



Cleveland State University EngagedScholarship@CSU

Journal of Law and Health

Law Journals

1997

Malpractice and Other Legal Issues Preventing the Development of Telemedicine

Christopher Caryl

Follow this and additional works at: https://engagedscholarship.csuohio.edu/jlh

Part of the Health Law and Policy Commons, and the Torts Commons

How does access to this work benefit you? Let us know!

Recommended Citation

Note, Malpractice and Other Legal Issues Preventing the Development of Telemedicine, 12 J.L. & Health 173 (1997-1998)

This Note is brought to you for free and open access by the Law Journals at EngagedScholarship@CSU. It has been accepted for inclusion in Journal of Law and Health by an authorized editor of EngagedScholarship@CSU. For more information, please contact library.es@csuohio.edu.

MALPRACTICE AND OTHER LEGAL ISSUES PREVENTING THE DEVELOPMENT OF TELEMEDICINE

I.	Introduction
II.	Why is Telemedicine Necessary?
	A. The Current State of Rural Health Care175
	B. How Will Telemedicine Eliminate or Ease the
	Problems Currently Associated With Rural
	Health Care?177
Ш.	THE DEVELOPMENT OF TELEMEDICINE IS HINDERED BY
	Four Issues
	A. Cost/Payment179
	B. Privacy
	C. Licensure
	D. Malpractice
	1. Medical Malpractice Defined
	2. Other Liability Issues
	3. Malpractice Insurance
	4. Venue Shopping
V	CONCLUSION

I. INTRODUCTION

Even though most Americans have not heard of telemedicine, the federal government is already actively involved in "developing a national telemedicine strategy." This note attempts to accomplish the following: demonstrate the urgent need of rural communities to gain access to adequate health care; clarify how telemedicine can provide enhanced health care to rural communities; and analyze the legal obstacles that have prevented, thus far, the most beneficial utilization of telemedicine. In particular, this note will examine how malpractice claims arising from telemedicine consultations might be resolved.

¹Telemedicine, BNA HEALTH L. DAILY, Feb. 19, 1997 at *1. For example, the Department of Defense, which is one of the largest health care providers in the nation, is expected to submit a strategy for the utilization of telemedicine to Congress in early 1998. Id. See also 42 U.S.C.S. § 254c (Law. Co-op. Supp. 1997) (establishing grant programs that promote telemedicine for use by rural health care providers); 7 U.S.C.S. § 950aaa (Law. Co-op. Supp. 1997) (encouraging "telemedicine services and distance learning services in rural areas"); 42 U.S.C.S. § 2487f (Law. Co-op. 1996) (creating "an international telemedicine satellite consultation capability to support emergency medical services in disaster-stricken areas.").

An important issue to recognize at the outset, and one that consistently reappears throughout this discussion, is that health care and the tort claims that arise out of health care are normally defined by state law, but telemedicine is not restricted by state boundaries. The laws of the state where the patient resides or where the consulting physician resides could control an action, or federal law could preempt any state law.

Telemedicine is "the use of advanced telecommunications technologies to exchange health information and provide health care services across geographic, time, social and cultural barriers."2 Advanced telecommunications technologies may include a simple transfer of communication via telephone or fax. Ideally, telemedicine will entail the transfer of information by interactive televideo (IATV) with the physicians at both ends of the communication experiencing the event in real time. 3 Telemedicine used to its highest potential might permit a physician, typically a specialist, from a high-tech, urban or university hospital to examine a patient on a video monitor. This physician—physician A—examines the patient despite the geographical distance and obstacles between physician A and the patient. The patient, who is observed by physician A, is under the care of—physician B—a general practitioner, typically serving a rural community. Physician B may not know the intricate distinctions that will produce the correct diagnosis. As a result of telemedicine, physician A and physician B may examine the patient at the same time as if they were in the same room together, their corroboration hopefully producing the best result.

Currently, the most utilized functions of telemedicine occur in static imaging or single-frame visual images.⁴ Teleradiology, telepathology, and teledermatology are examples of uses of static imaging.⁵ Static imaging information must be digitized and compressed in order to be transferred over telephone cables, a process performed by coder/decoder units called codecs.⁶ Fiber-optic cables, which produce the best imaging for telemedicine applications, are already available in some urban areas, but the high cost of installation prohibits communication providers from providing this service to rural areas.⁷ Congress commanded the Commission to develop recommendations as to which telecommunication services are within those services defined in universal service.⁸ The Commission must consider both

²Jim Reid, PA-C, A Telemedicine Primer: Understanding the Issues 10 (1996).

³ Ace Allen, MD, *The Rise and Fall and Rise of Telemedicine*, TELEMEDICINE SOURCEBOOK 3, 3 (John P. Reichard et al. eds., 1996).

⁴ Id.

⁵*Id*.

⁶Mary Colby, Telemedicine is Poised to Revolutionize The Practice of Medicine, Telemedicine Sourcebook 11, 11-12.

⁷ Id. at 13.

⁸⁴⁷ U.S.C.S. § 254(a)(2) (Law. Co-op. Supp. 1997). The recommendations of the Commission are due within fifteen months of the enactment of the Telecommunications

providing telecommunication services to rural areas at rates comparable to those charged in urban areas⁹ and providing telecommunication services for health care.¹⁰ In particular, the federal legislation demonstrates a policy initiative connecting rural health care providers with telecommunication services when requested.¹¹ The telecommunication services promoted by this federal statute appear to encompass those technologies necessary for the practice of telemedicine. By not charging rural areas with the actual cost of connecting them with fiber-optic cables and spreading the set-up costs, rural areas will be able to benefit from the technology of telemedicine. Despite the physical and financial challenges of providing rural areas with the means to transmit information sufficient for telemedicine consultations, the most difficult obstacles to solve in the development of telemedicine are legal quandaries.

II. WHY IS TELEMEDICINE NECESSARY?

A. The Current State of Rural Health Care

The inadequate supply of rural health care personnel is a major obstacle to providing quality health care in rural areas. ¹² Health Professional Shortage Areas (HPSA) are "areas with a primary care provider-to-client ratio of 1 to 3,500, or worse." ¹³ Twenty-nine percent of rural residents live in HPSA. ¹⁴ In contrast, only nine percent of urban residents resided in HPSA. ¹⁵ While only twenty-five percent of the population lives in rural areas, sixty-seven percent

Act of 1996, which was February 8, 1996. Id.

⁹47 U.S.C.S. § 254(b)(3) (Law. Co-op. Supp. 1997). This section of the statute states, in part, "Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services . . . and . . . at rates that are reasonably comparable to rates charged for similar services in urban areas."

¹⁰⁴⁷ U.S.C.S. § 254(b)(6) (Law. Co-op. Supp. 1997).

¹¹⁴⁷ U.S.C.S. § 254(h)(1)(A) (Law. Co-op. Supp. 1997). This section provides, in part, "A telecommunications carrier shall, upon receiving a bona fide request, provide telecommunications services which are necessary for the provision of health care services in a State, including instruction relating to such services, to any public or nonprofit health care provider that serves persons who reside in rural areas in that State at rates that are reasonably comparable to rates charged for similar services in urban areas in that State."

¹²E.g., Daniel McCarthy, The Virtual Health Economy: Telemedicine and the Supply of Primary Care, 21 Am. J.L. & MED. 111, 111 (1995).

¹³AMERICAN NURSES ASSOCIATION, RURAL/ FRONTIER NURSING: THE CHALLENGE TO GROW 12 (1996).

¹⁴McCarthy, supra note 12, at 116.

¹⁵ Id.

of those areas are HPSA.¹⁶ This means that of the remaining three-quarters of the population, only one-third live in HPSA. One source claimed that only nine percent of physicians practice in rural areas.¹⁷ The insufficient number of medical personnel providing care to rural communities prevents those communities from achieving and maintaining adequate levels of rural health care. Any solution to the rural health care problem must devise a way to encourage medical personnel to practice in rural areas.

Three primary factors cause difficulties in recruiting qualified physicians. First, physicians in rural areas have lower incomes than physicians in urban areas. 18 One reason for this income discrepancy is that rural physicians are more dependent upon public reimbursement. 19 One study indicated that as much as 40% of a rural physician's patients are insured by Medicare or Medicaid.²⁰ In the past, Medicaid payments to rural physicians were less than those to urban physicians. The discrepancy in payment while not substantial in individual cases is important because of the large portion of rural patients whose medical services are covered by Medicaid. Second, rural physicians suffer from professional isolation; lack of companionship or support from other physicians reduces professional satisfaction.²¹ Third, in addition to their full-time responsibilities, rural physicians are often on call for twenty-four hour emergency care, are interrupted in their personal time, and are unable to receive adequate time off because of the reduced number of physicians in rural communities who share the community's medical responsibilities.²² These factors are serious obstacles to maintaining even the inadequate number of physicians already practicing in rural areas. A recent survey found that twenty-three percent of rural physicians were "dissatisfied and plan to leave within 5 years."23

¹⁶ Id. at 116-117.

¹⁷Reid, supra note 2, at 36.

¹⁸Terri Randall, Rural Health Care Faces Reform Too; Providers Sow Seeds for Better Future, 270 JAMA 419, *3 (1993).

¹⁹ Id. at *3.

²⁰Elizabeth Kern, *The Role of Federal Policy In Furthering Telemedicine: An Overview*, TELEMEDICINE SOURCEBOOK 257, 258; Kathleen A. Buto, *Rural Health Care*, Sept. 12, 1996, *available in Westlaw*, 1996 WL 10830624 (member of HCFA testified before House Subcommittee on Health that rural residents make up twenty-six percent of all Medicare beneficiaries); *See also* Calvin Beale, *Persistent Poverty in Rural Areas and Small Towns*, U.S. Dept. of Agriculture, Number 664-54 (July 1993) ("In 783 nonmetro counties, 20 percent or more of the population had poverty-level income, a level more than one-half higher than the national rate. The great majority (546) were counties of persistently high poverty, where the rate was above 20 percent in each census from 1960 to 1990.").

