The Doctor Will E-mail You Now: Physicians' Use of Telemedicine to Treat Patients over the Internet

Lisa Rannefeld

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

LISA RANNEFELD

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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. 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

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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.

Id.
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.”4 Closely related to telemedicine is “cyber medicine,” which involves the provision of medical advice and treatment over the Internet.5 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.”6 Another basic example of telemedicine in use today is “communications between health care providers and their patients [through] . . . audio-visual conferencing.”7 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.8

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.”9 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.”10 Although these initial programs were only relatively successful, telemedicine truly emerged during the information and technology boom in the mid-1990s.11 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.12


4Id.


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

7Poe, supra note 3, at 682.


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. 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. Telemedicine allows health care providers of rural and elderly patients to “electronically monitor vital signs, verify medication compliance, and reinforce patient education.” 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. 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. 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.

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 health care expenditures in

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13 Id.
14 Id. (citing Aaron Zitner, Cybermedicine Seen as Unhealthy by Some, BOSTON GLOBE, Aug. 6, 1998, at C1).
16 Id. at 682.
17 Weiner, supra note 5, at 1114.
18 See 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.
19 Smalley, supra note 2, at *17 (citing Wiesemann, supra note 5, at 1121).
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

22 Smalley, 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)).
23 See id. (citing Wiesemann, supra note 5, at 1119).
24 See, e.g., Poe, supra note 3, at 686.
26 See infra Part III.A-E.
27 See infra Part III.A-E.
28 See infra Part IV.A-D.
29 See discussion infra Part II. These are the elements, as they apply to the medical field, needed to establish a general negligence cause of action.
30 See discussion infra Part II.
31 See discussion infra Part III. These problems include: liability for equipment failure and malfunctions, venue, jurisdiction, reimbursement, licensure, and pharmacists’ contribution to telemedicine.
32 See discussion infra Part IV.
than for patients treated telemedically than patients treated in the traditional medical setting.33

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 The 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

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.
36See infra notes 39-79.
38See id.
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.”46 Even if the physician “simply speaks with the patient to book an appointment for a specific illness,” the physician is subject to liability.47 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,

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41 See Meek, supra note 39, at 186.

42 Dougherty 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.

44 Wax 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).

45 See 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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.”\textsuperscript{51} Currently, this analysis is applicable in traditional medical negligence cases as well as in telemedicine cases.\textsuperscript{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.\textsuperscript{53} Furthermore, in traditional medical negligence cases, courts have based a physician’s duty on the standard of care in his locality.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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


\textsuperscript{49}See supra notes 39-50; see infra Part IV.A-D.

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

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

\textsuperscript{52}See 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).


\textsuperscript{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)).

\textsuperscript{56}Id. at 197-98.

\textsuperscript{57}Poe, 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. 60 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.” 61 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. 62 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. 63

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).

59 See 20 TERESA K. PORTER, CAUSES OF ACTION § 5 (1st ed. 2004); see infra Part IV.C-D.

60 PORTER, supra note 59.

61 Id.

62 Id.

63 See id.

64 TERRY 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.

66 42A 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.\textsuperscript{67}

In effect, the court’s holding in \textit{Times Publishing Co.} ensures that the patient’s injury be a direct result of the physician’s breach of the standard of care.\textsuperscript{68}

\textbf{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.\textsuperscript{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.\textsuperscript{70} The plaintiff generally establishes this connection by indicating that “the injury would not have occurred but for [the physician’s] conduct.”\textsuperscript{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.\textsuperscript{72} In \textit{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 life-saving cancer treatments.\textsuperscript{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.\textsuperscript{74} Although the elements of traditional medical negligence were found in \textit{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.\textsuperscript{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.\textsuperscript{76} Implementing a national standard of care would allow courts to apply these elements directly to

