁶See infra notes 193-221.

¹⁸⁷See infra notes 193-221.

¹⁸⁸See supra Part II.

¹⁸⁹See infra notes 193-221.

¹⁹⁰St. John v. Pope, 901 S.W.2d 420, 424 (Tex. 1995) (citing Tex. Rev. Civ. Stat. Ann. art. 4590i, § 1.03(a)(4) (Vernon Supp. 2004) (repealed)).

¹⁹¹*Id*.

¹⁹²Fenley v. Hospice of the Pines, 4 S.W.3d 476, 479-80 (Tex. App. 1999).

 $^{^{193}}Id.$

¹⁹⁴Hand v. Tavera, 864 S.W.2d 678, 679 (Tex. App. 1993) (writ denied).

¹⁹⁵Fought v. Solce, 821 S.W.2d 218, 220 (Tex. App. 1991) (writ denied).

¹⁹⁶Id. at 219.

¹⁹⁷Id.

Fought.¹⁹⁸ Since Dr. Solce did not take an active role in the treatment of Fought, the court held that no physician-patient relationship existed between Dr. Solce and Fought.¹⁹⁹

Additionally, in *Lloyd v. Ray*, the court acknowledged that, if no physician-patient relationship exists, a physician does not violate the duty not to injure a patient during an examination unless the physician takes some affirmative action resulting in an injury to that patient.²⁰⁰ The Amarillo Court of Appeals also determined that it could not extend the holding in *Lloyd* to include a duty to inform a non-inquiring patient of the physician's finding.²⁰¹ The court stated that "a doctor does not owe a duty to the [patient] to discover a disease when the doctor merely undertakes to examine the [patient] at the request of, and only for a report to, a third party."²⁰² The previous cases are associated with physician-patient situations in which Texas courts determined what does not constitute a physician-patient relationship, and, as these cases demonstrate, the established standard is somewhat ambiguous or undeveloped (i.e., what do courts denote as an active role) with regard to telemedical situations.²⁰³

In contrast, in *Wheeler v. Yettie Kersting Memorial Hospital*, the Houston Court of Appeals delineated the types of relationships that reasonably constitute the formation of a physician-patient relationship.²⁰⁴ *Wheeler* illustrates that courts are likely to find a physician-patient relationship when the health care professional reviews the patient's chart or medical information and, based on that review, expresses an opinion or makes a decision that directly impacts the patient's health.²⁰⁵ The Houston Court of Appeals distinguished its facts from *Fought* because, in *Wheeler*, the hospital asked the physician to evaluate certain information and to determine if the physician could transfer the patient.²⁰⁶ The physician then willingly agreed to do so.²⁰⁷ The court concluded that, "in evaluating the status of Mrs. Wheeler's labor and giving his approval, he established a [physician]-patient relationship with Mrs. Wheeler and accepted the duties which flow from such a relationship, specifically the duty to comply with the applicable standard of care for a physician."²⁰⁸

 $^{^{198}}Id.$

¹⁹⁹ Id. at 220.

²⁰⁰Wilson v. Winsett, 828 S.W.2d 231, 233 (Tex. App. 1992) (citing Lloyd v. Ray, 606 S.W.2d 545 (Tex. Civ. App. 1980).

 $^{^{201}}Id.$

 $^{^{202}}Id.$

²⁰³See id.; Lloyd, 606 S.W.2d at 545; Hand, 864 S.W.2d at 679; St. John v. Pope, 901 S.W.2d 420, 424 (Tex. 1995).

²⁰⁴Wheeler v. Yettie Kersting Mem. Hosp., 866 S.W.2d 32 (Tex. App.—Houston [1st Dist.] 1993, writ denied).

 $^{^{205}}Id.$

²⁰⁶Id. at 38-9.