²¹Reid, supra note 2, at 36.

²² Id.

²³Randall, supra note 18, at *1.

In urban areas the primary obstacle to accessing health care is money—the ability to pay. Most urban areas have adequate medical facilities, well-maintained roadways, and public transportation. Rural residents face obstacles different from urban dwellers in gaining access to health care. Jim Reid, who was the principal developer and first director of the Eastern Montana Telemedicine Network, notes:

Rural residents face unique obstacles to gaining medical care. Access to care in an urban setting is often discussed in terms of having the resources to pay for medical care. In rural settings, access refers to having the ability to physically get to health care providers. Mountain ranges, harsh climates, hazardous winter roads, deserts, and undependable island transportation present obstacles to gaining medical care.²⁴

These unique obstacles of rural medicine cause hardships for patients and physicians. Kansas has a well established telemedicine system in operation because of the difficulty that severe weather and distance cause to rural health care providers. [H]ospitals, clinics, HMOs, schools and correctional facilities in the state" utilize telemedicine. These physical obstacles to medical care may cause great expenditure of time and money, such as when rural residents must travel long distances, missing work and seeking hotel accommodations, to see a physician.

B. How Will Telemedicine Eliminate or Ease the Problems Currently Associated With Rural Health Care?

Telemedicine technologies have the ability to eliminate, or at least diminish, the problems associated with rural medical practice. First, telemedicine consultations diminish a rural practitioner's sense of isolation.²⁷ In addition, telemedicine can provide rural physicians with continuing medical education (CME) classes without burdensome travel.²⁸ Ideally, a rural physician may have a telemedicine connection between his home and the community clinic or hospital; this will allow a physician to be available for emergencies and on-call times while enabling the physician to remain at home. Reducing a rural care provider's sense of isolation and creating an opportunity to improve professionally will lessen one of the primary problems associated with rural practice.

²⁴Reid, supra note 2, at 2.

²⁵Jan Ziegler, Telemedicine Starts to Pay Off, Bus. & HEALTH, Oct. 1, 1995, at *1.

²⁶ Id.

²⁷Reid, *supra* note 2, at 40.

²⁸ Id.

Telemedicine improves the economic viability of rural hospitals. Ten percent of all rural hospitals closed in the 1980s.²⁹ Health maintenance organizations (HMOs) are reluctant to establish rural offices because of the many difficulties associated with rural medical care. 30 Rural medical facilities are harmed by the phenomenon of outmigration: a rural patient seeking medical care outside the community.³¹ Telemedicine keeps rural patients in rural hospitals. One study found that "85% of the patients that previously had to be transferred from rural to urban hospitals now are being treated at local hospitals," thus, increasing rural hospital viability.³² The administrator of telemedicine at one rural hospital in Ohio claims that telemedicine enables the rural hospital to retain more patients because telemedicine consultations often determine that the rural physician's treatment is sufficient.³³ During its second year of operation, the Eastern Montana Telemedicine Network retained 98.7% of its patients who utilized telemedicine.³⁴ In addition to the increased viability of rural hospitals, telemedicine can reduce the cost typically incurred by a rural patient who seeks a medical consultation: time away from work, travel expenses and other incidental costs. The Eastern Montana Telemedicine Network documented that rural patients who need to travel 300 miles to a modern medical facility and "who participate in a teleconsultation over the network save an average of \$400 to \$500 per consult in travel related expenses."35

Telemedicine stands as valuable technology to enhance the quality of rural medical care. Specialists from urban hospitals could examine rural patients without experiencing any of the unique difficulties of rural medicine that discourage both the patient and the physician: geography, weather, and distance. Physicians choosing to practice in rural communities would have contact with other professionals, a necessary element in sustaining an adequate ratio of care-givers to patients in the rural setting. While some rural communities and individuals have already benefited by telemedicine, rural

²⁹Randall, supra note 18, at *1; e.g. Delivering Essential Health Care, Agency for Health Care Policy and Research Pub. No. 91-0017 (May 1991).

³⁰Carl Serrato et. al., Why Do So Few HMOs Offer Medicare Risk Plans in Rural Areas?, HEALTH CARE FINANCING REV., Sept. 1, 1995, at *1.

³¹Reid, supra note 2, at 38.

³²Mary Colby, Telemedicine Is Poised To Revolutionize The Practice of Medicine, Telemedicine Sourcebook 11, 15.

³³Interview with Connie Bowler, Administrator of telemedicine at Ashtabula County Medical Center, in Ashtabula, Ohio (Jan. 16, 1997).

³⁴Reid, *supra* note 2, at 42. This percentage refers to only those seen by telemedicine, not the percentage of all patients in community. "This is not the same as suggesting that 98% of all patients who otherwise leave their community for health care services are retained... To even approach that statistic virtually every patient who leaves their local community to seek health care services would first have to be seen via telemedicine. This is an admirable but unrealistic goal." *Id.*

³⁵ Id. at 45.

residents' access to adequate health care will continue to suffer unless the legal barriers to telemedicine are resolved.

IV. THE DEVELOPMENT OF TELEMEDICINE IS HINDERED BY FOUR PRIMARY ISSUES: COST/PAYMENT, PRIVACY, LICENSURE, AND MALPRACTICE

Twenty-nine percent of rural hospitals were using or planned to be able to use telemedicine before 1996.³⁶ This percentage was higher than expected which means that rural hospitals are already utilizing telemedicine.³⁷ For example, the University of Georgia "network has 44 telemedicine sites that enable consultations to occur between any two sites in Georgia..."³⁸ Despite the significant utilization of telemedicine already,³⁹ many aspects of telemedicine remained undefined. The four primary issues that continue to stall the development of telemedicine are cost or payment, privacy, licensure, and malpractice claims.

A. Cost/Payment

Can telemedicine pay for itself or is telemedicine dependent upon government funds and private grants to cover all costs of operation? At this point, although most information relevant to this question is anecdotal, some uses of telemedicine are better documented than others.⁴⁰ Teleradiology is "the most commonly used and thoroughly studied application of telemedicine" because it is one area of telemedicine in which reimbursement is already permitted.⁴² A large Florida corporation has entered a seven year contract with the UCLA Medical Center, which requires UCLA to perform all radiological work for the corporation, in order to reduce the rising medical costs of its

³⁶Mary Jane Gore, *Teleradiology Network Pioneers: Harris/ UCLA and Telequest*, TELEMEDICINE SOURCEBOOK 233, 233 (surveyed 2,365 rural hospitals; the response rate was 95%, obtained by telephone); *Telemedicine Projects Begin to Multiply*, HEALTH DATA MANAGEMENT, March 19, 1996, at *1 (determined that eighteen percent of rural hospital have established programs and eleven percent were developing programs).

³⁷ Download: Far Greater Percentage of Rural Health Care Facilities for Patient Care, INFORMATION MANAGEMENT STRATEGIES FOR HEALTHCARE EXECUTIVES, Feb. 15, 1996.

³⁸Fred Bazzoli, *Putting His Support on the Line*, HEALTH DATA MGMT., Jan. 19, 1997, at *4.

³⁹Beyond the context of rural health care, in 1992, Congress enacted an international telemedicine program "to support emergency medical services in disaster-stricken areas." 42 U.S.C.S. § 2487f (Law. Co-op. 1996).

⁴⁰Sharon McIlrath, *Telemedicine Coming of Age: The Bottom Line*, TELEMEDICINE SOURCEBOOK 83, 83.

⁴¹Jim Grigsby et al., Effects and Effectiveness of Telemedicine, TELEMEDICINE SOURCEBOOK 88, 88.

⁴²Natalie Schrimpf, *Telemedicine Crucial Link for Rural Providers*, CRAINS CLEVELAND BUSINESS, June 3, 1996, at *2. The Abt study reported that 68% of rural hospitals currently using telemedicine were only using teleradiology. *Id.*

employees. As a result of this contract, employees' radiology information is examined by experts from UCLA and the corporation's 23,000 insured employees provide patients for UCLA. 43 Cunningham states, "Consistent with its long-standing policy of not reimbursing physicians for telephone consultations, for example, the U.S. Health Care Financing Administration (HCFA) does not pay for teleconsultations except in radiology and a few other services that typically do not involve face-to-face physician contact with patients."44 Some of the other services which currently permit reimbursement by HCFA and most insurers are telepathology, teleradiology, and certain electronic transmissions.⁴⁵ Since these services do not require face-to-face examinations even in traditional medicine, there is no distinction between the procedures used in traditional medical care and those utilized in telemedicine. 46 The HCFA sought permission from the Office of Management and Budget to waive its current policy of refusing to reimburse Medicare services performed via telemedicine as a means to test how telemedicine will affect providers of Medicare. 47 The Clinton administration recently announced a three-year experiment in which Medicare will pay for telemedicine services at fifty-seven Medicare-certified health facilities. 48 The results of such test programs will have important precedential value for the future of telemedicine financing.

In contrast to HCFA's typically limited reimbursement of telemedicine services, in which the state has great control over the reimbursement of medical services, such as with Medicaid, additional types of telemedicine consultations may be reimbursed. Presently, reimbursement for Medicaid services is available in Arkansas, Georgia, Idaho, Montana, South Dakota, Virginia, and West Virginia. ⁴⁹ In Montana, Medicaid agreed to pay for telemedicine because, otherwise, it must pay travel expenses for those who are referred by their primary care providers to specialists. ⁵⁰ In addition, HMOs and insurance carriers in several states provide for telemedicine services. ⁵¹

⁴³Ziegler, *supra* note 25, at *3-4. While this contract supports the proposition that telemedicine can pay for itself, it is in conflict with previous information that claimed that telemedicine would support small hospitals. It remains to be seen whether both small size health providers and large hospitals will benefit from telemedicine or whether one of theses interests will overwhelm the other.

⁴⁴ Robert Cunningham, *Telemedicine Races Against Time to Earn Its Keep*, TELEMEDICINE SOURCEBOOK, 77, 77-78. HCFA decides reimbursement policy for Medicare services.