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\textsuperscript{67}Times Publ’g Co. v. Ray, 1 S.W.2d 471, 474 (Tex. App.—Eastland 1927), aff’d, 12 S.W.2d 165 (Tex. 1929).
\textsuperscript{68}See id.
\textsuperscript{69}PORTER, \textit{supra} note 59, at § 10.
\textsuperscript{70}See id.
\textsuperscript{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).
\textsuperscript{72}See id.
\textsuperscript{74}See id. at 703.
\textsuperscript{75}See id.
\textsuperscript{76}See \textit{supra} notes 39-77.
\end{flushleft}
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.78 These problems are due to new legal issues associated with telemedicine as well as situational inapplicability of traditional medical standards to telemedicine.79 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

77 See infra Part IV.C-D.
78 Meek, supra note 39, at 180.
79 Id.
80 Poe, supra note 3, at 683.
82 Id. (citing McCarty, supra note 81, at 113).
83 Id.
84 Id. (citing McCarty, supra note 81, at 113).
85 Id.
86 Id. 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.”88 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.89 Telephysicians use these different types of equipment to transmit data, which are then transferred in various forms of visual images.90

The most utilized means of telemedicine occur in static imaging or single-frame visual images.91 Coder or decoder units known as “codecs” must digitize and compress these static images in order to transfer these images over telephone cables.92 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.93 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.94

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.”95 Like any other medical tool, the use of technological equipment requires the skill and experience to use it adequately.96 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.”97 Although equipment failures are bound to occur, “health organizations should ensure that reasonable and customary

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87 Weiner, 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.

89 Meek, supra note 39, at 173.

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

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

92 Id. (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.

93 Poe, 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.

95 Smith, supra note 37.

96 Poe, supra note 3, at 696.

safeguards and back-up systems are in place and operating effectively."\(^{98}\) 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.”\(^{100}\) 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.”\(^{102}\) 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.”\(^{106}\) 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

\(^{98}\)Poe, supra note 3, at 696 (citing Kuszler, supra note 10, at 297).

\(^{99}\)Roberts, 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).

\(^{101}\)Id. at 205.

\(^{102}\)Id. at 205-06.

\(^{103}\)See id. at 206.

\(^{104}\)See id.

\(^{105}\)See id.

\(^{106}\)Id. at 182.

\(^{107}\)Caryl, supra note 54, at 200.

\(^{108}\)See id.

\(^{109}\)See infra Part IV.D.

\(^{110}\)See infra Part IV.D.
prescriptions, self-diagnosing, or self-educating—because the Internet offers convenience, privacy, and lower prices.\textsuperscript{111}

\section*{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.”\textsuperscript{112} Approximately “400 websites sell[] prescription drugs, [and] experts predict that online sales of pharmaceuticals will exceed six billion dollars” by 2005.\textsuperscript{113} Internet pharmacies take different approaches when filling prescriptions.\textsuperscript{114} Some of the 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.\textsuperscript{115} Internet pharmacies can be divided into three categories: traditional pharmacies, prescribing-based site pharmacies, and rogue pharmacies.\textsuperscript{116}

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.\textsuperscript{117} 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.\textsuperscript{118} Rouge pharmacies allow customers to purchase medicine without any prescriptions and provide no diagnosis.\textsuperscript{119} The quality of prescription medication ordered over the Internet is

\begin{thebibliography}{99}
\bibitem{112}Id. (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).
\bibitem{113}Smalley, 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)).
\bibitem{114}Id. (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)).
\bibitem{115}Id. at *12 (citing Silverman, supra note 114, at 266).
\bibitem{116}Clifton, 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)).
\bibitem{117}Id. (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.
\bibitem{118}Id.
\bibitem{119}Id. (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.
\end{thebibliography}
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.\textsuperscript{120}

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

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

This lack of information and interaction makes the pharmacists and physicians involved vulnerable to medical liability.\textsuperscript{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.\textsuperscript{124} The formation of the physician-patient relationship is not a problem exclusive to the output of Internet prescriptions.\textsuperscript{125} In general, the establishment of this relationship is one of the key issues surrounding medical liability in telemedicine.\textsuperscript{126} 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.\textsuperscript{127} This lack of boundaries, however, causes problems with venue and jurisdiction when medical negligence claims arise.\textsuperscript{128}