 $^{^{207}}Id.$

 $^{^{208}}Id$

The rule established in Wheeler conflicts with the rule established in Wilson v. Winsett and Lotspeich v. Chance Vought Aircraft. Wilson and Lotspeich state that, if the consultation is for a third party, the advising physician does not form a physician-patient relationship, whereas Wheeler states that a physician forms a relationship with a patient when the physician expresses an opinion or makes a decision that directly impacts the patient's health.²¹⁰ Reporting to a third party has the potential directly to impact a patient's health if the consulting physician uses the advising physician's opinion in treating the patient, even though the advising physician, as in Wheeler, may speak only directly to the consulting physician and not to the patient.²¹¹ The Wheeler court did not draw this distinction, but, considering the issues surrounding telemedicine, this distinction is vital.²¹² Furthermore, in comparison to the ambiguous definition of "active role" demonstrated in Fenley, courts could potentially determine that reporting to a third party constitutes an active role, therefore establishing a physician-patient relationship. Another point of contention arises from the Wilson decision. 213 Wilson cites Lotspeich, a Dallas Court of Appeals case decided in 1963.²¹⁴ This court did not have the ability to consider the impact and issues rising from telemedicine at that time, which proves that this and other similar laws are outdated and inapplicable to telemedical issues.²¹⁵

B. Inconsistency of Telemedicine Laws in Other States

The telemedicine laws in other states are also important to note because these laws could potentially affect the physicians who treat patients across state lines. ²¹⁶ For example, in Illinois a physician consulted another physician about treatment options for a patient, and an Illinois court found no physician-patient relationship between the advising physician and the patient because the advising physician only spoke to the consulting physician and not to the patient. "Therefore, the patient could not legitimately expect the consulting physician to have a substantial performance in the patient's treatment." Additionally, a District Court in New York held that no physician-patient relationship existed between an advising

²⁰⁹See Lotspeich v. Chance Vought Aircraft, 369 S.W.2d 705 (Tex. Civ. App.—Dallas 1963, writ ref'd n.r.e.); Wilson v. Winsett, 828 S.W.2d 231, 233 (Tex. App.—Amarillo 1992, writ denied); Wheeler, 866 S.W.2d at 32.

²¹⁰See Lotspeich, 369 S.W.2d at 705; Wilson, 828 S.W.2d at 233; Wheeler, 866 S.W.2d at 32.

²¹¹See Lotspeich, 369 S.W.2d at 705; Wilson, 828 S.W.2d at 233; Wheeler, 866 S.W.2d at 32

²¹²See Lotspeich, 369 S.W.2d at 705; Wilson, 828 S.W.2d at 233.

²¹³See Wilson, 828 S.W.2d at 233.

²¹⁴*Id.*; *Lotspeich*, 369 S.W.2d at 705.

²¹⁵See Lotspeich, 369 S.W.2d at 705.

²¹⁶Poe, *supra* note 3, at 699.

²¹⁷Meek, *supra* note 39, at 186-87 (citing Reynolds v. Decatur Mem. Hosp., 660 N.E.2d 235 (Ill. App. 1996)).

²¹⁸Id. (citing Reynolds, 660 N.E.2d at 235).

physician and a patient because the patient did not know the identity of the advising physician. The court determined that the two main inquiries were: "1) the extent to which the consultive physician 'exercised his professional judgment in a matter bearing directly upon the plaintiff,' and 2) the foresee ability to the consultive physician 'that his exercise of judgment ultimately would determine the precise nature of the medical services to be rendered to the plaintiff.""²²⁰ Consequently, if the advising physician renders advice and the consulting physician uses that information to treat the patient, the more independent judgment the consulting physician uses in accepting or rejecting that advice, the lower the possibility that a court will find a physician-patient relationship between the patient and the advising physician. Although these state laws are similar, physicians treating patients from different states might be unclear as to the differences between the law in their state and the law in the patient's state.

Upon examination of the laws in Texas and in other states, as well as the problems associated with telemedicine, the need for uniformity and standardization in telemedicine becomes evident.²²³ In response to this necessity, the next subsection will outline the national standard of care as well as the benefits of this type of standard.

C. National Standard of Care Outlined

The problems and inconsistencies associated with state regulation of telemedicine present risks for patients and demonstrate the need for federal regulation of telemedicine. In order to minimize the risk of receiving inaccurate diagnoses that may be life-threatening, as well as other risks associated with the practice of [tele]medicine, the federal government should regulate how [telemedicine] is practiced and who can practice it through powers delegated to the [FDA]. The FDA is the most appropriate agency for regulating [telemedicine] since its current regulatory functions are largely in line with the practice's needs and could easily be expanded to cover this field. For example, expanding the FDA's current functions—regulating telemedicine devices for marketing, labeling, and quality control—would be more efficient than developing a completely new agency.

The Clinton Administration proposed legislation that would give the FDA the ability to regulate Internet pharmacies, which demonstrates that the federal government supports FDA regulation of telemedicine activities. However, the

²²²See id.