⁴⁵Reid, *supra* note 2, at 70.

⁴⁶Grigsby, supra note 41, at 88-9.

⁴⁷Telemedicine: HCFA to Seek Telemedicine Waivers for Physicians, Agency Official Says, BNA'S HEALTH L. REP., Feb. 2, 1995.

⁴⁸ Id

⁴⁹ Reid, supra note 2, at 71.

⁵⁰ Id. at 70.

Another profitable use of telemedicine is to serve prisons.⁵² Prison systems utilizing telemedicine avoided costs such as "security guards, transportation, average private physician's fees, and avoided costs of escape and possible litigation over lack of medical specialty care."⁵³ In a cost-benefit analysis of East Carolina University's telemedicine connection to North Carolina's largest prison, the system has a "net cost of \$1,467 after four years of operation... [T]he contract breaks even at a utilization rate of only 12 consults per month."⁵⁴ A similar program in Texas expects to save money by providing specialist consultations to over 30,000 prisons in 17 [seventeen] locations.⁵⁵ Based upon results such as those documented above, Gary Gaumer, ABT Associates' vice president, notes that "the telemedicine market has moved from one of being taxpayer financed to one driven by demands of the marketplace."⁵⁶

Telemedicine currently receives and relies predominately on federal funds—a consequence of which is that few telemedicine users seek profitable and sustainable uses of telemedicine.⁵⁷ Carole Mintzer of the Office of Rural Health Policy's rural telemedicine grant program advises health care organizations to manage their operations as a private businesses because telemedicine providers will not always be able to rely on funding.⁵⁸ Currently, conclusive evidence documenting the economic advantages of telemedicine is not available. In fact, one study found:

⁵¹HMOs in New Mexico and California uses telemedicine to for static images. Ziegler, *supra* note 25, at *4-6. Kansas and Montana Blue Cross insurers currently reimburse for telemedicine; in West Virginia, the Public Employees Insurance Agency (PEIA) and the State Workers Compensation Board reimburse telemedicine services. Reid, *supra* note 2, at 70.

⁵²Cunningham, supra note 44, at 79.

⁵³Edwin Doty et al., *Telemedicine in the North Carolina Prison System*, MEDICINE MEETS VIRTUAL REALITY 239, 240 (Suzanne J. Weghorst et al., 1996).

 $^{^{54}}$ Id. at 240-41. The telemedicine link was originally intended only for emergency use, and, as a result, only one teleconsult was requested in the first six months of operation. The report explains:

When specialty consultations were made available, usage of the system went up dramatically. The range of scheduled consultations ... expanded to include 38 School of Medicine physicians from 16 medical disciplines Since its inception 430 telemedicine consultations have taken place and in 1993 this link produced the largest number of comprehensive telemedicine consultations in the U.S. Id. at 240.

⁵⁵Cunningham, *supra* note 44, at 77, 79.

⁵⁶Telemedicine Market Full of Interactive Possibilities, INTERACTIVE VIDEO NEWS, Mar. 18, 1996, at *2.

⁵⁷Bruce Bunschoten, *Telemedicine*, HEALTH DATA MGMT., July 1, 1996, at *1.

⁵⁸ Id. at *2.

[A] demonstration of the cost effectiveness (or lack thereof) of telemedicine thus remains several years in the future. In the meantime, certain variables contributing to costs and revenues (e.g., line charges, equipment costs, possible reimbursement, low patient volumes) can be expected to be volatile and unpredictable. . . . At this time, statements about the cost-effectiveness of telemedicine should probably be regarded as largely conjecture.⁵⁹

Telemedicine will become more cost-effective after medical insurers are more certain of their susceptibility to liability for telemedicine. Liability considerations always contribute to the cost of doing business. When liability is uncertain the cost of doing business is not predictable. Liability claims resulting from telemedicine will most likely arise in the context of privacy, licensure, or malpractice.

B. Privacy

Health care providers have a duty not to disclose personal medical information without the consent of the patient.60"The Privacy Act declares that the [health care] provider owns the data in the medical chart, although the patient must release them, even for administrative purposes, such as obtaining reimbursement."61 With the development of telemedicine, a patient's concern about an improper usage of or access to his medical information increases. Telemedicine and modern computer filing systems place patients' private health care information at risk of improper use by health care workers, hospital staff, and computer hackers. Health and Human Services' Secretary, Donna E. Shalala, emphasized the importance of maintaining a patient's right to keep his medical information private as health providers increasingly use telemedicine, computers, and other new technologies. 62 Shalala believes that telemedicine and other technologies utilized in modern health care could create an "Orwellian nightmare."63 However, a 1997 survey of health law experts found them less concerned about privacy issues.64 Some suggest that paper files are more secure while other maintain that computer files and information

⁵⁹Grigsby, *supra* note 41, at 96.

⁶⁰Sonya Savkar & Robert J. Waters, *Telemedicine—Implications For Patient Confidentiality and Privacy*, TELEMEDICINE SOURCEBOOK 351, 351.

⁶¹Leslie G. Berkowitz, *Is There A Doctor In the House? The Rise of Telemedicine*, 25 COLORADO LAWYER, 19, at *1 (June 1996) (citing 5 U.S.C. § 552(a) (1988)).

⁶² Health Care Policy: Shalala Outlines 10 Policy Goals for Future Healthy Health Care System, BNA's HEALTH L. REP., June 13, 1996.

⁶³ Id.

⁶⁴ Outlook '97: Consolidation Remains Top Legal Issue for Health Care Industry In New Year, BNA'S HEALTH L. REP., Jan. 2, 1997, at 14.

transferred via telemedicine is more secure. 65 There appears to be no conclusive evidence on the matter.

The type of medical treatment sought will likely affect a patient's sensitivity to the inappropriate disclosure or access of that information. A patient involved in telepsychiatry is more likely to be inflamed by the unauthorized exposure of his medical information than a patient whose x-rays are seen by persons other than authorized medical personnel. With medical information sent through faxes and other cable transmissions, the potential for honest mistakes, such as dialing the wrong fax number, may send personal medical information to unintended destinations. Arguably, a patient could sue for negligence or negligent infliction of emotional distress where private medical information was sent to the wrong place, and the patient suffered an injury as a result of the unauthorized disclosure. Under certain circumstances, such as the results of an HIV test, the unauthorized or negligent disclosure of information may be devastating.

Telemedicine is seen by some as an opportunity to record physician consultations with patients to be used as evidence in possible subsequent lawsuits.⁶⁶ Videotapes of physician-patient consultations may prove valuable evidence for a physician in a malpractice claim for negligent care or failure to fully disclose, but maintaining stockpiles of live medical consultations may provide another avenue for lawsuits against medical providers when such information is wrongfully accessed. Similarly, "[t]reatment consent forms should also include authorization to photograph, videotape and otherwise record the patient's likeness and physiologic/ medical information."⁶⁷

Most policy makers and commentators agree that the appropriate health information system would allow authorized medical personnel immediate access but keep the information confidential.⁶⁸ Although a few people acknowledge that these policies are incompatible, or at least inconsistent. Arguably, any information system that seeks to provide medical personnel immediate access to necessary medical information will allow more opportunities for illegal observation of the same information. Professionals have developed ways to safeguard information sent through telemedicine.⁶⁹ Cryptography is a technology that "locks" transferred information until an

⁶⁵ Reid, supra note 2, at 80.

⁶⁶ Robert F. Pendrak & R. Peter Ericson, Telemedicine May Soon Spawn Long-Distance Lawsuits, NATIONAL UNDERWRITER LIFE & HEALTH FINANCIAL SERVICES EDITION, Nov. 4, 1996, at *4.

⁶⁷ Reid, supra note 2, at 81.

⁶⁸Savkar, supra note 60, at 352.

⁶⁹ Id.

authorized message or signature releases it.⁷⁰ No one knows how these security systems will hold up against sophisticated computer hackers.⁷¹

C. Licensure

It is well-established that each state is permitted, pursuant to its police power, to legislate to protect the health of its citizens.⁷² Each state has plenary power to regulate the practice of medicine.⁷³ Accordingly, the state may require any person seeking a medical license to demonstrate that he has the appropriate skill for the position as defined by the state's licensing statute.⁷⁴ A state must define guidelines for a medical license in order to permit their citizens to rely upon a physician's ability to practice medicine adequately.⁷⁵ For the same reason, states generally define the practice of medicine broadly.⁷⁶ Several states have amended their statutes defining the practice of medicine to include telemedicine.⁷⁷ States may prosecute persons who practice medicine without obtaining a state license.⁷⁸

⁷⁰¹d.

⁷¹ Id.

⁷²Gibbons v. Ogden, 22 U.S. 1, 3 (1885).

 $^{^{73}}$ Mann v. Board of Medical Examiners, 31 Cal. 2d 30, 41 (1947); 61 Am Jur 2D *Physicians, Surgeons, Etc.* § 26 (1981).

⁷⁴Semler v. Oregon State Board of Dental Examiners, 294 U.S. 608, 611 (1935) (concerning dentistry); Graves v. Minnesota, 272 U.S. 425, 427 (1926). For example, in Ohio, physicians and surgeons are licensed according to Ohio Rev. Code § 4731.41 and dentists are licensed according to Ohio Rev. Code § 4715.09(A).

⁷⁵Dent v. West Virginia, 129 U.S. 114 (1889) (holding that a state statute requiring physicians to gain a certificate from the state was not unconstitutional). Justice Field ended the opinion by stating, "The law of West Virginia was intended to secure such skills and learning in the profession of medicine that the community might trust with confidence those receiving a license under authority of the State." *Id.*, at 128.

⁷⁶The all-encompassing definitions used by states prevent untrained individuals from escaping prosecution through unintended loopholes in the statute's language. *See e.g.*, NEV. REV. STAT. § 630.020 (1995) (defining the practice of medicine, in part, means: "to diagnose, treat, correct, prevent, or prescribe for any human disease, ailment, injury, infirmity, deformity or other condition, physical or mental, by any means or instrumentality.").