\section*{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.\textsuperscript{129} To determine in which jurisdiction the malpractice occurred, the parties must ascertain where the practice of medicine happened during the patient’s treatment.\textsuperscript{130} Courts have jurisdiction over a case when a physician “sufficiently availed himself”

\textsuperscript{120}\textit{Id.}
\textsuperscript{121}Smalley, \textit{supra} note 2, at *15 (citing Silverman, \textit{supra} note 114, at 267).
\textsuperscript{122}\textit{Id.}
\textsuperscript{123}\textit{See} Clifton, \textit{supra} note 111, at 541.
\textsuperscript{124}\textit{Id.}
\textsuperscript{125}\textit{See supra} notes 39-52, 115-26.
\textsuperscript{126}\textit{See supra} notes 39-52, 115-26.
\textsuperscript{127}\textit{See Poe, supra} note 3, at 699.
\textsuperscript{128}\textit{See id.; see supra} notes 132-41.
\textsuperscript{129}\textit{See Poe, supra} note 3, at 699.
\textsuperscript{130}\textit{Id.}
in the patient’s state of residence.\textsuperscript{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.\textsuperscript{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.’”\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{136} 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.\textsuperscript{137} 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.\textsuperscript{138} 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.\textsuperscript{139}

\section*{D. Reimbursement}

Neither public nor private insurers have completely accepted telemedicine as a “cost-effective and reliable therapeutic modality that deserves reimbursement.”\textsuperscript{140}

\begin{itemize}
\item \textsuperscript{131}Id. (citing Meek, supra note 39, at 175).
\item \textsuperscript{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)).
\item \textsuperscript{133}Id. (quoting Asahi Metal Indus. Co. v. Super. Ct. of Cal., 480 U.S. 102, 112 (1987)).
\item \textsuperscript{134}See Granite, supra note 39, at 86.
\item \textsuperscript{135}See Meek, supra note 39, at 188; see infra Part IV.D.
\item \textsuperscript{136}See 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.
\item \textsuperscript{137}Id.
\item \textsuperscript{138}See id. at 189.
\item \textsuperscript{139}Speilberg, supra note 25, at 290; see supra notes 132-41.
\item \textsuperscript{140}Id. (stating that this is consistent with traditional medical practice in which neither telephone calls nor letters are reimbursed).
\end{itemize}
Furthermore, insurers are more likely to compensate telemedicine services that are intrastate rather than interstate because states’ premiums differ from state to state.\textsuperscript{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.\textsuperscript{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.\textsuperscript{143} These regulations, however, only apply to public insurers, and many private insurers choose not to comply with these federal regulations.\textsuperscript{144}

The BBA required Medicare reimbursement of telemedicine services.\textsuperscript{145} Because many private insurers base reimbursement criteria on Medicare and Medicaid, many insurers began covering telemedicine services.\textsuperscript{146} There were some restrictions imposed by the BBA, which hindered reimbursement of various telemedicine services.\textsuperscript{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).\textsuperscript{148} Furthermore, the BBA required the prescribing physician’s presence during consultations.\textsuperscript{149} As a result, Medicare only reimbursed $20,000 for 301 claims within the first two years of the implementation of the BBA.\textsuperscript{150} Because the BBA lacked effectiveness, Congress amended it in 2001 with the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000.\textsuperscript{151} Texas also passed legislation that expanded telemedicine coverage to