²²³See supra notes 194-229.

²¹⁹Id. at 186 (citing Gilinsky v. Indelicato, 894 F. Supp. 86 (E.D.N.Y. 1995)).

²²⁰*Id.* at 187 (quoting *Gilinsky*, 894 F. Supp. at 86).

²²¹See id.

²²⁴Weiner, *supra* note 5, at 1134.

²²⁵Id. at 1135.

²²⁶Id. at 1110.

²²⁷Volkert, *supra* note 100, at 204.

federal government has yet to submit this legislative proposal to Congress.²²⁸ Under this proposal, websites that operate Internet pharmacies and dispense prescription drugs must demonstrate to the FDA that their operations are in compliance with state and federal laws before the government will allow them to sell any products.²²⁹ The FDA would also supply consumers with information to keep them safe when purchasing drugs over the Internet.²³⁰ The most effective method for the federal government to implement such FDA regulations would be through a national standard of care.²³¹

A national standard of care is a "standard which compares physicians to a standard of care exhibited by all physicians in a certain field nationwide, holding physicians within the same field responsible for a similar base of knowledge and professional skill, regardless of location."232 Furthermore, a national standard of care should come in the form of medical practice guidelines, including standard clinical protocols and professional norms of conduct governing clinical encounters.²³³ Currently, medical guidelines are defined by the Agency for Health Care Policy and Research (AHCPR) as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical conditions."234 These telemedicine guidelines would predetermine standards of Providing telemedicine guidelines is advantageous because currently the "standards for medical practice over the internet . . . are nonexistent" and because courts require juries to determine, based on traditional medical standards of care, the required standard of care that physicians must exhibit in telemedical situations.²³⁶ The foundation for these guidelines would be most effective if the AMA and other website alliances were involved in the process.²³⁷ The AMA's previously established models are the best indication of the areas that need the most attention; therefore, the AMA's input would be very beneficial.²³⁸ Although many of the current duties of

²²⁸Weiner, supra note 5, at 1140 (citing The Clinton Administration Unveils New Initiative to Protect Consumers Buying Prescription Drug Products over the Internet, at http://www.fda.gov/oc/buyonline/onlinesalespr.html (last visited Jan. 5, 2005)).

²²⁹Id. (citing *The Clinton Administration Unveils New Initiative To Protect Consumers Buying Prescription Drug Products over the Internet*, at http://www.fda.gov/oc/buyonline/onlinesalespr.html (last visited Jan. 5, 2005)).

^{230&}lt;sub>Id</sub>

²³¹See Meek, supra note 39, at 191 (citing Granade, supra note 39, at 66).

 $^{^{232}}Id.$

²³³Smalley, *supra* note 2, at *50.

²³⁴*Id.* (stating that these guidelines would also provide physicians with legitimate defenses to medical negligence actions); Volkert, *supra* note 104, at 185.

²³⁵Smalley, *supra* note 2, at *54.

 $^{^{236}}Id.$

²³⁷Weiner, *supra* note 5, at 1140 (stating that the AMA's model consists of policies regarding content, privacy, sponsorship, advertising, and confidentiality).

 $^{^{238}}$ Id. (noting that the Web site alliances are beneficial to this process for the same reasons as the AMA).

the FDA do not directly relate to telemedicine—regulation of foods, cosmetics, and products testing—its expertise in regulating these areas collectively makes the FDA the most appropriate agency to regulate telemedicine. ²³⁹

In terms of the standard of care that the FDA should implement, when the telemedical procedure is virtually identical to that of traditional medical procedures, the applicable standard of care should be the same.²⁴⁰ For example, the reading of xrays by telemedical physicians has no distinction from the way in which traditional physicians read x-rays; therefore, the standard of care should be the same. ²⁴¹ On the other hand, where telemedical procedures and traditional-medical procedures are distinctive, the standard of care for telephysicians should be higher than the applicable standard for traditional physicians. 242 The absence of a hands-on consultation provides the basis for this heightened standard.²⁴³ For example, telephysicians who communicate by distance are unable physically to touch their patients, which in certain circumstances might be vital to patient care.²⁴⁴ In this situation, the standard of care should be greater, as compared to traditional-medical standards, in order to assure patients that the distance is not hindering their care.²⁴⁵ The heightened standard of care will effectively deter physicians from making inappropriate decisions as a result of limited data and encourage telephysicians to defer these decisions to the on-site physician.²⁴⁶ This type of standard is the most constructive in terms of avoiding the risks likely to affect a patient during a telemedicine procedure.²⁴⁷ As telemedicine becomes more common, the FDA should implement a standard requiring on-site physicians to obtain telemedicine consultations from specialists when such consultations are readily available.²⁴⁸ This requirement not only encourages the development of telemedicine, but it also assures patients that they are receiving the best possible care available. ²⁴⁹ In addition to the benefits already addressed, a national standard of care will resolve other troubles currently associated with telemedicine.