⁷⁷IND. CODE ANN. § 25-22.5-1-1.1 (West Supp. 1996) ("Providing diagnostic or treatment services to a person in Indiana when the diagnostic or treatment services: (A) are transmitted through electronic communications"); OKLA. STAT. ANN. tit. 59, § 492 (West Supp. 1997) (defining the practice of medicine to include "performance by a person outside of this state . . . of diagnostic or treatment services through electronic communications for any patient whose condition is being diagnosed or treated within this state.").

⁷⁸Ohio Rev. Code Ann. § 4731.41 (Baldwin 1994) ("No person shall practice medicine or surgery, or any of its branches without a certificate from the state medical board"); Colo. Rev. Stat. Ann. § 12-36-129 (West Supp. 1996); Okla. Stat. Ann. tit. 59, § 491

Due to the police power of the state to license physicians and to prosecute noncompliance with such licensing requirements, the development of telemedicine across state lines has been impeded. Currently, a physician practicing telemedicine can be certain to avoid the illegal practice of medicine in another state if he: (1) provides telemedicine consultations only within the same state that in which he is licensed; or (2) obtains the necessary state license for every state in which he may practice via telemedicine. Obtaining a license to practice medicine in every state that a physician utilizing telemedicine may access is unduly burdensome and expensive.⁷⁹ Several states recognize exceptions to this rule.

Several states allow exceptions for out-of-state physicians to practice medicine without being licensed in that state. Traditionally, the three primary exceptions include: the exception for physicians from bordering states,⁸⁰ out-of-state physicians providing consultations of limited duration or consistency,⁸¹ and emergency exceptions.⁸² These exceptions represent defenses to claims of the unlawful practice of medicine. However, eleven states have legislated to "narrow the exception for physician-to-physician consultations and to require out-of-state physicians to be licensed in a state where they are providing diagnostic or therapeutic services 'directly' or on an 'ongoing' basis to patients located in that state."⁸³ South Dakota's statute provides that nonresident physicians practicing telemedicine in the state who are under a contract with a licensed health care provider in the state are practicing medicine in the state; however, nonresident physicians providing telemedicine "consults on an irregular basis" are not practicing medicine in the

⁽West Supp. 1997).

⁷⁹ See Ohio Rev. Code Ann. § 4731.13 (Baldwin 1994) (requiring examination in order to be licensed to practice medicine); Ohio Rev. Code Ann. § 4731.12 (Baldwin 1994) (requiring fee in order to take exam).

⁸⁰Ohio Rev. Code Ann. § 4731.36 (Baldwin 1994).

⁸¹ OKLA. STAT. ANN. tit. 59, § 492(D)(8)(West Supp. 1997) ("Any person who is licensed to practice medicine and surgery in another state or territory of the United States whose sole purpose and activity is limited to brief actual consultation with a specific physician who is licensed to practice medicine and surgery by the Board..."); Tex. Rev. Ctv. Stat. Ann. art. 4495b (West Supp. 1997) (excluding from the practice of medicine "a legally qualified physician of another state who is in this state for consultation with physicians licensed in this state but who does not: (A) have an office in this state; or (B) appoint a place in this state for seeing, examining, or treating patients").

⁸²OKLA. STAT. ANN. tit. 59, § 492(D)(2) (West Supp. 1997) ("Any person who provides medical treatment in cases of emergency where no fee or other consideration is contemplated, charged or received"); IND. CODE ANN. § 25-22.5-1-2 (West Supp. 1996) (exempting emergency medical services where no consideration is contemplated, charged, or received).

⁸³ Telemedicine, BNA'S HEALTH L. REP., Feb. 20, 1997, at *2.

state.⁸⁴ Other states have similar provisions—permitting irregular telemedicine consults but finding ongoing consultations to be within the practice of medicine—, and, therefore, requiring licensure where telemedicine consultations are recurrent. The states that permit irregular consults include: Arizona,⁸⁵ Connecticut,⁸⁶ Indiana,⁸⁷ Nevada,⁸⁸ Oklahoma,⁸⁹ South Dakota,⁹⁰ Massachusetts,⁹¹ and Texas.⁹² However, the following states require full licen-

⁸⁴S.D. CODIFIED LAWS ANN. § 36-4-41 (Michie Supp. 1997).

⁸⁵ARIZ. REV. STAT. ANN. § 32-1421 (West Supp. 1996) ("This article [defining the practice of medicine] does not apply to any doctor of medicine residing in another state, federal jurisdiction or country who is authorized to practice medicine in that jurisdiction, if he engages in actual single or infrequent consultation with a doctor of medicine licensed in this state and if the consultation regards a specific patient or patients.").

⁸⁶CONN. GEN. STAT. ANN. § 20-9 (West Supp. 1997) (practice of medicine "shall apply to any individual whose practice of medicine includes ongoing, regular or contractual arrangement whereby, regardless of residency in this or any other state, he provides, through electronic communications or interstate commerce, diagnostic or treatment services In the case of electronic transmissions of radiographic images, licensure shall be required for an out-of-state physician who provides, through an ongoing, regular or contractual arrangement, official reports of diagnostic evaluations of such imaging to physicians or patients in this state.").

⁸⁷ IND. CODE ANN. § 25-22.5-1-1.1 (West Supp. 1996) (defining the practice of medicine to include "Providing diagnostic or treatment services to a person in Indiana when the diagnostic or treatment services: (A) are transmitted through electronic communications; and (B) are on a regular, routine, and non-episodic basis or under an oral or written agreement to regularly provide medical services.")

 $^{^{88}}$ Nev. Rev. Stat. Ann. § 630.020 (Michie 1997) (practice of medicine does not include "[p]hysicians who are called into this state, other than on a regular basis, for consultation with or assistance to a physician licensed in this state, and who are legally qualified to practice in the state where they reside.")

⁸⁹OKLA. STAT. ANN. tit. 59, § 492(C)(3)(b) (West Supp. 1997) (defining practice of medicine to include "performance by a person outside of this state, through an ongoing regular arrangement, of diagnostic or treatment services through electric communications for any patient whose condition is being diagnosed or treated within this state.")

⁹⁰ S.D. CODIFIED LAWS ANN. § 36-4-41 (Michie Supp. 1997).

⁹¹The only statute that appears to be relevant is MASS. GEN. LAWS ANN. ch. 112, § 7 (West Supp. 1997) which provides that licensure requirements shall not apply "to a physician or surgeon resident in another state who is a legal practitioner therein, when in actual consultation with a legal practitioner of the commonwealth..." However, I found no section that limited the number of consultations.

⁹²Tex. Rev. Crv. Stat. Ann. art. 4495b (West Supp. 1997) ("A person who is physically located in another jurisdiction but who, through the use of any medium, including an electronic medium, performs an act that is part of a patient care service initiated in this state . . . that would affect the diagnosis or treatment of the patient, is engaged in the practice of medicine in this state for the purposes of this Act and is subject to this Act and to appropriate regulation by the Board. This subsection does not apply to: (1) the

sure within the state in order to practice telemedicine: Florida, ⁹³ Kansas, ⁹⁴ New Mexico. ⁹⁵ These restrictive state laws prohibit the development of an interstate telemedicine network and provide incentives for the federal government to preempt state law in this area.

Only California's recently enacted licensing law allows out-of-state licensed physicians to consult with in-state physicians through telemedicine without any licensing requirement and any limitation on the frequency of consults. His statute prohibits a nonresident practitioner from opening an office within the state, designating a place to meet patients within the state, receiving calls from patients within the state, and having ultimate authority over patient care or diagnoses. California's statute permits the development of an interstate telemedicine system.

Three other proposals have been made to lessen the burden of state licensure. First patients will be deemed "electronically transported" to the state of the consulting telephysician, for the purposes of the law. 98 Under this legal fiction, the physician would not be required to be licensed in another state because the patient, or, at least, all the patient's medical information, would be considered to be within the state of the consulting physician. This position is impractical and possibly harmful. The electronic transference position is impractical because state courts will be reluctant to give up jurisdiction when a patient who is a resident of that state sues a non-resident physician. Worse yet, if the state court did submit to the electronic transference theory and dismiss personam jurisdiction against the physician, then the injured patient would be burdened with commencing a lawsuit in another state. Patients will not be protected by their state medical boards and the laws of their states. Rather, a patient would need to complain to the medical board of the state where the consulting

acts of a medical specialist located in another jurisdiction who provides only episodic consultation services on request to a person licensed in this state who practices in the same medical specialty.").

⁹³FLA. STAT. ANN. § 458.3255 (West Supp 1997) ("Electronic-imaging [sic] diagnostic-imaging or treatment services. Only a physician licensed in this state or otherwise authorized to practice medicine in this state may order, from a person located outside this state, electronic-communications diagnostic-imaging or treatment services for a person located in this state.")

 $^{^{94}}$ Kan. Stat. Ann. § 65-2803 (1992) (containing no exception for the practice of telemedicine: "It shall be unlawful for any person who is not licensed under the Kansas healing arts act . . . to engage in the practice of the healing arts").

⁹⁵ N.M. STAT. ANN. § 61-6-6 (West 1997) ("J. "'the practice of medicine' consists of: . . . (5) offering or undertaking to diagnose, correct or treat in any manner or by any means, methods, devices or instrumentalities ").

⁹⁶CAL. BUS. & PROF. CODE § 2060 (West Supp. 1997).

⁹⁷ Id

⁹⁸Stacey Swatek Huie, Note, Facilitating Telemedicine: Reconciling National Access With State Licensing Laws, 18 HASTINGS COMM. & ENT. L.J. 377, 405-407 (Winter 1996).

physician was licensed, and that medical board has little incentive to allocate its resources investigating claims of non-residents. Therefore, a licensure system that transfers a patient's protection against substandard medical treatment to the state where the physician is licensed and away from the state where the patient resides unjustly shift the burden of legal protection against the patient.