\textsuperscript{141}Caryl, supra note 54, at 202.
\textsuperscript{142}Id.
\textsuperscript{144}Id.
\textsuperscript{145}Id. at 680. The reimbursement rate for “telecommunications are set at 75% of in-person reimbursement rates.” Id.
\textsuperscript{146}Id. 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)).
\textsuperscript{147}Id. at 681.
\textsuperscript{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/ojnin/topic16/tpc16_1.htm.
\textsuperscript{149}DeLeon, supra note 8, at 681.
\textsuperscript{150}Id. at 682.
\textsuperscript{151}Id. (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.\textsuperscript{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.\textsuperscript{153} By enacting this regulation, the Texas legislature secured reimbursement for “telemedicine services . . . now and in the future.”\textsuperscript{154} Even though Texas adopted this regulation, physicians who practice telemedically outside of the State of Texas are not guaranteed insurance coverage.\textsuperscript{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.\textsuperscript{156} Individual state regulation of reimbursement cannot be completely effective because of the cross-border nature of telemedicine.\textsuperscript{157} A national standard of care regulating reimbursement will be the most effective type of regulation for this area of medical practice.\textsuperscript{158} This cross-border nature not only affects reimbursement, but it also creates problems in physician licensure.\textsuperscript{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.\textsuperscript{160} 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.\textsuperscript{161} The first approach only allows in-state physicians to practice telemedicine on patients within that state.\textsuperscript{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.\textsuperscript{163} The third approach

\textsuperscript{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. \textit{Id.} (citing \textsc{Tex. Gov’t Code Ann.} § 531.0217(b)-(c) (Vernon 2003)).

\textsuperscript{153}Id. (citing \textsc{Tex. Ins. Code Ann.} art. 21.53F, § 3(a) (Vernon 2003)).

\textsuperscript{154}Id.

\textsuperscript{155}See \textit{id.} at 680-84.

\textsuperscript{156}See \textit{id.}

\textsuperscript{157}See \textit{id.}; see \textit{infra} Part IV.D.

\textsuperscript{158}DeLeon, \textit{supra} note 8, at 680-84; see \textit{infra} Part IV.D.

\textsuperscript{159}James B. Rosenblum, \textit{A Telemedicine Primer}, 45 \textsc{Prac. Law.} 23, 26 (1999).

\textsuperscript{160}See \textit{id.}

\textsuperscript{161}Id. (noting that the first approach is the most restrictive and the last approach is the least restrictive).

\textsuperscript{162}See \textit{id.}

\textsuperscript{163}See \textit{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.

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.

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.

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.
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.”178 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.181 Until the federal government implements a national standard of care, state regulations regarding licensure will continue to hinder the growth of telemedicine.182 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.183 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.184 Unfortunately, liability may also spill over to the hospitals in which these

174 Weiner, supra note 5, at 1130.
175 Id.
176 Id. at 1131.
177 See id. at 1133.
178 Id. 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)).
179 See id. at 1142.
180 See id. at 1132.
182 See id.
183 See id.
184 See id.
unlicensed telephysicians work.\textsuperscript{185} State regulations are problematic, and Texas laws are no exception.\textsuperscript{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.\textsuperscript{187}

\textit{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.\textsuperscript{188} Regarding the formation of the physician-patient relationship, Texas courts utilize several standards from traditional medical practices in determining telemedicine cases.\textsuperscript{189}

In Texas, the “creation of the physician-patient relationship does not require the formalities of a contract.”\textsuperscript{190} “The fact that a physician does not deal directly with a patient does not . . . preclude the existence of a . . . relationship.”\textsuperscript{191} Furthermore, in \textit{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.\textsuperscript{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.”\textsuperscript{193} Additionally, in \textit{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.”\textsuperscript{194} On the other hand, \textit{Fought v. Solce} states that the mere fact that a physician is on-call does not establish the required relationship.\textsuperscript{195} In \textit{Fought}, the court held that the physician did not have a physician-patient relationship with Fought when he examined him at the emergency room.\textsuperscript{196} A physician diagnosed Fought's injury, and then consulted with a specialist, Dr. Solce, concerning further treatment.\textsuperscript{197} Dr. Solce was on-call, but he refused to examine