²³⁹Id. at 1138-139. The FDA currently regulates some areas of telemedicine, but this statement explains that most FDA regulations do not deal directly with telemedicine. *Id.*; Volkert, *supra* note 100, at 204.

²⁴⁰Poe, *supra* note 3, at 694-95.

²⁴¹See id. at 695.

 $^{^{242}}See\ id.$

²⁴³See id.

 $^{^{244}}Id.$

²⁴⁵See id.

²⁴⁶Id. (citing Caryl, supra note 54, at 181).

 $^{^{247}}Id.$

²⁴⁸See id. (citing Kuszler, supra note 10, at 297).

²⁴⁹See id. (noting that these specialty consultations would be extremely beneficial for rural patients—one of the populations most directly benefited by telemedicine).

D. Benefits of the National Standard of Care

A national standard of care is beneficial for telemedicine because it allows for a minimum standard of care to evaluate physicians who practice in the field. The national standard would also provide states with guidance when telemedicine cases arise, which takes inconsistency out of telemedical and other medical negligence cases. A national standard of care minimizes the issues currently associated with telemedicine.

1. Equipment

Telemedicine revolves around the use of equipment; therefore, the issues regarding equipment use, failure, and malfunction must be minimal for telemedicine to be successful.²⁵² A national standard of care would best address the issues regarding equipment because the federal government would ensure proper quality control.²⁵³ A standard for adequate education, proper maintenance, and sufficient safeguards—back-up systems—operates in the best interest of patients and assures telephysicians that a clear-cut standard is applicable.²⁵⁴ Quality control reassures patients that physicians are providing adequate services and reassures physicians that, if they comply with the standard of care, they can avoid liability.²⁵⁵ Furthermore, a national system "establish[es] a bright line rule as to liability for equipment failure" among manufacturers and physicians.²⁵⁶ No longer will uncertainty exist as to who is responsible for equipment failure or malfunction; strict liability is enforceable against the "manufacturers and sellers of telemedicine equipment which the implemented standards deem defective and unreasonably dangerous."257 In addition to the benefits associated with telemedical equipment, Internet pharmacies also benefit from a national standard of care.

2. Internet Pharmacies

FDA control over Internet pharmacies allows the federal government to "monitor the sale of prescription drugs online, regulate the importation of drugs from abroad, set up labeling standards for drugs that come from oversees, and ensure that all drugs that enter the country have been approved by the FDA for domestic use."²⁵⁸ Furthermore, the FDA should restrict physicians from prescribing medications through Internet pharmacies unless they first obtain a "copy of the medical records on file with the patient's traditional doctor in order to determine potential adverse

²⁵²See supra Part III.A.

²⁵⁰Gelein, *supra* note 81, at 217.

²⁵¹See id.

²⁵³Meek, *supra* note 39, at 193.

²⁵⁴See id. at 193-94.

²⁵⁵See id.

²⁵⁶Id. at 194.

²⁵⁷See id.

²⁵⁸Clifton, *supra* note 111, at 563.

reactions and examine the patient's medical history."²⁵⁹ The physicians rendering services to Internet pharmacies are held to the national standard as well, in terms of the care they must provide the patients when prescribing their necessary medications. Requiring physicians to examine a patient's medical records allows for a more thorough examination and better patient care, which in turn minimizes the issues associated with Internet pharmacies. Although a national standard of care benefits the telemedical areas of equipment liability and Internet pharmacies, a national standard of care is the most advantageous for venue and jurisdiction issues.