The second proposal to reduce the problem of state licensure in the context of telemedicine is to create a national licensure system. 99 Congress may regulate any activity that has a substantial effect on interstate commerce. 100 Assuming that telemedicine has a substantial effect on interstate commerce, Congress may regulate the practice of telemedicine. 101 Congress generally defers health issues to the states. 102 As a result, states have enacted laws that inhibit the interstate practice of telemedicine. 103 The United States Supreme Court tendered this rule in reviewing state statutes that affect commerce:

Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits . . . If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and whether it could be promoted as well with a lesser impact of interstate activities. ¹⁰⁴

Within this frame work, telemedicine poses a quandary. The same state laws that insure trained medical providers inhibit interstate commerce. Courts considering this issue may focus on: the state's interest in safeguarding the practice of medicine, physician lobby groups seeking to limit out-of-state competition, or the public benefit of providing quality medical services to all areas of the state.

Congress stated its intention to preempt any state laws that prohibit the development of any interstate telecommunications service. One commentator stated, in reference to the Telecommunications Reform Act of 1996:

⁹⁹ Id.

¹⁰⁰United States v. Lopez, 514 U.S. 549, 559 (1995).

¹⁰¹See City of Philadelphia v. New Jersey, 437 U.S. 617, 623 (1978).

¹⁰²Great Atlantic and Pacific Tea Co., Inc. v. Cottrell, 424 U.S. 366, 371 (1976).

¹⁰³See supra, notes 85-95.

¹⁰⁴Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

¹⁰⁵⁴⁷ U.S.C.S. § 253(d) (Law. Co-op. Supp. 1997).

although there is a strong presumption against state preemption, the Supremacy Clause of the Constitution mandates that even state regulation designed to protect vital state interests must give way to paramount Federal legislation. Should Congress desire to regulate telemedicine licensure, it could do so. However, states would be able to continue their own licensing systems in the absence of complete preemption. Therefore, the ultimate question of preemption will lie with the intent of Congress. ¹⁰⁶

If states inhibit telemedicine substantially, Congress should develop a means of licensing physicians for the practice of telemedicine. However, the police power should remain with the state.

The Center for Telemedicine Law argues for a uniform interstate licensure system that would outline the standards for professional conduct of a physician practicing across state lines. 107 They believe a "federal impetus" will be necessary to create a uniform interstate licensure system, and if such a system is unworkable, a federal licensure system will need to be established. 108 Alternatively, the American Medical Association's (AMA) Board of Trustees "rejected a proposal calling for interstate licensure of physicians for telemedicine, instead ruling that such licensing requirements should be developed by the states and their medical boards. 109

Despite their unwillingness to agree to a national licensure system, the Federation of State Medical Boards (FSMB) and the American Medical Association approved national accreditation programs to provide national standards for quality medical care. ¹¹⁰ However, the Federation of State Medical Boards stated that its purpose in implementing the accreditation program was to promote the development of telemedicine through a system that provided

¹⁰⁶Telemedicine, Interagency Panel Reports Progress of Issues Barring Use of Telemedicine, BNA HEALTH CARE DAILY, Feb. 4, 1997, at *1.

¹⁰⁷ Trends & Timelines Telemedicine, AMERICAN POLITICAL NETWORK, Feb. 14, 1997, at *2. The Center for Telemedicine Law (CTL) was established on November 27, 1995. CTL is a "non-profit organization addressing legal issues that may act as impediments to the development of telemedicine, such as cross-state physician licensure, malpractice jurisdiction, and reimbursement standards. Founding members include the Cleveland Clinic Foundation, the Mayo Clinic, the Midwest Rural Telemedicine Consortium, and the Texas Children's Hospital. Center for Telemedicine Established, BNA'S HEALTH L. REP., Dec. 7, 1995.

¹⁰⁸Trends & Timelines Telemedicine, AMERICAN POLITICAL NETWORK, Feb. 14, 1997, at *2.

¹⁰⁹Telemedicine, BNA'S HEALTH L. REP., July 4, 1996. The AMA did note exceptions for emergency and informal telemedicine consultations. *Id*.

¹¹⁰ Physician Credentialing, BNA'S HEALTH L. REP., (Federation of State Medical Boards), Jun. 27, 1996.; Physician Credentialing, BNA'S HEALTH L. REP., (AMA), Dec. 12, 1996, at *1.

easy access to documents assuring the credentials of a consulting telephysician. 111

The FSMB has presented a better solution to the problem of state licensure. The FSMB adopted a model act that would require all physicians practicing medicine across state lines to seek a special purpose license—for the limited purpose of practicing telemedicine. The model act provides, in part,

that the practice of medicine is a privilege, and that the licensure by this State of practitioners outside this State engaging in such medical practice within this State and the ability to discipline such practitioners is necessary for the protection of the citizens of this State and for the public interest, health, welfare, and safety. 113

The most crucial aspect of the model act, which is in contrast to the theory of electronic transference, is that the state medical board where the patient is examined, and where, presumably, in most cases the patient resides, will maintain disciplinary authority against any physician. By providing the patient of a telemedicine consultation with the ability to engage the medical board of his state, a patient injured by substandard care is empowered by an accessible means of legal redress. Similarly, the model act finds that the "agency best able to ensure the maintenance of such [medical] standards in the protection of the patient is the medical board in the state of the patient's residence." 114

The model act maintains that the practice of medicine across state lines occurs whenever a physician provides a "written or otherwise documented medical opinion concerning diagnosis or treatment of a patient within this State by a physician located outside this State." 115 This definition is sufficiently broad to bring physicians within the jurisdiction of the patient's state for most telemedicine communications, which protects the patient in case of substandard care. This language of the model act is similar to many states. 116

The model act provides several exemptions to the requirement that out-of-state physicians must gain a special purpose license. The exemptions would allow out-of-state physicians to practice telemedicine in a state where they are neither fully licensed nor specially licensed: physicians who practice medicine across state lines in cases of emergency (as defined by the state medical board), physicians who practice medicine across state lines "irregularly or infrequently" (less than once each month; fewer than ten patients each year;

¹¹¹ Physician Credentialing, BNA'S HEALTH L. REP., Jun. 27, 1996.

¹¹²Ad Hoc Committee on Telemedicine of the Federation of State Medical Boards, *A Model Act to Regulate the Practice of Medicine Across State Lines*, http://www.fsmb.org/telmed.htr., at *5 [hereinafter *Model Act*].

¹¹³ Id. at *4.

¹¹⁴ Id. at *2.

¹¹⁵ Id. at *4.

¹¹⁶ See supra note 76.

or less than 1% of the physician's practice), and physicians who practice medicine across state lines "without compensation or [the] expectation of compensation." Similarly, several states provide licensure exemptions such as these. 118

The FSMB's model act should be adopted by the states. Tennessee adopted a special licensing provision similar to that promoted by the FSMB's model act. 119 Most importantly, the model act protects patients by keeping the authority to regulate physicians within the patient's state. Second, states should provide special licenses for the limited purpose of practicing telemedicine within the state. In addition, restrictions, such as those defined by the California telemedicine licensing statute should be maintained—physicians cannot maintain office in the state, do not examine patients in the state, do not receive phone calls from patients in the state—unless the physician is fully licensed by the state. State medical boards should provide a special license to a nonresident physician who seeks to practice telemedicine in the state, if the physician is fully licensed in a different jurisdiction and the physician has not been previously disciplined. 120 State medical boards empowered to grant special licenses for telemedicine must verify a physician's application materials through a national information center, such as that created by the FSMB or the National Practitioner Data Bank, 121

States license physicians in order to ensure quality medical services are available to patients. The state licensing system is the first line of assurance in the state's effort to assure quality medical care. The second mechanism to assure quality medical care is the medical malpractice system.

¹¹⁷ Model Act, supra note 112, at *5-6.

¹¹⁸ See supra notes 82, 85-89.

¹¹⁹TENN. CODE ANN. § 63-6-209 (West 1997) (stating that the state medical "board has the authority to issue restricted licenses and special licenses based upon licensure to another state for the limited purpose of authorizing the practice of telemedicine ").

¹²⁰ Model Act, supra note 112, at *5.

¹²¹ National Practitioner Data Bank for Adverse Information on Physicians and Other Health Care Practitioners, 45 C.F.R. § 60 (1996). The National Practitioner Data Bank is a Department of Health and Human Services program that requires all information concerning a practitioner's competence to be collected. According to federal law, hospitals must access a physician file when the physician applies for staff privileges. Disclosure of Information by the National Practitioner Data Bank, 45 C.F.R. § 60.10 (1996).

D. Malpractice

Medical malpractice claims, or the threat of such claims, hinders the development of telemedicine. ¹²² Malpractice claims arise within the tort law system ¹²³ and are regulated by each state. ¹²⁴ A modern tort casebook states:

For the most part, tort law is a creature of the state, rather than the national, government. Under America's federal system, each state has broad leeway to define the conditions under which a person will be subject to tort liability for causing harm to another . . . Because reasonable persons may differ on issues of individual responsibility and social accountability for personal injury or property damage, the principles of tort law governing a particular issue may vary from one jurisdiction to the next. ¹²⁵

As a result, physicians are uncertain about potential liability for practicing telemedicine across state lines. Currently, there are no reported malpractice cases arising within the context of telemedicine. This is not surprising considering that a February 1997 survey found that "more than 40 percent of telemedicine programs surveyed had been in operation for one year or less." While courts have, thus far, evaded the confusing array of legal issues that telemedicine raises, such suits are inevitable and likely to soon appear. Others who have already sketched the legal implications of telemedicine claim that "malpractice issues... may be the most perplexing of all." A well functioning telemedicine system will allow interstate medical consultations while providing reasonable certainty against unexpected liability.