\textsuperscript{185}Id. at 241.
\textsuperscript{186} See infra notes 193-221.
\textsuperscript{187} See infra notes 193-221.
\textsuperscript{188} See supra Part II.
\textsuperscript{189} See infra notes 193-221.
\textsuperscript{190}St. 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)).
\textsuperscript{191} Id.
\textsuperscript{192} Fenley v. Hospice of the Pines, 4 S.W.3d 476, 479-80 (Tex. App. 1999).
\textsuperscript{193} Id.
\textsuperscript{194} Hand v. Tavera, 864 S.W.2d 678, 679 (Tex. App. 1993) (writ denied).
\textsuperscript{196} Id. at 219.
\textsuperscript{197} Id.
Fought.\textsuperscript{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.\textsuperscript{199}

Additionally, in \textit{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.\textsuperscript{200} The Amarillo Court of Appeals also determined that it could not extend the holding in \textit{Lloyd} to include a duty to inform a non-inquiring patient of the physician’s finding.\textsuperscript{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.”\textsuperscript{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.\textsuperscript{203}

In contrast, in \textit{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.\textsuperscript{204} \textit{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.\textsuperscript{205} The Houston Court of Appeals distinguished its facts from \textit{Fought} because, in \textit{Wheeler}, the hospital asked the physician to evaluate certain information and to determine if the physician could transfer the patient.\textsuperscript{206} The physician then willingly agreed to do so.\textsuperscript{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.”\textsuperscript{208}

\begin{footnotes}
\item[198] Id.
\item[199] Id. at 220.
\item[201] Id.
\item[202] Id.
\item[203] See 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).
\item[205] Id.
\item[206] Id. at 38-9.
\item[207] Id.
\item[208] Id.
\end{footnotes}
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. 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. The *Wheeler* court did not draw this distinction, but, considering the issues surrounding telemedicine, this distinction is vital. 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. *Wilson* cites *Lotspeich*, a Dallas Court of Appeals case decided in 1963. 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.

**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. 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

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

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

212 See Wilson, 828 S.W.2d at 233.

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

214 See Lotspeich, 369 S.W.2d at 705.

215 Poe, supra note 3, at 699.


217 Poe, supra note 3, at 699.

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.’” 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. 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

219 Id. 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).
221 See id.
222 See id.
223 See supra notes 194-229.
224 Weiner, supra note 5, at 1134.
225 Id. at 1135.
226 Id. at 1110.
227 Volkert, 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 care. 235  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 228 Weiner, 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)).

229 Id. (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 Id.

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

232 Id.

233 Smalley, 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.

235 Smalley, supra note 2, at *54.

236 Id.

237 Weiner, 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.\textsuperscript{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.\textsuperscript{240} For example, the reading of x-rays 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.\textsuperscript{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.\textsuperscript{242} The absence of a hands-on consultation provides the basis for this heightened standard.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{246} This type of standard is the most constructive in terms of avoiding the risks likely to affect a patient during a telemedicine procedure.\textsuperscript{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.\textsuperscript{248} This requirement not only encourages the development of telemedicine, but it also assures patients that they are receiving the best possible care available.\textsuperscript{249} In addition to the benefits already addressed, a national standard of care will resolve other troubles currently associated with telemedicine.

\textsuperscript{239} Id. 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.

\textsuperscript{240} Poe, supra note 3, at 694-95.

\textsuperscript{241} See id. at 695.

\textsuperscript{242} See id.

\textsuperscript{243} See id.

\textsuperscript{244} Id.

\textsuperscript{245} See id.

\textsuperscript{246} Id. (citing Caryl, supra note 54, at 181).

\textsuperscript{247} Id.

\textsuperscript{248} See id. (citing Kuszler, supra note 10, at 297).

\textsuperscript{249} See 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.\(^{250}\) The national standard would also provide states with guidance when telemedicine cases arise, which takes inconsistency out of telemedical and other medical negligence cases.\(^ {251} \) 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 overseas, 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

\(^ {250} \) Gelein, supra note 81, at 217.

\(^ {251} \) See id.

\(^ {252} \) See supra Part III.A.

\(^ {253} \) Meek, supra note 39, at 193.

\(^ {254} \) See id. at 193-94.

\(^ {255} \) See id.

\(^ {256} \) Id. at 194.

\(^ {257} \) See id.