3. Venue and Jurisdiction

The cross-border nature of telemedicine generates problems in terms of venue and jurisdiction because of the resulting venue shopping as well as physicians avoiding liability by practicing in states with a lower standard of care.²⁶² In order to notify physicians and other health care related entities, the legislature must establish a standard for what constitutes minimum contacts in telemedicine cases.²⁶³ Providing guidelines for establishing venue and jurisdiction, physicians will no longer be uncertain as to where a lawsuit may arise. 264 Moreover, telephysicians will no longer question which standard of care they must follow because the laws that apply will be apparent; the laws for every state will be the same.²⁶⁵ Making this standard applicable to all states will eliminate "venue shopping" in the telemedicine context, as well as eliminate the opportunity for physicians to practice lower standards of care in order to avoid liability.²⁶⁶ Patients benefit from this standardization because physicians will be cognizant of the standard they must meet, which warrants a trusting physician-patient relationship.²⁶⁷ As the issues surrounding telemedicine diminish, more and more physicians will begin to use telemedicine in their daily practice. 268 As a result, a greater number of physicians will be counting on reimbursement for services. A national standard of care will encourage physicians to practice telemedicine, as this type of standard positively addresses the problems associated with reimbursement.

4. Reimbursement

In order for telemedicine to expand in health care, insurance companies, both federally and privately controlled, must reimburse physicians for telemedicine

²⁶¹See id.; see supra Part III.B.

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²⁵⁹See id. at 568.

 $^{^{260}}$ See id.

²⁶²See Meek, supra note 39, at 188-89.

²⁶³See id.

²⁶⁴See id.

 $^{^{265}}$ See id.

²⁶⁶See id.

²⁶⁷See id.

²⁶⁸See id.

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procedures.²⁶⁹ A standard allowing adequate reimbursement for all telemedicine services is the logical solution to the reimbursement issues. 270 Reimbursement of this nature will encourage physicians to practice telemedicine.²⁷¹ The standard that the federal government implements must include types of services that are reimbursable as well as how much information physicians must gather in order for the insurance provider to reimburse physicians for their services.²⁷² Allowing reimbursement for a simple phone call to a physician "further solidifies the integrity and depth of a particular medical relationship because patients may appreciate the perception of expanded direct access to their physician."273 By expanding reimbursement to include telephone calls, this enhanced physician-patient relationship is possible, thereby increasing the amount of trust and quality of care for a patient.²⁷⁴ The reason why a national standard is important in this particular area is because many private insurance companies base their reimbursement regimens on Medicare and Medicaid; if the federal legislation broadens the reimbursement scheme for telemedicine services, then it is reasonable for physicians to conclude that many private insurers will do the same.²⁷⁵ Finally, it is also important that the telemedicine services are "reimbursed at the same rate as in-person consultations" if physicians are expected to use telemedicine procedures in daily practice.²⁷⁶ In order for insurance companies to reimburse physicians and for physicians to participate in telemedicine, physicians must obtain a medical license. 277 A physician practicing telemedicine, however, might not have licenses in distant states.²⁷⁸ A national standard of care would resolve such a problem.

5. Licensure

In order for telemedicine to be successful, a physicians' ability to practice medicine in a distant state must be a reality.²⁷⁹ Nevertheless, "licensing is the single largest hurdle to be addressed in the field of telemedicine."²⁸⁰ Therefore, in order for the national standard to be most effective, it should specify that in order to practice telemedicine, states require physicians to obtain a "telemedicine only" license.²⁸¹

²⁶⁹See DeLeon, supra note 8, at 680-83.

 $^{^{270}}$ See id.

²⁷¹See id.

²⁷²See Roberts, supra note 97, at 164.

²⁷³Spielberg, *supra* note 25, at 291.

²⁷⁴See id.

²⁷⁵See DeLeon, supra note 8, at 680-83.

 $^{^{276}}Id$.

²⁷⁷See infra notes 294-97.

²⁷⁸See infra notes 294-97.

²⁷⁹See Meek, supra note 39, at 183.

²⁸⁰See id. at 185.

²⁸¹See id.