A conflict exists in malpractice, as it did in licensure. The Tenth Amendment reserves all powers to the states that are not delegated to the federal government. Traditionally, states control issues of health and safety. In accordance with that principle of federalism, states may define through their

¹²² Robin Elizabeth Margolis, Law and Policy Barriers Hamper Growth of Telemedicine, HEALTHSPAN, Nov. 1994 at 14, 15; See Diane Millman & Scott Edelstein, Telemedicine Enhances Care in Rural Locales, OPHTHALMOLOGY TIMES, Nov. 1, 1996, at *1 (noting that the U.S. Department of Health and Human Services' Health Resources and Services Administration is currently soliciting comments and suggestions for dealing with liability and malpractice claims resulting from telemedicine).

¹²³ VINCENT R. JOHNSON & ALAN GUNN, STUDIES IN AMERICAN TORT LAW 250 (1994).

¹²⁴ Id. at 2.

¹²⁵ Id.

¹²⁶Pendrak, supra note 66, at *2.

¹²⁷ Telemedicine, BNA'S HEALTH CARE POLY REP., Mar. 3, 1997.

¹²⁸ Douglas D. Bradham, Ph.D. et al., The Information Superhighway and Telemedicine, 30 WAKE FOREST L. REV. 145, 165 (Spring 1995).

¹²⁹U.S. CONST. amend. X.

¹³⁰Gibbons v. Ogden, 22 U.S. 1 (1885).

legislatures and courts the extent to which malpractice claims shall be permitted. The state has an interest in compensating victims of medical malpractice—substandard medical care—because such victims may otherwise impose a burden on public programs that provide for the well-being of its citizens. ¹³¹ In addition, malpractice shapes policy and assures quality because it "provides an extra incentive to improve one's skills, maintain high professional standards and make referrals to specialists when the problem exceeds one's own level of competence." ¹³²

On the other hand, the fear of malpractice liability inhibits the development of telemedicine. Physicians who are interested in providing care to rural communities may shy away from such a practice because they are uncertain of their liability. If malpractice liability was relaxed, telemedicine could have the effect of deterring substandard care because rural medical providers would have greater access to other physicians to verify a diagnosis or treatment. In this respect, malpractice liability hinders rural physicians from providing the best possible care for their patients. 133

1. Medical Malpractice Defined

Malpractice is a type of negligence claim. A prima facie medical malpractice action requires a plaintiff to show: there was a duty, the duty was breached, the plaintiff's injury was proximately caused by the breach of duty, and the plaintiff suffered damages. 134 Each of these elements must be analyzed in order to note the distinctions between a malpractice claim resulting from traditional medical procedures and a malpractice claim resulting from a telemedicine consultation.

A physician-patient relationship is a precondition to a medical malpractice claim. ¹³⁵ Without establishing that a telemedicine consultant has a duty of care to the patient, there can be no malpractice claim. State statutes defining telemedicine as within the practice of medicine are not pertinent to this inquiry.

 $^{^{131}}$ Uncompensated, injured patients may become dependent upon welfare, unemployment, or Medicaid.

¹³² JOHNSON, *supra* note 123, at 250.

¹³³This conclusion is based upon the assumption that all telemedicine physicians will be properly licensed and competent. The interconnection between the issues of licensure and malpractice is significant. States license physicians to assure patients that medical providers are reputable. Malpractice liability compensates injured patients for substandard care. These two issues are inseparable. Malpractice claims will result regardless of whether a national licensure system is implemented or the state licensing system continues. Considerations of the proper type of licensing system may be based upon a physician's liability for telemedicine as defined by malpractice claims.

¹³⁴Starcher v. Byrne, 687 So.2d 737, 740 (Miss. 1997); Pellerin v. Humedicenters, Inc., 696 So.2d 590, 592 (La. Ct. App. 1997).

¹³⁵Green v. Walker, 910 F.2d 291, 293 (5th. Cir. 1990) (applying Louisiana law); Payne v. Sherrer, 458 S.E.2d 916, 918 (Ga. Ct. App. 1995).

The issue of whether or not a physician-patient relationship exists is a question of law for the courts to decide. 136

It is well established that a physician-patient relationship forms "[w]hen the professional services of a physician are accepted by another person for the purposes of medical or surgical treatment." The physician-patient relationship is often based upon contract, usually an implied contract. Where telemedicine consultations reflect traditional medical situations, the courts are likely to find a physician-patient relationship exists between the consultant and the patient. An example of such a situation may include a patient accompanied by his primary care physician in Ohio and a distant consultant examining the patient by electronic means—telemedicine. Here, the patient, the primary care physicians, and the consultant can all see each other and recognize that they are each consenting to the examination, diagnosis, and treatment. The patient consents to be examined by the primary care physician and the consultant, and the consultant consents to examine the patient for diagnosis or treatment.

One commentator believes that courts will find that a physician-patient relationship exists in a telemedicine consultation even if one of these elements is not shown: "1) if the consultant has met the patient, or knows the patient's name; 2) if the consultant examined the patient's record; 3) if the consultant examined the patient; [or] 4) if the consultant accepts a fee for his services." A telemedicine consultation that satisfies each of these elements will likely find a physician-patient relationship established, assuming that the patient consents to the examination. A telemedicine consultation that satisfied each of these elements would be similar to a traditional medical examination.

Telemedicine consultations combine the efforts of the consultant with those of the primary care giver who is present with the patient. While one perspective may be that liability will diminish because two care givers are more

¹³⁶Webb v. Jarvis, 575 N.E.2d 992, 995 (Ind. 1991); Heigert v. Reidel, 565 N.E.2d 60, 63 (Ill. App. Ct. 1990), appeal denied, 575 N.E.2d 914 (Ill. 1991); Hill ex rel Burston v. Kokosky, 463 N.W.2d 265, 266 (Mich. Ct. App. 1990).

¹³⁷STEVEN E. PEGALIS & HARVEY F. WACHSMAN, AMERICAN LAW OF MEDICAL MALPRACTICE, 24 (2d ed. 1992); Miller v. Sullivan, 625 N.Y.S.2d 102, 103-104 (1995); Payne, 458 S.E.2d at 917.

¹³⁸Pegalis, *supra* note 137, at 25; Green, 910 F.2d at 293; Young v. Crescente, 39 A.2d 449, 450 (N.J. 1944).

¹³⁹ Phyllis F. Granade, Malpractice Issues Affecting The Implementation of Telemedicine, TELEMEDICINE SOURCEBOOK, 361-62 (citing Doughtery v. Gifford, 826 S.W.2d 668 (Ct. App. Tex. 1992); Burston, 463 N.W.2d 265; Clarke v. Hoek, 219 Cal. Rptr. 845 (Cal. Ct. App. 1985)).

¹⁴⁰The physician's failure to gain the patient's consent may result in a malpractice action for lack of informed consent.

¹⁴¹The patient may be accompanied by someone other than his physician. For example, in rural areas where physicians are sparse, nurses and other health care providers may be the patients immediate care giver.

likely to provide non-negligent treatment, another perspective may suggest that telemedicine's utilization of two physicians increases the patient's expectations. A typical referral to a specialist occurs outside the presence of the primary care giver and under the undivided control of the specialist. Uuring a telemedicine consultation there is a significant distinction: the question of who has control over the patient's care may be a question of fact. The California statute defines that the resident physician has final authority over patient diagnosis and treatment. It the primary care giver makes the final decision on the patient's diagnosis and treatment, does the consulting physician's lack of control immunize him from malpractice liability? As the telemedicine consultation moves further away from formal patient-physician interaction, the legal guidelines of traditional physician-patient consultations becomes less relevant. Cases defining the point at which a medical consultant establishes a physician-patient relationship are helpful.

In *McKinney v. Schlatter*, a patient was admitted to the emergency room and examined by the emergency room physician who telephoned the cardiologist on call.¹⁴⁵ After the cardiologist was briefed on the patient's condition, he told the emergency room physician that the patient's problem was not cardiac. Relying upon the cardiologist's diagnosis, the patient was released and died soon thereafter.¹⁴⁶ In the subsequent malpractice case against the cardiologist, the Ohio appellate court found that:

a physician-patient relationship can exist by implication between an emergency room patient and an on call physician who is consulted by the patient's physician but who has never met, spoken with, or consulted the patient when the on call physician (1) participates in the diagnosis of the patient's condition, (2) participates in or prescribes a course of treatment for the patient, and (3) owes a duty to the hospital, staff or patient for whose benefit he is on call. ¹⁴⁷

In McKinney, the element of contention in the analysis was whether the on call physician had a duty to be on call. Plaintiff's expert witness testified that in ninety-five percent of the nation's hospitals, physicians must be available—on

¹⁴²Pendrak, supra note 66, at *2.

¹⁴³Granade, supra note 139, at 362.

¹⁴⁴CAL. Bus. & Prof. Code § 2060 (West 1997).

¹⁴⁵McKinney v. Schlatter, No. CA96-05-100, 1997 WL 67702, at *1 (Ohio App. 12 Dist. Feb. 18, 1997), appeal dismissed, 78 Ohio St.3d 1471, appeal dismissed, 79 Ohio St.3d 1421 (1997).

¹⁴⁶ ld. at *1.

¹⁴⁷ Id. at *5.

¹⁴⁸ *Id.* at *5. Plaintiff's expert witness testified about hospitals' on call policies: ninety-five percent all hospitals in this country require physicians to be on call in order to maintain hospital privileges. *Id.* at *4.

call—in order to maintain their staff privileges at the hospital. 149 While there was no showing that the consultant in McKinney was required to be on call, likewise, there was no evidence to the contrary. 150 Ultimately, the court based its decision on the fact that the cardiologist was consulted in order to render an opinion—to rule out a heart attack. 151 A Texas appellate court found that where an emergency room patient sued an on call specialist who was consulted by the patient's physician, no physician-patient relationship existed because the on call physician volunteered for the assignment. 152 The consulted physician was not required to be on call according to a contract or as a requirement for his staff privileges. 153 In a similar case, the Illinois Appellate Court held that a physician consulted by telephone regarding an emergency room patient did not create a physician-patient relationship where the consulted physician often received such inquiries, which do not require examining a patient or stating an opinion, and for which he was not compensated. 154 The court implies that if the consultant had gone to examine the patient and to provide a diagnosis or treatment program, then the physician-patient relationship would exist. 155

In a slightly different circumstance, an on call physician consulted by telephone did not form a physician-patient relationship when he stated that the emergency room patient should be transferred to another facility. ¹⁵⁶ In *St. John*, the on call physician was wrong in thinking that the patient's problem was neurological. ¹⁵⁷ Even though the physician based his decision not to treat the patient on the false premise that the patient's problem was neurological, the physician could not be liable for malpractice because he refused to treat the patient. ¹⁵⁸ The Texas Supreme Court stated it this way, "a physician may decline treatment and thereby decline to create a physician-patient relationship, even on the basis of an erroneous conclusion that the patient's condition is beyond his or her ability to treat. "¹⁵⁹ However, the court noted that a physician may create a physician-patient relationship, which would prohibit the physician from declining treatment of patients, where the physician is

¹⁴⁹McKinney, at *4.