\(^ {258} \) Clifton, 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.260 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.261 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

259 See id. at 568.
260 See id.
261 See id.; see supra Part III.B.
262 See Meek, supra note 39, at 188-89.
263 See id.
264 See id.
265 See id.
266 See id.
267 See id.
268 See id.
A standard allowing adequate reimbursement for all telemedicine services is the logical solution to the reimbursement issues. Reimbursement of this nature will encourage physicians to practice telemedicine. 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. 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. 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. 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. 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. In order for insurance companies to reimburse physicians and for physicians to participate in telemedicine, physicians must obtain a medical license. A physician practicing telemedicine, however, might not have licenses in distant states. 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. Nevertheless, “licensing is the single largest hurdle to be addressed in the field of telemedicine.” 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.

269 See DeLeon, supra note 8, at 680-83.
270 See id.
271 See id.
272 See Roberts, supra note 97, at 164.
273 Spielberg, supra note 25, at 291.
274 See id.
275 See DeLeon, supra note 8, at 680-83.
276 Id.
277 See infra notes 294-97.
278 See infra notes 294-97.
279 See Meek, supra note 39, at 183.
280 See id. at 185.
281 See id.
Furthermore, the national standard should specify the requirements for obtaining such a license.\textsuperscript{282} 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.”\textsuperscript{283} 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.\textsuperscript{284}

V. CONCLUSION

Medical technology in the twenty-first century provides an array of choices in treating illnesses.\textsuperscript{285} This technology is beneficial both for physicians and for the patients they treat.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{289} Most courts also lack guidance in telemedicine cases because of deficient precedent in this particular area.\textsuperscript{290}

By implementing a national standard of care, courts, physicians, and patients will find viable solutions for many of these problems.\textsuperscript{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.\textsuperscript{292} The national standard will also ensure

\textsuperscript{282}See 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).

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

\textsuperscript{284}See Meek, supra note 39, at 185.

\textsuperscript{285}Clifton, supra note 111, at 568-69.

\textsuperscript{286}See id.

\textsuperscript{287}See supra Part III.A-E.

\textsuperscript{288}See supra Part III.A-E.

\textsuperscript{289}See supra Part III.A, C, & E.

\textsuperscript{290}See supra Part IV.D.

\textsuperscript{291}See supra Part IV.D.

\textsuperscript{292}See supra Part IV.D.1.
quality control of telemedical equipment, allowing physicians to better discern the
difference between distortions and equipment malfunctions.\textsuperscript{293} Additionally, the
federal government will regulate prescription drugs available on the Internet and
require a more thorough look at a patient’s medical history before issuing
prescriptions, which will ensure that patients receive quality care and medication.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{297} By standardizing insurance
reimbursement for telemedical services, the federal government will require
equivalent reimbursement for telemedical procedures and traditional medical
procedures.\textsuperscript{298} Consequently, private insurers will follow the public insurers and
reimburse telemedical procedures more consistently.\textsuperscript{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.\textsuperscript{300} Requiring a “telemedicine only”
license will allow physicians to practice telemedicine in distant states without
worrying about liability.\textsuperscript{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.\textsuperscript{302} This increased quality of care will foster
consumer trust, and patients will be more willing to receive telemedical treatments.\textsuperscript{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.\textsuperscript{304}

\textsuperscript{293}See supra Part IV.D.1.
\textsuperscript{294}See supra Part IV.D.2.
\textsuperscript{295}See Meek, supra note 39, at 188-89.
\textsuperscript{296}See supra Part IV.D.3.
\textsuperscript{297}See supra Part IV.D.3.
\textsuperscript{298}See supra Part IV.D.4.
\textsuperscript{299}See supra Part IV.D.4.
\textsuperscript{300}See supra Part IV.D.5.
\textsuperscript{301}See supra Part IV.D.5.
\textsuperscript{302}See supra Part IV.D.
\textsuperscript{303}See supra Part IV.D.
\textsuperscript{304}See Poe, supra note 3, at 681-82.