Furthermore, the national standard should specify the requirements for obtaining such a license. Requirements should include the passing of a standardized test "cover[ing] not only medical knowledge, but also technical, telemedical expertise, such as knowledge of hardware and software capabilities, as well as an on-site test allowing physicians to demonstrate their capabilities and the quality of the equipment." This national standard for licensure allows physicians to have an idea of what the federal government requires from them, while giving patients an idea of what to expect when being treated telemedically. 284

V. CONCLUSION

Medical technology in the twenty-first century provides an array of choices in treating illnesses.²⁸⁵ This technology is beneficial both for physicians and for the patients they treat.²⁸⁶ Unfortunately, state regulation of physicians who utilize telemedicine does not allow these physicians or their patients to realize the potential and real benefits of telemedicine.²⁸⁷ State regulation of equipment, Internet pharmacies, licensure, and an applicable standard of care cause venue and jurisdiction problems when patients bring lawsuits against their medical providers.²⁸⁸ Moreover, states have completely overlooked several areas of telemedicine, including the physicians' obligations in using telemedicine equipment, the standard for establishing minimum contacts, and the amount of training physicians that must obtain before treating patients telemedically.²⁸⁹ Most courts also lack guidance in telemedicine cases because of deficient precedent in this particular area.²⁹⁰

By implementing a national standard of care, courts, physicians, and patients will find viable solutions for many of these problems.²⁹¹ Physicians and manufacturers will no longer question their liability regarding telemedicine equipment because the national standard will provide a bright line test distinguishing responsibility for equipment failures and malfunctions.²⁹² The national standard will also ensure

²⁸⁷See supra Part III.A-E.

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²⁸²See id. at 183 (noting that this standardization of licensure indirectly benefits the telemedical areas of equipment and reimbursement because in order to become licensed, states require physicians to be skilled in using telemedical equipment, and reimbursement is more likely when physicians are licensed in the state in which they are engaging in telemedicine procedures).

²⁸³See id. at 185. In order for the legislature to implement such a standard, Congress must first prove that the practice of medicine substantially effects interstate commerce, giving the legislature jurisdiction over the issue. Poe, *supra* note 3, at 698.

²⁸⁴See Meek, *supra* note 39, at 185.

²⁸⁵Clifton, *supra* note 111, at 568-69.

²⁸⁶See id.

²⁸⁸See supra Part III.A-E.

²⁸⁹See supra Part III.A, C, & E.

²⁹⁰See supra Part IV.D.

²⁹¹See supra Part IV.D.

²⁹²See supra Part IV.D.1.

quality control of telemedical equipment, allowing physicians to better discern the difference between distortions and equipment malfunctions.²⁹³ Additionally, the federal government will regulate prescription drugs available on the Internet and require a more through look at a patient's medical history before issuing prescriptions, which will ensure that patients receive quality care and medication.²⁹⁴ No longer will individual states set the minimum standard of care that physicians must follow to avoid liability, as the federal government will set a standard that applies to telephysicians in every state.²⁹⁵ A nationalized standard will also determine when a physician establishes the necessary minimum contacts in a state, which makes physicians aware of the state in which a patient's medical negligence claim could arise. 296 This awareness allows the physician better to plan the treatment because the physician can no longer "venue shop" or selectively practice in states with lower standards of care in order to avoid liability. ²⁹⁷ By standardizing insurance reimbursement for telemedical services, the federal government will require equivalent reimbursement for telemedical procedures and traditional medical procedures.²⁹⁸ Consequently, private insurers will follow the public insurers and reimburse telemedical procedures more consistently.²⁹⁹ Lastly, nationalizing licensure for telemedicine provides criteria for physicians seeking to obtain specialization in telemedicine and allows for adequate training in telemedicine equipment, treatment, and communication.³⁰⁰ Requiring a "telemedicine only" license will allow physicians to practice telemedicine in distant states without worrying about liability.³⁰¹

By nationalizing the regulation of telemedicine, the justifications keeping medical practitioners from implementing telemedicine in their daily practices will subside, and the increased use of telemedicine in treating patients will result in an improved quality of medical care.³⁰² This increased quality of care will foster consumer trust, and patients will be more willing to receive telemedical treatments.³⁰³ The full benefits of telemedicine are unknown, but with the implementation of a national standard of care, physicians as well as patients will begin to realize that telemedicine is the future of health care.³⁰⁴

²⁹³See supra Part IV.D.1.

²⁹⁴See supra Part IV.D.2.

²⁹⁵See Meek, supra note 39, at 188-89.

²⁹⁶See supra Part IV.D.3.

²⁹⁷See supra Part IV.D.3.

²⁹⁸See supra Part IV.D.4.

²⁹⁹See supra Part IV.D.4.

³⁰⁰See supra Part IV.D.5.

³⁰¹See supra Part IV.D.5.

³⁰²See supra Part IV.D.

³⁰³See supra Part IV.D.

³⁰⁴See Poe, supra note 3, at 681-82.