¹⁵⁰ Id. at *5.

¹⁵¹ Id. at *5.

¹⁵²Fought v. Solce, 821 S.W.2d 218, 219 (Tex. Ct. App. 1991).

¹⁵³ Id. at 220.

¹⁵⁴ Reynolds v. Decatur Memorial Hospital, 660 N.E.2d 235, 237 (Ill. App. Ct. 1996).

¹⁵⁵ Id. at 239.

¹⁵⁶St. John v. Pope, 901 S.W.2d 420, 421 (Tex. 1995).

¹⁵⁷ Id. at 422.

¹⁵⁸ Id. at 423.

¹⁵⁹ Id.

under a contract to provide service to patients. ¹⁶⁰ According to these cases, a telemedicine consulting physician would establish a physician-patient relationship if the physician participated in the diagnosis and treatment of the patient and if the physician had a duty to be available as a consultant-on call. The agreement to be available to consult could be written, oral, or an extension of some other duty, such as staff privileges. The courts that consider malpractice claims that arise from telemedicine consultations must decide whether these legal standards apply.

Telemedicine is perceived as a means to eliminate the professional isolation experienced by many rural practitioners. If a rural practitioner is often consulting specialists with questions, does each of these consultations create a physician-patient relationship between the consulting physician and the patient? For example, when a consulting physician examines a patient's medical records, does this constitute "an informal consultation between two colleagues" or does it constitute "a formal doctor-patient relationship." ¹⁶¹ If consulting physicians are bound to legal relationships for all communications with other practitioners, they might be less likely to share their knowledge and expertise with other physicians.

Once physician-patient relationship exists, a party seeking to sue a physician for malpractice resulting from a telemedicine consultation must prove that the physician breached the requisite standard of care. What is the requisite standard of care? In an ordinary malpractice action two standards are possible: (1) the traditional view defines a physician's duty according to the standard of his locality; ¹⁶² or (2) the modern trend utilizing a national standard of care. ¹⁶³ Under the traditional view, also known as the geographic proximity rule, one of two similar tests may be applied. First, under the strict locality rule a physician or surgeon is held only to that degree of skill possessed by physicians and surgeons of the particular locality where he practices. ¹⁶⁴ Because the strict locality rule permits arbitrary results in malpractice cases—the standards in an area may be particularly high or low—some jurisdictions require physicians to use the care of physicians of ordinary skill and care in similar communities. ¹⁶⁵

¹⁶⁰ Id. at 424.

¹⁶¹ Pendrak, supra note 66, at *2.

¹⁶²Tucker v. Meis, 487 S.E.2d 827, 828 (N.C. Ct. App. 1997)

¹⁶³Spencer v. Seikel, 742 P.2d 1126, 1128 (Okla. 1987); Gorab v. Zook, No. 96SC90, 1997 WL 356948, slip op. at *5 (Colo. June 30, 1997) (en banc); See McDaniel v. Hendrix, 401 S.E.2d 260 (Ga. 1991) (rejecting local standard of care and adopting general standard of care).

¹⁶⁴Murphy v. Dyer, 409 F.2d 747, 748 (1969) (applying Colorado law); Custodio v. Bauer, 251 Cal. App. 2d 303, 311 (1967); Evans v. Appert, 372 S.E.2d 94, 97 (N.C. App.), appeal denied 374 S.E.2d 584 (N.C. 1988) (affirming summary judgment where plaintiff failed to present expert testimony on the standard of care in Wilson, North Carolina, where the medical services were rendered).

¹⁶⁵Bougher v. Choi, 562 N.E.2d 1289, 1290 (Ind. Ct. App. 1990).

This is called the same or similar locality rule. 166 It prevents physicians from rural communities where the standard of care is typically lower from being held to that standard appropriate in urban centers, where the standard is typically higher. The national standard of care considers the physician's locality as a factor but requires that "[e]ach physician . . . possess or have reasonable access to such medical knowledge as is commonly possessed or reasonably available to minimally competent physicians in the same specialty or general field of practice throughout the United States"167 What is the proper standard of care for telemedicine?

Telemedicine will likely promote a national standard of care. One advantage of telemedicine is that rural physicians will be able to access more knowledgeable and experienced physicians without significant delays due to time, weather, or other circumstances. Arguably, telemedicine technology will eventually reduce or eliminate a physician's excuse that he complied with the appropriate standard of care for his locality because he will have immediate access to physicians in other localities, where the standard of care is higher. As telemedicine continues to develop, holding a rural primary care physician with access to telemedicine to a national standard may be inappropriate. The high cost of using telemedicine may functionally prevent the physician from using the technology. The United States Commerce Department's National Telecommunications and Information Administration has acknowledged that the high cost of transmitting information during telemedicine consultations prohibits the use of this technology. 168 Federal policy makers are constructing ways to assist rural and urban under served health care providers in obtaining affordable advanced telecommunications services."169

Medical providers who do not wish to wait for courts to define the proper standard of care should develop their own standards. The American College of Radiology and the American Electroencephalograph Society took an active role, and defined standards for physicians practicing telemedicine within those fields. To While courts considering malpractice issues of telemedicine will consider the physician's conduct against any applicable standards available, compliance with such standards does not prohibit a finding of liability. Courts may apply their own standard where they perceive the industry standard as inadequate. Therefore, physicians who rely upon standards announced by

¹⁶⁶ Id.

¹⁶⁷ Hall v. Hilbun, 466 So.2d 856, 870 (Miss. 1985).

¹⁶⁸Telemedicine, HEALTH LEGIS. & REG. WKLY., Feb. 5, 1997.

¹⁶⁹ Id.

¹⁷⁰Pendrak, supra note 66, at *2.

¹⁷¹ See T.J. Hooper v. Northern Barge Corp., 60 F.2d 737, 740 (2d Cir.), cert. denied, 287 U.S. 662 (1932) (providing that "Courts must in the end say what is required; there are precautions so imperative that even their universal disregard will not excuse their omission.").

industry groups may be liable. Courts and juries may find industry standards to be self-serving. Even compliance with government standards does not preclude liability.¹⁷²

Where the telemedicine procedures are virtually identical to the traditional medical procedures, the standard of care should be the same. Likewise, where telemedicine is inferior to the traditional medical protocol, physicians should be on guard. For example, there is no significant distinction between the way physicians traditionally examine x-rays and the way a telemedicine consultant reads an x-ray. Therefore, the standard of care for a telemedicine consultant reading x-rays should be defined by the traditional medical standards. Other telemedicine applications may be less effective in making proper diagnoses, and telemedicine physicians practicing in those areas will need to state diagnostic opinions after considering many factors. Physicians who are familiar with risks that telemedicine poses may be held liable even if such knowledge is beyond that of conventional medical wisdom. ¹⁷³ Physicians have other duties to their patients that may be complicated when applied to telemedicine.

2. Other Liability Issues

Physicians have a duty of confidentiality to patients for most matters disclosed during medical treatment.¹⁷⁴ Different jurisdictions sometimes provide contradictory requirements. For example, in some circumstances, California requires physicians to disclose that a patient is infected with HIV,¹⁷⁵ while the District of Columbia prohibits the same practice.¹⁷⁶

Physicians must keep patients comprised of all the facts that a reasonable patient would want to know before consenting to a particular medical treatment. The Idaho Supreme Court described informed consent this way,

A valid consent must be preceded by the physician disclosing those pertinent facts to the patient so that he or she is sufficiently aware of the need for, the nature of, and the significant risks ordinarily involved in the treatment to be provided in order that the giving or withholding of consent be a reasonably informed transaction. ¹⁷⁷

¹⁷²Sours v. General Motors Corp., 717 F.2d 1511, 1517 (6th Cir. 1983) (holding defendant automaker liable in a product liability suit for defective roof even though the roof was in compliance with federal regulations).

¹⁷³See Burton v. Brooklyn Doctors Hospital, 452 N.Y.S.2d 875, 880 (N.Y. App. Div. 1982).

¹⁷⁴ Alberts v. Devine, 479 N.E.2d 113, 120 (Mass.), cert. denied, 474 U.S. 1013 (1985).

¹⁷⁵Reisher v. Regents of Univ. of Cal., 31 Cal. App.4th 1195, 1203 (1995).

¹⁷⁶ N.O.L. v. District of Columbia, 674 A.2d 498, 499 (D.C. 1995).

¹⁷⁷Sherwood v. Carter, 805 P.2d 452, 462 (Idaho 1991).

A patient has a right to know the risks of telemedicine. Unfortunately, the risks of treating examining, diagnosing, and treating a patient by means of telemedicine are unknown. Informed consent within the context of telemedicine may require disclosure of risks beyond those concerning patient treatment. In telemedicine, there may be risks involved in examination, diagnosis, and treatment. Arguably, a physician should inform the patient that: telemedicine is experimental; images of the patient, who may be naked for the medical examination, may be intercepted by a person not a party to the consultation; or the consulting physician may not be legally permitted to practice medicine within this state. If such a disclosure becomes necessary, patients will be reluctant to utilize telemedicine.

Generally, a physician has a duty to refer a patient to a specialist if reasonable. 178 Similarly, as telemedicine develops, a physician may develop a duty to provide telemedicine consultations when reasonable. As technology makes information and medical specialists readily accessible, physicians who fail to secure specialists necessary to provide a proper diagnosis will be increasingly subject to liability. Jurisdictions that provide few incentives to physicians who fail to refer patients to specialists will find it increasingly difficult to justify the standard. In the future, telemedicine will become more cost-effective. As the cost of obtaining a telemedicine consultation declines, physicians' excuses for failing to secure a telemedicine consultation are eliminated. When the patient's interest in gaining a proper diagnosis is great, and the inconvenience to the physician's interest is minimal, the courts may require telemedicine consultations in order to avoid liability. 179

If telemedicine technology proves unable to transfer complete information between physicians, then it cannot succeed. A telemedicine consultant would assume that all the information that is perceived by the camera taping the patient is available to him unless there were obvious indications of distortion in the picture or sound. Where there is an obvious distortion or loss of information between the physicians, the distant physician should refuse to make a diagnosis because he does not know how severely the information is distorted. But where the distant physician has no indication that the information is distorted, and as a result a patient is injured by negligent treatment, who is liable? Manufacturers of telemedicine equipment should be liable if their products prove unable to transfer complete information. The underlying question is, does the lack of direct patient contact increase the risk of misdiagnosis? One expert in the field believes,

specialist physicians providing teleconsults must be allowed the option to decline to offer an opinion about a patient's problem. They

¹⁷⁸ JOHNSON, supra note 121, at 258.

¹⁷⁹See United States v. Carroll Towing Co., 159 F.2d 169, 173 (1947) (L. Hand provides that a finding of negligence should be the following principles: the possibility of the harm, the gravity of the potential injury, and the expense of providing necessary precautions).

must also have the option of requesting an opportunity to examine the patient in person. It is essential that the consultant, the referring provider, and the patient all understand this potentiality when undertaking a teleconsultation. ¹⁸⁰

There is a concern that computer images may deceive physicians performing patient examinations. Telemedicine consultants must be able to refuse to provide diagnoses when, due to insufficient data, they cannot make a conclusive diagnosis. The only study available provides some evidence that this concern is unwarranted: physicians examining thirty dermatology patients "found no difference between the diagnoses made using a telecommunication link and those made in person." 181

Technology manufacturers of teleconferencing equipment utilized in telemedicine may be liable for discrepancies in images that might cause misdiagnosis. 182 Currently, there are no standards for this equipment. Federal regulators must define standards for this highly technical field so that physicians can rely upon the information that is transmitted, and upon which they diagnose and treat patients.

A physician has a duty not to abandon a patient with whom he has a physician-patient relationship. ¹⁸³ "[A] physician involved in a teleconsultation could be deemed to have abandoned a patient in another state if the referring physician does not fulfill his or her duty to that patient." ¹⁸⁴ As telemedicine creates the opportunity for physicians and patients to reside in distant locations, it increases the possibility that communication between the patient and physician will break down. Under some circumstances the patient's loss of the physician's care may be actionable. It may be improper to hold a physician living in a distant state to the same standard for a claim of abandonment as a physician living down the street. On the other hand, a physician always has the right to refuse to treat a patient if no previous physician-patient relationship existed. ¹⁸⁵ The same technology that provides the physicians with a means to perform a telemedicine consultations, render the physician responsible to maintain contact with the patient.

3. Malpractice Insurance

The extent to which malpractice insurers will cover consultations performed outside the physician's state of licensure is uncertain. Dr. Jay Sanders, a

¹⁸⁰Reid, supra note 2, at 86.

¹⁸¹Pendrak, supra note 66, at *1.

 $^{^{182}\}mbox{Lawsuits}$ against manufacturers of telemedicine equipment would be product liability actions.

¹⁸³Lee v. Dewbre, 362 S.W.2d 900, 902 (Tex. Ct. App. 1962).

¹⁸⁴Telemedicine, BNA HEALTH CARE DAILY, Dec. 17, 1996, at *2.

¹⁸⁵61 Am. Jur. 2D Physicians, Surgeons, Etc. § 158 (1981).

telemedicine advocate, said, "if I were a malpractice insurer, I would require a premium equal to those in the highest state, not the lowest." 186 While malpractice insurers likely cover intrastate telemedicine consultations, interstate telemedicine consultations may not be covered. 187 Physicians practicing telemedicine in states where they are not licensed may not be covered by their malpractice insurers. 188 For example, a malpractice insurer for a physician licensed only in the state of Ohio would not expect to defend a malpractice suit by a patient from California. Where physicians are participating in telemedicine consultations across state lines, malpractice insurers may be pulled into distant jurisdictions where they did not anticipate defending suits.

4. Venue Shopping & Jurisdiction

Telemedicine is practiced beyond state lines and, as a result, claims initiated after telemedicine communications may be adjudicated in the state of the patient or the physician, "whichever state has the most favorable laws." 189 Federal courts apply state law when deciding a case based upon diversity of citizenship jurisdiction, according to the landmark decision of Erie Railroad Co. v. Tompkins. 190 Previously federal courts sitting in diversity applied general federal common law principles. 191 The effect is to prohibit parties in litigation from venue shopping: seeking the jurisdiction with the most advantageous laws. Telemedicine partially revives the strategy of venue shopping that was eliminated by Erie. Venue shopping is an unsound strategy for litigation. It diminishes a party's ability to rely upon the law of his jurisdiction, and "[t]he financial ramifications of venue shopping are potentially devastating to the physician and hold the potential to discourage interstate telemedicine practice."192 In order to develop an interstate telemedicine system, physicians must know whether or not they will be judged by the laws of their state of residence or the other states in which they may teleconsult.

Due process prohibits a state from asserting jurisdiction over a defendant unless the defendant has had minimum contacts with the state. ¹⁹³ States must demonstrate a substantial connection "between the defendant and the forum State necessary for a finding of minimum contacts [that] must come about by

¹⁸⁶Telemedicine, BNA'S HEALTH L. REP., Aug. 31, 1995, at *1.

¹⁸⁷Reid, supra note 2, at 78-9.

¹⁸⁸ Id. at 79.

¹⁸⁹ Id.

¹⁹⁰Erie R.R. Co. v. Tompkins, 304 U.S. 64, 78 (1938).

¹⁹¹ Id.

¹⁹²Reid, supra note 2, at 80.

¹⁹³International Shoe Co. v. State of Washington, 326 U.S. 310, 316 (1945); World-Wide Volkswagen, Corp. v. Woodson, 444 U.S. 286, 291 (1980).

an action of the defendant purposefully directed toward the forum State." ¹⁹⁴ The following factors demonstrate a state's power to maintain jurisdiction over a non-resident defendant: state's interest in providing a "convenient forum for redressing injuries inflicted by out-of-state actors," nonresidents who benefit from a state's laws should be accountable to those laws, and modern communication and transportation reduce the burdens of litigation in distant states. ¹⁹⁵

Physicians practicing interstate telemedicine will likely be subject to the jurisdiction of those states in which they practice medicine. Once a telemedicine consultant treats a patient in a state other than where the physician is licensed, that physician has established purposeful minimum contacts within the state. If a physician is sued by a patient in another state for malpractice as a result of a telemedicine consultation, then the physician's contacts within the state provide the basis for the lawsuit. An injured patient's state of residence holds an interest in providing its residents with a convenient forum to adjudicate the matter. The state has an interest in protecting its citizens against substandard medical care, whether it is performed by a resident or nonresident physician. Physicians should not be able to benefit from the state's laws that allow them to practice medicine and then evade liability for malpractice.

However, defendant physicians who are sued in other states have good reason not to fear defending malpractice claims in distant states. The prominent United States Supreme Court cases defining personal jurisdiction involve corporations whose assets provide them with the means to defend suits in distant states. ¹⁹⁶ In these cases, the defendants were corporations selling non-essential goods. In contrast, a physician's services are essential to the health of the public. In those states that permit irregular telemedicine consultations, the nonresident physician should argue that since the state legislature found irregular telemedicine consultations to be too insignificant to regulate, this evidence should demonstrate that irregular contacts with the state are insufficient to maintain jurisdiction over the physician.

¹⁹⁴ Asahi Metal Industry Co., Ltd. v. Superior Court of California, 480 U.S. 102, 112 (1987) (emphasis in original); *See Burger King Corporation v. Rudzewicz*, 471 U.S. 462, 475-476 (1985).

¹⁹⁵Burger King, 471 U.S. at 473-4.

¹⁹⁶International Shoe Co. v. Washington, 326 U.S. 310 (1945) (involved defendant corporation); World-Wide Volkswagen Corp. v. Woodson, 444 U.S. 286 (1980) (involved defendant corporation); Asahi Metal Industry Co. v. Superior Court of California, 480 U.S. 102 (1987) (involved defendant corporation); But see Burger King v. Rudzewicz, 471 U.S. 462 (1985) (held individual owner of a Burger King franchise, who resided in Michigan, was subject to Florida laws, where national headquarters of franchise was located).

V. CONCLUSION

Rural communities lack access to adequate health care. Telemedicine provides an opportunity to connect rural communities with excellent medical centers. Telemedicine holds the key to eliminating many of the obstacles that plague rural medical care, such as distance and professional isolation. The threat of malpractice claims arising from telemedicine is a primary obstacle to rural communities becoming connected with consulting physicians because physicians and insurers are uncertain of their liability in undertaking telemedicine. Unless the legal obstacles are resolved, telemedicine will be hindered, and as a result rural communities will lack access to adequate health care. States must continue to regulate the practice of medicine in order to protect their citizens against substandard medical care. However, federal intervention may be necessary so that states do not enact laws that would prohibit an interstate telemedicine system. As telemedicine is continually utilized, malpractice claims will follow as a consequence. Courts and legislatures resolving such claims should consider how malpractice claims have been dealt with in the past. In addition, states should consider how malpractice claims may be resolved so that rural communities will have access to quality health care, whether it is provided by resident or non-resident health care providers.

CHRISTOPHER J. CARYL